CHAPTER

SUBSTANTIVE TESTS OF TRANSACTIONS AND BALANCES

LEARNING OBJECTIVES

After studying this chapter you should be able to:

- identify and distinguish between tests of controls and substantive tests of transactions, and also between substantive tests of transactions and substantive tests of balances;
- 2 identify the financial report assertions associated with both tests of transactions and tests of balances and how the audit objective influences the audit procedures;

explain the specific audit objectives and the common audit procedures traditionally used to achieve those objectives for:

- cash, cash receipts and cash payments;
 accounts receivable;
 purchases and sales, and inventories;
- accounts payable and cash payments;
- non-current assets;
- liabilities and owners' equity;
- identify several different audit approaches that may be used for account balances included in the statement of financial performance;
- 10 describe and understand the use of computer-assisted audit techniques in substantive testing; and
- 11 appreciate the impact of assessing strategic business risk on undertaking tests of balances.

<u>Chapteroutline</u>

Substantive tests of transactions and balances are used to reduce detection risk, so that the desired level of audit risk can be achieved. Substantive tests of transactions are designed to substantively verify the dollar value of transactions. Substantive tests of balances are audit tests that substantiate the ending balance of a general ledger account. These substantive tests either provide reasonable assurance of the validity and propriety of a transaction or balance or identify monetary misstatement in it. A monetary misstatement may be caused by a variety of factors, but in all cases the effect on the financial report is either to overstate or to understate the balance. In designing audit programs for account balances, the auditor is concerned with whether the balance is overstated or understated by a material amount.

Tests of controls and substantive tests of transactions and balances are two of the main evidence-gathering procedures, and the auditor needs to co-ordinate the audit approach detailed in the audit program to ensure that the most efficient and effective combination of audit procedures is used.

No matter what audit strategy is adopted, the auditor must undertake substantive tests and usually makes considerable use of direct tests of balances. In audits of the financial reports of small businesses, many auditors rely almost exclusively on them. The following discussion of substantive tests considers their objectives. For each major financial report component, the specific objectives are explained and the common procedures used to achieve them are discussed. The components are considered in the following order: cash; accounts receivable; inventories; accounts payable; non-current assets and liabilities and owners' equity; and the statement of financial performance.

Relevantprofessionalguidance

Australian		Internatio	nal
AUS 502	Audit Evidence	ISA 500	Audit Evidence
AUS 504	External Confirmations	ISA 506	External Confirmations
AUS 506	Existence and Valuation of Inventory	ISA 501	Audit Evidence—Additional Considerations for
AUS 526	Auditing Fair Value Measurements and	ISA 545	Specific Items Auditing Fair Value Measurements and
	Disclosures		Disclosures
AGS 1002	Bank Confirmation Requests	IAPS 1000	Inter-Bank Confirmation Procedures
AGS 1060	Computer Assisted Audit Techniques	IAPS 1006	Computer-Assisted Audit Techniques



RELATIONSHIP BETWEEN EVIDENCE-GATHERING PROCEDURES

In this section we examine the relationship between tests of controls and substantive tests of transactions. As both these tests involve transactions, in many instances transactions selected for examination are tested for compliance with controls as well as determining whether monetary errors have occurred, giving rise to the concept of dual-purpose testing. Later in this section we also distinguish between substantive testing of transactions and balances.

Relationship between tests of controls and substantive tests of transactions

Tests of controls detect departures from prescribed controls. However, tests of controls do not directly measure monetary error in accounting records. Substantive tests must be performed to determine whether monetary errors have occurred. The auditor's judgment of the likelihood of monetary errors, based on tests of controls, determines the extent of substantive tests considered necessary.

Accounting records provide the underlying evidence for financial reports. The auditor's objective in making **substantive tests of transactions** is to obtain reasonable assurance that the accounting records are accurate and reliable. The auditor's approach in substantive tests of transactions is to inspect underlying documents, to trace the flow of transactions through the system and to recompute for clerical accuracy.

The direction of the trace determines the objective to be satisfied. For example, **tracing** from a source document to the accounting record provides evidence of completeness of the accounting records, that is, it detects errors of understatement. Tracing from the accounting record to the source document (commonly called **vouching** to the source document) provides evidence of occurrence, that is, it detects errors of overstatement. Usually some tests are made in both directions. The extent of testing in a particular direction depends on the auditor's judgment of the likelihood of error. When an error is detected the auditor needs to consider the cause of the error and determine whether any change is called for in the planned nature and extent of testing.

Dual-purpose tests

Since both tests of controls and substantive tests of transactions involve inspection of documents for individual transactions, they are usually performed simultaneously on the sample of documents chosen. Although several tests can be performed simultaneously on the same transaction documents, it is important to be specific about the purpose of particular procedures. **Dual-purpose tests** should be narrowly defined to include only those tests that are specifically planned to provide direct evidence of both controls and substantive matters.

In a broad sense, all audit tests are dual-purpose tests. Whenever an error is discovered in a test, there is some evidence of a breakdown in controls. Whenever no errors are discovered, there is indirect evidence that controls are operating. This is the reason that some auditors say the evaluation of controls is not final until the audit is completed. Substantive audit tests can always provide some additional evidence of the functioning of controls.

In a true dual-purpose test, different procedures are performed to satisfy different objectives, but they are performed using the same documents at approximately the same time. For example, controls in the processing of purchase invoices may require a clerk to compare the data with supporting documents, check the classification in the purchases journal, recompute amounts and initial the invoice to indicate performance of the procedures. The auditor inspects documents for the clerk's initials—the test of controls—and recomputes and retraces the clerk's other procedures, which satisfies several substantive objectives.

On the other hand, if controls are absent or not functioning, there will be no testing of controls, and more extensive substantive testing (of either transactions or balances) will be necessary. Thus, in practice, a sample of transactions selected to test controls will virtually always be a dualpurpose test, or the sample of transactions may be selected for substantive tests only.

Relationship between substantive tests of transactions and substantive tests of balances

Substantive tests of transactions can also be distinguished from substantive tests of balances. If the account balance is affected by many relatively small transactions, the auditor designs substantive tests of balances directed to selected items (e.g. individual customers, inventory items) which aggregate to create the ending balance. This commonly occurs for the accounts receivable and inventory balances. Consider the extract of the accounts receivable subsidiary ledger (overleaf):

Customer	Year-end balance Transactions for Able		
Able	5000	Sale	2000
		Receipt	(1000)
		Sale	4000
Baker	500		
Chan	1000		

The balance of accounts receivable would be composed of the balances of many customers. Consider customer Able, whose ending year balance of \$5000 is composed of three transactions. If the auditor verifies the \$5000 ending balance (such as through confirmation procedures discussed later in this chapter) this is a substantive test of balances. If the auditor verifies the dollar value of the individual transactions comprising the \$5000 (such as by verifying sales invoices and remittance advices associated with cash receipts transactions) this is a substantive test of transactions.

Tests of transactions (both tests of controls and substantive tests of transactions) are usually performed for major classes of transactions that are repetitive and large in volume. The major classes of transactions—sales, purchases, cash receipts and cash disbursements—affect statement of financial position accounts in the following manner:

Accounts receivable	Cash	Accounts payable
Beginning balance Additions (sales DR)	Beginning balance	Beginning balance Additions (purchases CR)
Reductions (cash receipts CR) \leftrightarrow	Additions (cash receipts DR) Reductions (cash disbursements CR) \leftrightarrow	Reductions (cash disbursements DR)
Ending balance	Ending balance	Ending balance

In the abstract, if beginning balances were tested in the previous year, it would be possible to indirectly test the major transactions by substantive tests of balances of these statement of financial position accounts. There might be other sources of cash receipts and cash disbursements, but they would be substantiated by direct tests of balances of the statement of financial position accounts affected. Substantive tests of balances of statement of financial position accounts are generally preferred because there are fewer items in the ending balance than there are transactions that affect the balance, and there is generally more persuasive evidence available to support the ending balance.

Note also that the substantive tests of balances of statement of financial position accounts indirectly test the statement of financial performance account balances (sales and expenditure). For example, the testing of accounts receivable will verify the sales that gave rise to this asset. Taking one step back from this abstraction, it is obvious that even in a highly condensed statement of financial performance there is normally more than one category of expenditures. This means some tests of recording accuracy as to account classification would be necessary. However, it is still possible to plan an audit that consists primarily of substantive tests of balances of statement of financial position accounts, with selected tests of transactions for particular specific audit assertions.

This kind of audit—with emphasis on substantive tests of balances of statement of financial position accounts—is, in fact, the approach typically used for small businesses. It is also used

when a large entity has material deficiencies in the processing of particular classes of transactions. This approach is called the substantive approach to an audit. Generally, it is the most efficient and effective means of auditing the financial report of a small business. It is especially efficient if the auditor designs effective analytical tests for those specific audit objectives, such as statement of financial performance, account classification and those related to the completeness assertion, that are not achieved by substantive tests of balances. For a large business, however, the substantive approach is often not cost effective for the following reasons:

- The number of items in ending balances, while still fewer than the number of transactions that affect the balances, is relatively large.
- The accounting system for processing major classes of transactions is generally well designed and produces more reliable accounting data because management in a large entity has to rely extensively on the accounting data to monitor and control the business.
- There are generally enough employees to achieve effective separation of duties.

In these circumstances, by testing the processing of transactions the auditor can restrict the substantive tests of balances that would otherwise have been undertaken.

Quick review

- Dual-purpose tests are specifically planned to provide direct evidence concerning both controls and substantive matters in order to satisfy different audit objectives. They are performed using the same documents at approximately the same time.
- In practice, if documents are selected to test controls they will virtually always be examined to achieve substantive testing objectives and the tests are classed as dual-purpose tests. Documents may also be selected with no intention of testing controls (for substantive purposes only) and these are classed as substantive tests of transactions.
- Account balances are composed of a series of transactions. It is possible to substantively verify either the transactions comprising the account balance or the account balance itself.

FINANCIAL REPORT COMPONENTS AND AUDIT OBJECTIVES FOR DIRECT TESTS OF BALANCES

A component of a financial report is simply a line item in the report. Generally, it is more precise to refer to a component rather than an account balance because several general ledger accounts are usually combined into a line item in a financial report. For example, an entity may have general purpose bank accounts in several locations, a payroll bank account and several special purpose accounts, with a separate general ledger account for each. However, on the statement of financial position, all these accounts are combined in a single line item for cash. In this book, the term 'account balance' is often used instead of 'financial report component' for convenience. It should be understood to mean either an individual balance or a group of account balances in the general ledger combined for the purpose of preparing a financial report.

The nature of the account balance and the related specific audit objectives the auditor has developed are important considerations in determining the nature of the audit procedures that are selected, and also their timing and extent.

Specific audit objectives

The auditor develops specific audit objectives from the broad categories of financial report assertions introduced in Chapter 5. The broad categories are detailed in Table 10.1 (overleaf).

learning objective

		Applies to				
Assertions Definitions		Balances, therefore Statement of Financial Position	Transactions, therefore Statement of Financial Performance			
Existence	Concerned with whether assets or liabilities exist at a given date.	Х				
Rights and Obligations	Concerned with whether an asset or liability pertains to the entity at a given date and whether the entity was a party to reported transactions.	Х				
Occurrence	Concerned with whether trans- actions that generated financial report accounts actually occurred.		Х			
Completeness	Concerned with ensuring that there are no unrecorded assets, liabilities, transactions or other events, or undisclosed items.	Х	Х			
Valuation	Concerned with whether an asset or liability is recorded at an appropriate carrying amount.	Х				
Measurement	Concerned with whether appropriate amounts have been used to record asset, liability and expense transactions in the proper period.	Х	Х			
Disclosure	Concerned with whether an item is disclosed, classified and described in accordance with the applicable financial reporting framework.	x	X			

TABLE 10.1 Financial report assertions for account balances

The auditor selects procedures to achieve each of the specific audit objectives for an account balance. These objectives are developed from the broad categories of assertions, and the nature of an audit objective influences the nature of the procedures selected. The following descriptions illustrate this relationship.

- **Existence** In designing substantive tests for the assertion of existence, the auditor selects from items contained in the account balance and obtains evidence that supports them. The logical procedures to accomplish such objectives include physical examination, confirmation and vouching. Note that these are tests for overstatement of the balance.
- Occurrence is concerned with whether transactions that generated financial report accounts actually occurred. Focuses on whether all transactions recorded during a period are *bona fide* transactions and that no fictitious transactions have been recorded. This assertion is concerned with overstatement—nothing has been recorded and reported to inflate any account balance. Verification of transaction occurrence includes two subordinate objectives. The transactions should be supported by a proper internal control structure and the auditor should evaluate the existing internal control structure underlying each of the various types of transactions recorded during the period. Second, the auditor must ascertain that proper documentary support exists to validate the transactions creating the various account balances. The extent of documentary support required varies with the nature of the client and the transaction, but some documentary support should exist for all transactions.

EXAMPLE 10.1 Relationship between existence and occurrence

The relationship between specific audit objectives for related account balances can be demonstrated by an example from the sales cycle. The financial report assertion of 'existence or occurrence' is translated into specific audit objectives as follows:

	Specific audit objectives				
Financial report assertion	Statement of financial position (Existence)	Statement of financial performance (Occurrence)			
Existence or occurrence	Accounts receivable are authentic obligations owed by customers at the balance date	Reported sales to customers actually occurred during the period covered by the profit and loss statement			

Procedures to achieve the objective related to existence for accounts receivable should also aid in achieving the objective related to occurrence for sales. Directly testing the accounts receivable balance for overstatement (existence) simultaneously indirectly tests the occurrence of sales.

Procedures to achieve objectives for statement of financial position and statement of financial performance account balances in the sales cycle are often a combination of tests of transactions for sales and cash receipts and direct tests of balances for accounts receivable.

- **Completeness** In designing substantive tests for the assertion of completeness, the auditor identifies evidence indicating items that should be included in the account balance or class of transactions and investigates whether they are in fact included. A logical procedure is to trace from documentation created when transactions originate, or other evidence of origination, to the account balance. In other words, the direction of the test is the opposite of that for objectives related to the existence assertion. Note that these are tests for understatement of the balance.
- Rights and obligations In designing substantive tests for the assertion of rights and obligations, ownership must be verified for many assets. The auditor must ascertain that the assets are owned/controlled by the client and that the liabilities are those of the client. Although possession may be accepted as evidence for ownership of some assets, the auditor must take further steps in ascertaining that many of the recorded assets are in fact owned/controlled by the client.

The auditor may also need to obtain information on the terms of the agreement between the parties to the exchange transaction that created the right or obligation. Common procedures used to accomplish such objectives are inquiry and inspection of contracts, agreements, minutes and similar documentation. Many of these are called general procedures because they are not directed to a specific account balance. For example, reading the minutes of meetings of the board of directors is a general procedure used to obtain evidence relevant to many account balances that specific transactions pertain to the entity.

EXAMPLE 10.2 Difficult areas associated with rights and obligations

Inventories held by the client under consignment arrangements exist, but may not be owned by the client. The auditor must therefore determine that inventories as represented on the balance sheet do not contain significant amounts of consigned inventories owned by others. It is also possible that inventories out on consignment at distributors at the time of counting stock may still be owned by the audit client at the time of the audit, as identified by the terms of the consignment. The auditor will have to carefully consider rightful ownership of the inventory in these circumstances.

- Measurement While measurement usually relates to transactions (the valuing of assets and liabilities is the equivalent of the measuring of the dollar value of transactions), two aspects of measurement are clerical accuracy and cut-off. Cut-off involves checking that transactions are recorded in the correct period and will thus affect the associated valuation of the corresponding assets or liabilities.
- Valuation In designing substantive tests for the assertion of valuation, the auditor needs to consider the basis of valuation of the asset or liability in terms of approved accounting standards. If the basis is historical cost less accumulated depreciation or amortisation, the likely procedure to accomplish the audit objective is recomputation. If the basis is net realisable value, or something similar, the likely procedures are inquiry and analytical procedures to assess the reasonableness of management's estimation, or inspection of external information on market prices. Naturally, omission of items (completeness) or inclusion of improper items (existence) will also affect valuation. However, because the cause of these types of misstatements is usually different, they are considered separately under those specific assertions.

EXAMPLE 10.3 Relationship between valuation and measurement

The following example illustrates the relationship between these two assertions for the sales cycle.

	Specific audit objectives					
Financial report assertion	Statement of financial position (Valuation)	Statement of financial performance (Measurement)				
Valuation or measurement	Accounts receivable are valued at the amount we expected to receive from debtors	Transactions affecting accounts receivable, sales and cash receipts are properly measured in terms of cash value				

Direct tests of balances of accounts receivable for the specific audit objective related to valuation (reduction of receivables to net realisable value) are concerned with the adequacy of the allowance for doubtful debts. Transactions are not valued, they are measured. The related transactions (sales and cash receipts) are verified to assure that the dollar value of the transactions is appropriately included in transactions listings (sales journals and cash receipts journal).

 Disclosure In designing substantive tests for the assertion of disclosure, the auditor considers the appropriate classification, description and disclosure of the item in the financial report. Thus the auditor will include in the audit program specific procedures to examine whether the draft financial report meets financial disclosure requirements.

Nature of the item and available evidence

The nature of the item has an important influence on the auditor's selection of audit procedures. For example, the preceding discussion indicates that, for audit objectives related to the existence assertion, likely audit procedures are physical examination, confirmation and vouching. For the procedure of physical examination to be useful, the item must have a physical existence and be present. An auditor can count cash or securities on hand, but must confirm an accounts receivable balance with a customer or cash in a bank account with the client's bank.

Another aspect of the nature of the item is the size and volume of transactions during the period covered by the financial report. If an account balance is affected by only a few large transactions, the auditor may design substantive tests directed to the individual transactions that increase or decrease the balance (assuming the beginning balance was substantiated last year) in

order to substantiate the ending balance. For example, account balances for property and equipment, long-term debt and shareholders' equity are often of this nature. This is referred to as, and understood by auditors to be, a direct test of balances utilising a transactions approach. Thus direct tests of balances by the transactions approach can be distinguished from tests of transactions (as outlined earlier in this chapter) by identifying whether the concern is with specific isolated transactions or with an entire class of transactions.

The available evidence also influences the selection of procedures to achieve audit objectives. For example, to confirm accounts receivable with individual customers, the auditor needs a detailed listing of the amount owed by each customer. The availability of evidence may influence the auditor's selection of procedures to achieve specific audit objectives. If a common audit procedure cannot be applied because the evidence is unavailable, an alternative procedure may be selected. Thus, for example, if the auditor was unable to confirm the existence of an outstanding balance with a debtor, the existence of this balance may be confirmed by a subsequent payment and by inspecting accompanying documentation for the amount of that balance.

Quick review

- Direct tests of balances are audit tests that substantiate the ending balance of a general ledger account.
- 2 The direct tests of transactions and balances are aimed at gathering audit evidence for the following financial report assertions:
 - existence
 - occurrence
 - completeness
 - rights and obligations
 - measurement
 - valuation
 - disclosure.
- Existence means that assets or liabilities comprising an account balance actually exist. Testing that the items which do appear should be there is a test for overstatement of the balance.
- 4 Occurrence is the transaction equivalent to the account balance assertion of existence. Rather than talking about whether transactions existed we talk about gaining evidence as to whether or not they have occurred.
- 5 Completeness means that all items under the entity's control that should be included in account balances are included. The search for additional items that should be included is a test for understatement of the balance.
- 6 Rights and obligations mean that the assets pertain to the entity, that the liabilities are obligations of the entity and that the entity was a party to reported transactions.
- Measurement refers to clerical accuracy, and that assets are not misstated, by ensuring transactions are recorded in the correct period (cut-off).
- 8 Valuation refers to the proper valuation of assets and liabilities in accordance with approved accounting standards.
- 9 Disclosure means the proper description and disclosure of assets and liabilities in the statement of financial position.

CASH, CASH RECEIPTS AND CASH PAYMENTS



The account balance cash is directly affected by both the cash receipts and cash payments systems. As these are both major transaction systems the auditor may undertake substantive tests of both these systems. The auditor would be most worried about the assertions of *occurrence* and

completeness of transactions when undertaking substantive testing of these transactions systems. *Measurement* of the dollar value will become an assertion of concern if transactions involve foreign currencies.

The essential feature of substantive tests of the cash balance is substantiation of the client's bank reconciliations to achieve specific audit objectives related to *existence* and *completeness*. Most cash receipts and cash payments pass through the client's bank accounts, and thus the cash balance at year-end should reflect what has flowed through those bank accounts. *Valuation* may become an assertion of concern if the cash balance at year-end includes amounts converted from foreign currencies. Thus, most of the direct tests of the cash balance make use of information obtained directly from banks. Usually, cash on hand is clearly immaterial and not counted. However, in industries that require substantial amounts of cash on hand, such as banks or casinos, a cash count may be an important and time-consuming procedure.

It may be necessary to undertake both tests of transactions and tests of balances. Some errors that ultimately affect cash can be detected only in tests of sales transactions and payments transactions. For example, not invoicing a customer, invoicing the wrong amount, paying a supplier's invoice twice or paying for goods or services not received are not detected by cash balance procedures. However, errors confined to cash receipts and cash payments may be detected in tests of cash transactions or by cash balance procedures. For example, omission of a cheque from recorded cash payments or inclusion of cash received after year-end in cash receipts of the current period might be detected by examining cash transactions or testing bank reconciliations.

Assertions, objectives and procedures

The financial report assertions, specific audit objectives and common audit procedures traditionally used to achieve the objectives for auditing cash are summarised in Table 10.2. The primary procedures are:

- confirmation of balances and related information for all general bank accounts; and
- tests of the client's bank reconciliations.

General procedures and scanning aim to identify restrictions on cash or cash commitments arising from such things as escrow accounts (monies kept in the custody of a third party until some condition has been fulfilled) or compensating balance arrangements. Generally, valuation of cash is not a significant concern unless the company engages in foreign currency transactions. Rights and obligations to cash are generally established by the procedures used to achieve objectives related to existence, completeness and valuation.

Confirmation of bank balances

The auditor commonly confirms the year-end cash balance by direct correspondence with all banks with which the client has had accounts during the period. Confirmation procedures provide evidence that the cash in the statement of financial position exists at the balance date and that it is owned by the entity and is not restricted or committed. Audit guidance on bank confirmation procedures is provided by AGS 1002, 'Bank Confirmation Requests'. **Bank confirmation requests** ask a bank to provide independent confirmation of the audit client's account balances and other information held by the bank on behalf of the client, including securities, treasury management instruments and documents. Two standard bank confirmation request forms have been developed in conjunction with the Australian Bankers' Association and are recommended for use by auditors:

Financial report assertion	Specific audit objective	Common audit procedures to achieve objectives
Existence	Cash in the statement of financial position exists at the balance date.	Bank confirmationTests of bank reconciliations
Occurrence	The transactions giving rise to cash receipts and cash payments occurred during the period. (Note: relates to tests of cash receipts and cash payments transactions.)	 Sight supporting documentation. For cash receipts, sight remittance advice; for cash payments, sight documents supporting payment
Completeness	Cash in the statement of financial position includes all cash items at the balance date.	• Tests of bank reconciliations
Rights and obligations	Cash in the statement of financial position is owned by the entity and not restricted or committed.	Bank confirmationGeneral procedures
Measurement	Cash receipts and payments are recorded in the correct amount and in the correct period.	 Sight supporting document to verify dollar amount of transactions Check last cash receipts and cash payment recorded before balance date and first cash receipts and cash payments recorded after balance date are recorded in the correct period (cut-off) Test clerical accuracy of bank reconciliation
Valuation	Cash in the statement of financial position is stated at the correct amount.	• Tests of bank reconciliations
Disclosure	Cash balances are properly described and classified in the statement of financial position and related disclosures are adequate.	 General procedures Scanning of cash receipts and cash payments journals

TABLE 10.2 Assertions, objectives and procedures for cash balances

- **1** Bank Confirmation—Audit Request (General) The information contained on this confirmation relates to the normal banking activities and is used to confirm cash. A standard form is contained in Appendix 1 to AGS 1002 (IAPS 1000).
- **2** Bank Confirmation—Audit Request (Treasury Operations) The information to be confirmed or requested in this confirmation relates to the entity's treasury operations and use of treasury management instruments. A standard form is contained in Appendix 2 to AGS 1002.

The standard Bank Confirmation—Audit Request (General) requests the following:

- Details of all account balances in favour of the client at a certain date (usually balance date). This includes details of any current accounts, interest-bearing deposits, foreign currency accounts, convertible certificates of deposit and money market accounts.
- Details of all account balances owed by the client to the bank at a certain date (usually balance date) in respect of overdraft accounts, bank loans and term loans, and details of repayment terms.
- Promissory notes and bills of exchange held for collection on behalf of the audit client.
- The audit client's other liabilities to the bank.
- Items held as security for the audit client's liabilities to the bank.
- Accounts opened or closed during the 12 months prior to confirmation date.

- Any sealed packets, locked boxes or security packets held on behalf of the audit client.
- All available unused limits and facilities as at confirmation date.
- Any other details relating to any financial relationships not dealt with under the above points.

The auditor should complete all known details on the confirmation request before forwarding three copies to the bank. The bank is required to ensure that all details supplied are as at the confirmation date, to list all relevant information from details contained in its records and to confirm the details provided by the auditor as to correctness. Any variation is marked in red on all copies, and any information not included on the confirmation request by the auditor is inserted in red. All three copies of the confirmation are to be signed: the original is returned directly to the auditor, the duplicate forwarded to the client and the triplicate copy retained by the bank.

The standard form contains a disclaimer that the certificate has been completed from records held at the branch level. The bank is therefore unable to warrant the correctness of that information and thus disclaims all liability. The effect of the disclaimer is discussed in AGS 1002.09–.10. While the disclaimer may limit the liability of the bank to the auditor, the legal advisers of the Auditing and Assurance Standards Board are of the opinion that the disclaimer does not affect the information obtained from a bank confirmation request in terms of its reliability as appropriate audit evidence. The auditor can reasonably rely upon information given by the bank provided it is not clearly wrong, suspicious, internally inconsistent, ambiguous or in conflict with other evidence gathered during the course of the audit. When there is evidence to suggest that the information provided by the bank is inaccurate or incomplete, the auditor contacts the bank and requests clarification in writing.

In view of this disclaimer and notification by the Australian Bankers' Association that the present recording systems of banks do not necessarily maintain together all information for different entities that form part of an economic entity or all accounts of a customer, an auditor cannot rely solely on the standard form to satisfy the completeness assertion. An auditor who believes that there is a 'risk that material accounts, agreements or transactions exist of which the auditor is unaware' should contact the bank and request further information.

Tests of a client's bank reconciliations

The essential objective of testing a client's **bank reconciliations** is to substantiate that the balance confirmed with the bank agrees with the client's cash accounting records. Differences are caused by deposits in transit, outstanding cheques and other reconciling items. The auditor's objective is to obtain reasonable assurance that reconciling items are authentic, complete and treated accurately.

The extent of testing of the client's reconciliations varies depending on the assessed level of control risk. Recall that the auditor plans for three assessment levels: low, medium or high. Possible procedures for a client's reconciliation are as follows:

- 1 Compare amounts on the reconciliation with totals in the bank statement, general ledger and cash receipts and cash payments records, including a comparison of the balance per bank with the amount confirmed by the bank.
- 2 Test the clerical accuracy of the reconciliation.
- **3** Compare deposits in transit on the reconciliation with deposits appearing in the subsequent period's bank statement and consider whether the time lag between the end of the period and recording by the bank is reasonable.
- 4 Vouch other reconciling items in the reconciliation to supporting documents.
- 5 Consider the need to investigate outstanding cheques or other reconciling items that have not been cleared.

(Large or unusual items are always investigated.)

When the level of control risk is assessed as low, substantive procedures might be confined to scanning the client reconciliations and comparing balances per bank to bank confirmations. A medium assessed level might result in applying the procedures listed above at year-end, together with some additional procedures described below.

If the level of control risk is assessed as high, the auditor extends the substantive procedures in testing the client's reconciliation by examining the individual details of reconciling items. The individual supporting documents are examined and traced to the cash accounting records. Outstanding cheques that did not clear are traced to cash payment records, and old or unusual items are thoroughly investigated and resolved.

Extended cash procedures

When control risk is assessed as high because of deficiencies in the internal control structure, there is usually a greater risk of fraud. A high control risk is unusual because most clients tend to maintain at least moderately effective controls over cash. In cases of high control risk, a common audit procedure is the preparation and review of a **bank transfer schedule**. One of the more common frauds involving cash is kiting (described in Chapter 9). Such a schedule is used when there is a serious risk of kiting because cash controls are deficient and there are many bank accounts and many bank transfers. When there are few bank accounts and few transfers, the auditor scans the bank statements and cash records to determine whether deposits and withdrawals between bank accounts are recorded in the same and the correct period. A bank transfer schedule lists all transfers and the dates of recording on the books and bank statements.

Quick review

- The major assertions of interest to the auditor in testing the account balance of cash are existence and completeness, and valuation if foreign currencies are included.
- The major assertions of interest to the auditor in substantively testing the associated transactions of cash receipts and cash payments are occurrence and completeness, and measurement if transactions involve foreign currencies.
- The essential feature of direct tests of the cash balance is substantiation of the client's bank reconciliations.
- 4 The standard bank confirmation requests are used to help confirm information from the client's banks.
- 5 Cash on hand is usually immaterial and not counted.

SALES, CASH RECEIPTS AND ACCOUNTS RECEIVABLE

The essential feature of direct tests of balances for accounts receivable is emphasis on specific audit objectives related to *existence* and *valuation*. For the related transactions of sales and cash receipts the major assertions are *occurrence* and *measurement*. In practice there is usually an emphasis on direct tests of balances, primarily for reasons of audit efficiency. These are achieved primarily by confirmation directly with customers (although recently there has been an increased emphasis on reviewing subsequent receipts rather than direct confirmations) and audit work based on a review of the aged trial balance of accounts receivable. As explained in more detail later, the aged trial balance is the basic work paper schedule in the receivables area because of audit efficiency considerations.

learning objective

Assertions, objectives and procedures

Table 10.3 summarises the financial report assertions, specific audit objectives and common audit procedures traditionally used to achieve the objectives for accounts receivable and related account balances. The common audit procedures listed are the primary procedures traditionally used to achieve the related specific audit objective. As applied in the accounts receivable area, the procedures have the following features:

- Confirmation Requests are mailed directly to selected customers, asking them to 'confirm' an amount owed at a date specified in the request. This procedure has lost prominence in recent years, because of its failure to adequately address the important assertion of valuation (discussed further in a separate section below). However, because it is still relatively important in many audits, and demonstrates the evidence-gathering technique of external confirmations in general, it is explained further (below).
- Subsequent receipts review The auditor verifies whether the amount in outstanding receivables is subsequently received. This provides the auditor with evidence that the debt existed, and evidence of the amount that was collectible (valuation assertion). As it covers both of the major assertions for accounts receivable, in many cases it is preferred to confirmation procedures. Because of the growing importance of this technique, it is also discussed below, as an alternative procedure to confirmation.
- Cut-off This audit procedure is designed to determine that all significant transactions of the current period are recorded and no significant transactions of the next period are recorded, as of a specified date. For accounts receivable, cut-off tests are concerned with *shipments* and *cash collections*. The auditor identifies the numbers of the last prenumbered shipping document and the last prenumbered sales invoice for the period and determines that lower numbers are recorded in the current period and higher numbers in the next period. If documents are not prenumbered or the sequence is not accounted for, the auditor examines all sales transactions above a specified amount within a few days before and after the end of the period, to test proper cut-off. Cash collection cut-off is tested by identifying the last cash receipt recorded in the period and comparing the date to the date of deposit in the bank. The 'as of' date for cut-off tests for receivables should be the same as that used for debtor's confirmation. A review of credit notes issued after the end of the period is also undertaken in order to identify transactions from the previous period that may require adjustment.
- Analytical procedures In the accounts receivable area, these include comparison of amounts and ratios for relationships between sales and receivables, allowance accounts and sales, and sales and cost of sales. Comparisons are made to previous periods, budgets and information on unit quantities (units shipped to units billed).
- Tests of sales transactions Tests of sales transactions are usually dual-purpose tests, having both control and substantive elements. With regard to substantive testing, they can be especially useful for testing assertions that aren't well tested by other audit procedures, in particular the completeness assertion. This is because the primary evidence-gathering procedures in this area—confirmation and subsequent receipts review—are directed to other assertions, especially existence and valuation. The auditor may rely on controls to ensure that all transactions that should be included are actually included. If the audit approach does not include tests of controls related to completeness of sales transactions, the auditor has to consider the need for transaction testing as part of direct tests of the receivable balance. The transactions test that is relevant to completeness of receivables is tracing from shipping documents to sales invoices. In practice, analytical tests of sales and receivables, combined with consideration of the results of audit

procedures applied to inventory, are often considered sufficient for the assertion of completeness. (Note that unrecorded sales should also result in inventory shrinkage.)

- General procedures These procedures, such as reading minutes and contracts, are usually applied separately to the audit, rather than in relation to specific balances. However, the results of general procedures are considered in relation to the balances affected. For receivables, the relevant information would concern the existence of pledging, factoring or other liens on receivables.
- Inquiry and scanning Inquiries relevant to accounts receivable include the existence of nonstandard sales terms (consignment sales or other rights of return) and related-party transactions. Scanning includes visually reviewing accounting records and financial reports in relation to the knowledge obtained from applying other audit procedures, including reviewing for items about which inquiries were made.
- Review of aged trial balance An aged trial balance of receivables lists all customer balances as of a specified date, and shows the total balance for each customer and the components of the overall balance by age category, such as 30 days or below, 31 to 60 days, 61 to 90 days, and over 90

Financial report assertion	Specific audit objective	Common audit procedures to achieve objectives
Existence	Accounts receivable are authentic obligations owed by customers at the balance date.	 Confirmation Test from debtors subsidiary ledger to supporting documentation of sale (invoice, delivery note) Subsequent receipts review
Occurrence	Sales occurred in the financial year.	 Vouch entries in sales journal to supporting documentation of sale (invoice, delivery note)
Completeness	Accounts receivable include all amounts owed by customers at the balance date.	 Analytical procedures Test from supporting documentation (invoice, delivery note) to sales journal or subsidiary ledger
Rights and obligations	Accounts receivable are owed to the entity and not pledged or subjected to other claims.	General proceduresInquiry and scanningConfirmation
Measurement	Sales and accounts receivable are included in the correct amount and period.	 Cut-off (tests of cash receipts and sales transactions) Verify prices, quantity and computation on sales invoices, prices verified to master price list, quantity verified to shipping documentation Test clerical accuracy of accounts receivable listing
Valuation	Accounts receivable are presented at a reliable estimate of the net realisable amount.	 Review of aged trial balance Analytical procedures Subsequent receipts review
Disclosure	Accounts receivable are properly described and classified in the statement of financial position and related disclosures are adequate.	• Review the draft financial report

TABLE 10.3 Assertions, objectives and procedures for sales and accounts receivable

days. A periodic ageing is used by an entity's financial management to monitor collectibility and for cash management. The auditor reviews the aged trial balance as of the balance date with the credit manager as part of the evaluation of the reasonableness of the allowance for doubtful debts. The older the debt, the greater the risk of the debt not being paid, thus the greater the likelihood that an allowance has to be made for non-payment. Since the aged trial balance is usually prepared by the client, the auditor needs to test clerical accuracy by footing and tracing. The extent of the testing depends on the controls over completeness and accuracy of processing sales and cash receipts.

Confirmation procedures

Up until the year 2000, AUS 504/ISA 505 required that the auditor should plan to obtain direct confirmation of accounts receivable or individual entries in an accounts balance, in all but exceptional circumstances. However, in 2000 the AuASB/IAASB extended AUS 504/ISA 505 from confirmations of receivables to cover all external confirmations undertaken by the auditor. The standard was adjusted with the expectation of allowing the auditor the opportunity to choose auditing procedures most suitable for the client, rather than effectively mandating procedures. In the revised standard the auditor is required to determine whether the use of external confirmations is necessary to obtain sufficient appropriate audit evidence to support certain financial report assertions. In making this determination, the auditor should consider materiality, the assessed level of inherent and control risk, and how the evidence from other planned audit procedures will reduce audit risk to an acceptably low level for the applicable financial report assertions. These changes reflect the fact that accounts receivable confirmations are used much less in practice than they were 10 years ago, and are seen as a less appropriate form of audit procedure for assertions requiring audit attention when compared with other audit procedures. In particular, confirmations do not provide evidence of intention of the client to pay (valuation assertion), while procedures such as review of subsequent receipts show clearly the amount paid attributable to amounts outstanding at balance date.

If it is decided that an accounts receivable confirmation is an appropriate procedure there are two alternatives in the method of requesting a direct confirmation—positive and negative:

- 1 Positive form of debtors' confirmation (most commonly used) The positive form asks the debtor to respond, whether or not the debtor agrees with the information on the amount owed in the request. The receipt of a response from the debtor provides evidence of the authenticity of the receivable and, if the debtor agrees, evidence of the accuracy of the amount. It provides no positive evidence of collectibility but may detect a disputed amount which indicates doubtful collectibility. Some auditors request recipients of the confirmation to provide the balance or invoice amounts owed.
- 2 Negative form of debtors' confirmation The negative form of request asks the debtor to respond only if there is disagreement with the information given. Generally, the negative form is considered to provide less reliable evidence, as a non-response may be for reasons other than the client agreeing with the balance, such as difficulty of reconciling. For this reason the number of negative confirmation requests sent should be greater than the number of positive requests that would be sent in similar circumstances. If the number of confirmations returned as undeliverable is more than expected, the auditor may suspect the possibility of fictitious receivables.

A combination of positive and negative forms may be used. For example, where the total accounts receivable balance comprises a small number of large balances and a large number of

small balances, the auditor may decide to confirm all or a sample of the large balances with positive confirmation requests, and a sample of the small balances using negative confirmation requests.

AUS 504/ISA 505 states that negative confirmations may be used to reduce audit risk to an acceptable level when:

- 1 the assessed levels of inherent and control risk are low;
- 2 a large number of small balances is involved;
- 3 a substantial number of errors is not expected; and
- 4 the auditor has no reason to believe that the confirmation recipients will not seriously consider the requests.

Exhibit 10.1 (overleaf) shows a positive form. Generally, auditors have found that the response rate is improved when the request accompanies a regular monthly statement to the customer. Note that the request comes from the client, and the auditor should ensure that adequate control over confirmations is maintained.

The confirmation process has to be started early enough during the audit to allow adequate time to mail initial requests, send second and third requests if necessary, and analyse responses.

When planning the accounts receivable confirmations, the auditor considers the following:

- Prior experience Experience with the client or similar clients may have shown poor response rates or other indications that confirmations are ineffective. Is enough information provided to help the recipient respond? Is the confirmation being directed to the wrong person?
- The nature of the information being confirmed Should invoices or balances be confirmed? For example, if most of the debtors' accounting systems track individual invoices rather than balances, it is ineffective to send a balance confirmation.
- Have there been unusual transactions, such as large sales at or near year-end? The auditor might design the confirmation to identify inflated sales for the period, such as through invoice-and-hold transactions, where merchandise is invoiced to customers before delivery.
- Is there a medium or high risk of oral agreements, such as lenient rights of return of merchandise? If so, the confirmation should request information on the terms of agreements.
- **Respondent** Care should be taken to direct the confirmations to the individuals knowledgeable about the transactions or arrangements.

In evaluating responses the auditor considers whether disagreements noted by debtors merely indicate discrepancies caused by timing, such as those caused by mailing time for cash receipts or shipping time for shipments, or are a result of actual clerical errors or disputed amounts. The auditor does not want to project monetary misstatement for timing discrepancies or isolated errors, so the qualitative analysis of confirmation responses is extremely important.

Further requests may be sent if an initial positive request does not result in a response. The reasons for this are: the lack of response may be an indication of fictitious receivables or a bad debt and these possibilities must be pursued; and the alternative procedures to confirmation are more costly and time-consuming.

If management requests that the auditor not confirm certain accounts receivable balances, the auditor should consider whether there are valid grounds for such a request. Such a request might be justified if, for example, the particular account is in dispute and communication on behalf of the auditor might jeopardise sensitive negotiations between the entity and the debtor. Before accepting a refusal as justified, the auditor should examine any available evidence to support management's explanations, such as correspondence between management and the debtor. In such cases, alternative procedures should be applied to the accounts receivable not subjected to confirmation.

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Format of positive accounts receivable confirmation requests with itemised statement enclosed

[Client's Letterhead]

[Date] [Debtor's Name and Address]

Dear,

Our auditors, [Name], are making an annual audit of our financial report. Please confirm the balance due at [Date], which is shown on our records and the enclosed statement as \$

Please indicate in the space below whether this is in agreement with your records. If there are differences, please provide any information that will assist our auditors in reconciling the difference.

Please sign and date your response and mail your reply directly to [Auditor's Name and Address] in the enclosed return envelope. PLEASE DO NOT MAIL PAYMENTS ON YOUR ACCOUNT TO THE AUDITORS.

Yours sincerely,

[Officer's Signature and Title]

[Client's Name]

Alternative procedures to confirmation

As outlined earlier, use of direct confirmations has reduced in practice as auditors have determined that other procedures are a more appropriate form of audit evidence (in particular as regards the assertion of valuation). These alternative procedures may include examination of evidence of subsequent cash receipts, examination of sales and shipping documents and/or oral confirmation of the balance with the debtor. Generally, subsequent cash receipts are considered to be a superior form of evidence because sales and dispatch documents originate in the client's system, and substantiating subsequent collection simultaneously achieves the audit objectives related to existence and valuation. The alternative procedures are essentially the same: vouching, tracing and recomputing of source documents as are used in tests of transactions. However,

instead of a representative sample of source documents, the auditor applies procedures to the specific documents for selected accounts.

These alternative procedures can also be applied to non-respondents to a confirmation procedure in order to gain sufficient appropriate audit evidence. The auditor also needs to consider the qualitative characteristics of the non-responses. Is there a systematic characteristic, such as a tendency to be the year-end transactions?

Materiality

Materiality is used primarily to identify individually significant customer accounts for testing, either through confirmation or alternative procedures. Examples of customer accounts that might be identified as individually significant are:

- large dollar balances;
- significant balances past their due dates;
- accounts with unusual names;
- related-party balances; and
- credit balances.

Often the recorded amount that remains after identifying individually significant items is in total a very large dollar amount, and audit sampling is necessary (audit sampling procedures are discussed in Chapter 11). In fact, confirmation of accounts receivable is one of the most frequent audit sampling applications among direct tests of balances.

Audit risk

The timing and extent of audit procedures is influenced significantly by consideration of audit risk. The inherent risk factors considered include the nature of products, the nature of distribution methods, the complexity of the invoicing system and economic developments. The control risk evaluation focuses on specific control objectives. The extensiveness of procedures to test collectibility is influenced by environmental considerations, such as changes in national or an industry's economic conditions, and whether the specific control objective for authorisation and approval of credit limits and terms for sales transactions was achieved.

Audit efficiency

Efficiencies in testing in the accounts receivable area can be achieved by organising the documentation of audit procedures around the schedule for the *aged trial balance of accounts receivable*. Debtors' accounts can be selected from the aged trial balance for further testing. By footing (adding up) the trial balance and comparing the total to the general ledger and financial report, the auditor simultaneously establishes the population being sampled and the clerical accuracy of the trial balance.

Quick review

- The major assertions of interest to the auditor in substantive tests of balances for accounts receivable are existence and valuation.
- 2 The major assertions of interest to the auditor in substantive tests for the related transactions of sales and accounts receivable are occurrence and measurement.

Continued...

The main audit procedures are confirming balances directly with the customers, review of subsequent receipts and reviewing the aged trial balance of accounts receivable.

4 There are two types of accounts receivable confirmation: the positive form, where the debtor is asked to respond, whether or not the debtor agrees with the information on the amount owed in the request; and the negative form, where the debtor is asked to respond only if there is disagreement with the information given.

Burchases and Inventories

Inventories consist of goods to be sold, or used in production of saleable goods, in the ordinary course of business. The transactions involving inventory are an increase when goods are purchased, and a decrease when goods are sold. Usually, especially for retail and manufacturing entities (but not for service entities), inventory is very material and one of the most complex areas of the audit. The form of inventory varies depending on the nature of the business. A manufacturer has inventories of raw materials, work-in-process and finished goods. A retailer or wholesaler has goods acquired for resale. The related transactions cycles are purchases of raw materials (manufacturer) or finished goods (retailer), and cash payments. This discussion is generalised to apply to both types of inventory, identifying significant differences at relevant points. Some types of service industries, such as hospitals or repair services, also have supplies that can be inventoried, and while in these situations inventories are usually less material, if considered material the audit approach is generally similar.

Differences from the sales and expenditures cycles

The inventory area of the audit is sometimes referred to as the production or conversion function, and there is a relationship between inventory and the sales and expenditures cycles. For example, for a manufacturer the sales cycle includes the shipment of finished goods and the expenditures cycle includes the acquisition of raw materials, direct labour (payroll) and overhead expenses. However, the inventory area is different in nature for reasons explained in the following discussion.

Nature and frequency of accountability tests

Recall that for the sales and expenditures cycles, accountability tests are usually important control procedures used as a basis for the auditor's assessment of control risk. For example, the accounts receivable subsidiary ledger is reconciled to the general ledger control account, prelists of cash receipts are reconciled to deposits and accounting postings, and cash in bank accounts is reconciled to cash accounting records. Also, outside parties may provide information that acts as a type of accountability test. Monthly statements are mailed to customers and complaints are independently resolved. Suppliers' statements may be reconciled with accounts payable balances.

The accountability tests in the sales and expenditures cycles are usually performed at least monthly, and some are more frequent. Almost invariably, these tests are control procedures that are important for achieving specific control objectives that permit the auditor to reduce the assessed level of control risk.

For inventories, an accountability test is also made, and it is probably the single most important control procedure in that area. It is the undertaking of a **physical inventory count**, or **stocktake**, by the client. Inventory items are counted and listed, and the results are compared to accounting records. However, this accountability test usually occurs only once a year, and it is essentially a

stand-alone procedure—its effectiveness depends on procedures that are applied only when the inventory is counted. In practice, there are usually two ways of counting inventory: in a **complete inventory count**, operating activity largely stops and all inventory is counted at one time; in a **cycle count**, periodic counts of selected inventory items are made during the year, with all items counted at least once each year. Auditors' procedures regarding inventory counts are dual-purpose tests (see beginning of this chapter), because the auditor is concerned with both the accuracy of the physical count and the effectiveness of the control procedures over the client's counting and pricing.

Importance of accounting principles

As discussed earlier, audit problems associated with the sales and expenditures cycles tend to be those related to high-volume clerical processing rather than complex accounting principles. Accounting principles cannot be totally ignored: for example, the auditor has to be concerned with classification and recording in the proper period. However, in the inventory area there may be both a large number of items and complex matters of accounting principle.

Generally, the auditor is concerned with application of accounting principles in the following respects:

- assignment of costs to inventory in accordance with an acceptable accounting method, such as first-in, first-out (FIFO) or average cost, and the consistency of the accounting method and the methods of application;
- identification and proper accounting treatment of obsolete, slow-moving, excess or defective inventory items; and
- reduction of inventory items to replacement cost or net realisable value (lower of cost or net realisable value).

It can be very difficult to assign costs to inventory. A manufacturer may use a **standard cost system**, and the auditor must be concerned with whether the adjustments to standard cost result in a reasonable approximation of actual cost. A retailer may use the **retail inventory method**, and the auditor must be concerned with whether the adjustment of inventory at selling price approximates actual cost (or net realisable value if this is lower). For a manufacturer, the allocation of overhead expenses involves several considerations. No matter what accounting method is used by a manufacturer, the auditor must be concerned with conformity with regulations on the proper inclusion of expenses in overhead. For example, if a *direct costing* method is used, only variable overhead expenses are assigned to inventory; this method is not in accordance with approved accounting standards. These standards require the use of absorption costing, where both fixed and variable production overhead related to bringing inventories to their present location and condition are allocated to inventory.

The client's costing or pricing of the quantities determined by counting inventory usually occurs some time after the inventory count to allow for investigation of differences. Generally, this step, referred to as the 'pricing and summarisation', is considered to be part of the client's physical inventory. Under both the complete and cycle count methods, the physical count is reconciled to perpetual inventory records if they are maintained, with the pricing and summarisation being based on the reconciled amount.

Materiality and method of allocation

In accounting, the process of apportioning costs incurred between expenses of the current period and assets that benefit future periods is broadly referred to as *allocation*. The general accounting records accumulate the totals of costs incurred for inventory, such as purchases and payrolls.

Source documents provide a record of units purchased (receiving reports) and units sold (shipping reports), or, as in a perpetual inventory system, a separate record of units may be maintained.

At the end of the accounting period the costs incurred for inventory during the period must be allocated between units sold and units on hand. This is the function of the cost accounting system. The term 'cost accounting system' is usually applied to manufacturers. However, even a merchandiser who acquires goods for resale often needs a system for assigning costs of acquiring and storing goods, such as freight and warehousing, to inventory. Inventory costs are seldom confined to the supplier's invoice price.

Cost accounting systems vary greatly in complexity and sophistication. A job order or a process cost system may concurrently track the internal use and movement of inventory units and costs and be integrated with the general accounting system. On the other hand, the system may consist simply of spreadsheets based on general accounting records and unit records that are prepared periodically or only annually.

Whether the costing approach is sophisticated or rudimentary, the resulting allocation between the current period and future periods usually has a material effect on profit. Cost of sales is often 60 per cent or more of sales, the largest expense in the statement of financial performance. Also, inventory is usually material to the statement of financial position and a very material component of current assets. Thus, the misstatement of the allocation between cost of sales and inventory can cause a material misstatement of the operating results and financial position.

The substantiation of both cost of sales and ending inventory is usually dependent on direct tests of the ending inventory balance, combined with tests of transactions for the expenditures cycle or direct tests of balances of accounts related to that cycle. In a continuing engagement, beginning inventory has been substantiated in the previous period. The amount of cost of sales is, in effect, a residual of the following activity analysis:

Beginning inventory

Plus Expenditures for goods and services for inventory

Less Ending inventory Cost of sales

It is usually tested indirectly by tests of inventory and expenditures.

The significance of ending inventory to the determination of net profit, combined with the high volume of activity and accounting complexities, often creates a *high risk of material misstatement*. The inventory area is particularly susceptible to intentional misstatements designed to manipulate net profit, and it is important for the auditor to maintain professional scepticism. If the auditor's procedures detect discrepancies between accounting records and supporting documentation or other corroborating information, the auditor should consider the possibility of material misrepresentations by management.

Assertions, objectives and procedures

The essential feature of direct tests of balances for inventories is emphasis on specific audit objectives related to *existence and valuation*, achieved primarily by *observation of physical inventory* and *tests of pricing and summarisation*. AUS 506 'Existence and Valuation of Inventory' (ISA 501 'Audit Evidence—Additional Considerations for Specific Items: Part A: Attendance at Physical inventory Counting') establishes standards and provides guidance on obtaining sufficient appropriate audit evidence regarding these two assertions. The financial report

assertions, specific audit objectives and common audit procedures to achieve these objectives are summarised in Table 10.4. As applied in the inventory area, these procedures have the following features:

• **Observation of physical inventory** This term is used to describe the combination of observation, inquiry and physical examination (test counts) that provides the basis for achieving several specific audit objectives for inventory. It is explained further in a separate section.

Financial report assertion	Specific audit objective	Common audit procedures to achieve objectives
Existence	Inventories included in the statement of financial position physically exist and represent items held for sale in the ordinary course of business.	 Inspection of physical inventory (checking from inventory records to physical stock) Analytical procedures Confirm stock held at other locations
Occurrence	Transactions of purchases and cash payments occurred during the period.	 Select transactions from purchases journal and agree to supporting documentation (e.g. goods received note) Select transactions from cash payments journal and agree to supporting documents (e.g. suppliers' invoices)
Completeness	Inventory quantities include all items on hand or in transit. Inventory listings are accurately compiled and properly included in the inventory accounts.	 Inspection of physical inventory (checking from physical stock to inventory records) Analytical procedures Inquire about stock held at other locations
Rights and obligations	The entity has legal title or ownership rights to inventory items, and inventories exclude items billed to customers or owned by others.	 Check legal ownership of goods being shipped and goods on consignment
Measurement	Inventory transactions are recorded in the correct amount and period.	 Check dollar value of purchases to inventory price list Agree dollar value of cash payments to supporting documents (e.g. supplier's invoice) Check last purchases and sales recorded before balance date and first purchases recorded after balance date are recorded in correct period (cut-off) Test clerical accuracy of inventory listing
Valuation	 Inventories are properly stated with respect to: cost determined by an acceptable method consistently applied slow-moving, excess, defective, and obsolete items identified reduced to net realisable value if lower than cost. 	 Tests of pricing and summarisation Analytical procedures Observation of physical inventory (look for obsolete or damaged items) Inquiry and scanning Check subsequent sales prices and compare with cost
Disclosure	Inventories are properly described and classified in the statement of financial position and related disclosures are adequate.	Inquiry and scanningGeneral procedures

TABLE 10.4	Assertions,	objectives	and	procedures	for	purchases	and	inventory
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- Analytical procedures In the inventory area these include computation of ratios for inventory turnover and detailed gross margin (by product type or code and location) and comparison to previous periods. For a manufacturer, computation of the ratio of overhead to materials and labour and comparison to previous periods may be an important substantive test. If a standard cost system is used, it is usually important to study variance reports and consider the reasonableness of explanations for variances. Sales forecasts and marketing plans may provide information relevant to the net realisable value of inventory. In general, analytical tests usually receive more emphasis in the inventory area than in many other audit areas.
- **Cut-off** This procedure relates to the measurement assertion and is directed to the control over shipping and receiving activities at the physical inventory date. Usually, the auditor identifies the numbers of the last prenumbered shipping and receiving documents at the time of the observation of physical inventory. These numbers are used for cut-off tests for accounts receivable and accounts payable recording. The document numbers are also used to determine whether the related inventory items were properly included or excluded from the physical inventory count and, if perpetual records are maintained, the inventory records. The inclusion or exclusion of inventory items in transit should ideally be based on passage of title as determined by the shipping terms Free on Board (FOB), where title passes at the shipping point, and Cost, Insurance and Freight (CIF), where title passes at destination. However, unless the difference would be material, purchases are often recorded when received and sales when shipped.
- **Tests of pricing and summarisation** This term is used to describe the combination of vouching, tracing and recomputation procedures used to test the client's pricing and summarisation of inventory counts. It is explained further in a separate section.
- General procedures The general procedures relevant to inventory include reading minutes, debt instruments and agreements to find indications of liens or pledging of inventory, unrealised losses on purchase commitments or inventories held on consignment.
- Inquiry and scanning The important inquiries for inventory include discussion with management concerning obsolete, excess or slow-moving inventory, and the same matters as described above for general procedures. Scanning includes reviewing perpetual records or other records or reports of inventory usage and movement in order to identify any such obsolete, excess or slow-moving items.

Observation of the physical inventory

The following list highlights points that are often misunderstood about observation of physical inventory:

- 1 The client's taking of the physical inventory is a control procedure, but it is a stand-alone activity and its effectiveness is not dependent on control over processing transactions.
- **2** The procedures the auditor uses are a combination of observation, inquiry and physical examination (making test counts of client's counts).
- **3** The auditor's goal is to obtain reasonable assurance that the client's methods of counting inventory result in an accurate count, which is a test of controls. The auditor undertakes test counts as an aid in making this assessment, rather than attempting to directly substantiate inventory quantities by counting.
- 4 In most circumstances there are no satisfactory alternative procedures to making or observing some counts of items in inventory for verifying the ending inventory.

When inventory is material, the auditor is required to obtain sufficient appropriate audit evidence regarding its existence and condition by attendance at a physical inventory count unless it is impractical (AUS 506/ISA 501). In exceptional circumstances, the auditor may judge it necessary to depart from this procedure in order to achieve the same objective more effectively; the justification for this departure should be documented in the audit working papers.

In planning attendance at the physical inventory count, the auditor considers the following matters:

- inherent, control and detection risks and materiality related to inventory;
- whether adequate procedures are expected to be established and proper instructions issued for physical inventory counting;
- the timing of the count;
- the locations at which inventory is held; and
- whether an expert's assistance is needed.

In determining the need to use an expert, the auditor would consider the materiality of the inventory, the nature and complexity of the items and other evidence that is available. Situations in which experts are normally required include where minerals are stored in stockpiles or where the client is in the business of selling items such as gems or paintings that require expert valuation. If an expert is required, the auditor follows the standards and guidance outlined in AUS 606/ISA 620 'Using the Work of an Expert', as discussed in Chapter 5.

The desirable features of client procedures for taking a physical inventory include the following:

- a written plan of instructions for inventory counting which is communicated to all relevant staff;
- proper arrangement of inventory items to facilitate counting;
- procedures for the identification and recording of obsolete or excess inventory;
- numerical control of inventory tags or count sheets and accounting for all used and unused tags or sheets;
- personnel on inventory count teams who are independent of inventory storekeeping; and
- supervision of counting by internal auditors or supervisory personnel who re-count on a test basis.

To obtain assurance that management's procedures are adequately implemented, the auditor observes employees' procedures and performs test counts. When performing counts the auditor may test both the completeness and the existence of inventory by tracing items selected from those records to the physical inventory, and items selected from the physical inventory to the count records. The auditor considers the extent to which copies of such count records need to be retained for subsequent testing and comparison. The auditor also considers cut-off procedures, including details of the movement of inventory just before, during and after the count, so that the accounting for such movements can be checked at a later date.

A physical inventory count conducted at a date other than period end is usually adequate for audit purposes only when control risk is assessed as less than high. The auditor assesses whether, through the performance of appropriate procedures, changes in inventory between the count date and period end are correctly recorded. When the entity operates a perpetual inventory system which is used to determine the period-end balance, the auditor would assess, through the performance of additional procedures, whether the reasons for any significant differences between the physical count and the perpetual inventory records are understood, and whether the records are properly adjusted. Sometimes the inventory balance may be material, but attendance at an inventory count is impractical because of the nature or location of the inventory, or in exceptional circumstances the auditor is able to justify not attending the physical inventory counting (e.g. counting cattle that are roaming around a Northern Territory cattle ranch). In these circumstances the auditor should consider whether alternative procedures provide sufficient appropriate audit evidence of existence and condition to conclude that they need not make reference to a scope limitation in the audit report (refer to Chapter 13). For example, the auditor may not be engaged until after the client's physical inventory. A satisfactory alternative procedure is for the auditor to make test counts at a later date and, by examining the documentation of inventory receipts, issues, movements and shipments, to work back to the quantities on hand at the count date and make comparisons to the client's counts. This means the client must maintain either good perpetual records or other sufficient documentation of inventory movements to permit the equivalent of perpetual records to be prepared for the period between the count date and the auditor's test counts. The auditor reviews client documentation of counts and counting methods.

In order to test the completeness assertion for inventory, the auditor needs to make inquiries about stock held at locations other than the client's. Incomplete inventory records may be detected using analytical procedures such as the ratio of sales to cost of sales to discover irregularities.

If inventory is under the custody and control of a third party, the auditor ordinarily obtains direct confirmation from the third party as to the quantities and condition of inventory held on behalf of the entity. Depending on the materiality of this inventory the auditor would also:

- consider any apparent lack of integrity and independence of the third party;
- observe, or arrange for another auditor to observe, the physical inventory count;
- obtain another auditor's report on the adequacy of the third party's internal control structure for ensuring that inventory is correctly counted and adequately safeguarded; and
- inspect documentation regarding inventory held by third parties, for example warehouse receipts, or obtain confirmation from other parties when such inventory has been pledged as collateral.

Tests of pricing and summarisation

The auditor's tests of **pricing and summarisation** are a combination of vouching, tracing and recomputation to test the following aspects of the client's procedures:

- summarisation of quantities from the count tags or sheets to the inventory list;
- application of prices to the quantities in the list;
- computation of the extensions and footings of the list; and
- identification of obsolete, excess or slow-moving items and reduction of their prices to net realisable value where this is lower than cost.

The auditor's procedures for testing the summarisation of quantities are designed to provide reasonable assurance that all items counted are included in the listing (giving evidence that the listing is complete), and that no items have been inappropriately added (giving evidence that all inventory items on the list exist). Therefore, the auditor is concerned with both existence and completeness. The auditor reviews the listing to see that only tags or sheets used for the client's counts are included, and compares selected items on the list to the record of the auditor's test counts and to the client's tags or sheets.

The auditor is required to evaluate the bases used by management in the valuation of inventory and to perform audit procedures designed to obtain sufficient appropriate audit evidence regarding these bases. Audit sampling may be used, and the extent of testing may be restricted when the control risk for the purchases subsystem is evaluated as less than high.

The extent of testing for obsolete, excess or slow-moving items depends on the care and thoroughness of the client's own review for such items. If the entity has adopted specific criteria, such as a reduction in cost for all items for which they have over a year's supply on hand and all items that have not been sold or used within six months, the auditor evaluates the reasonableness of the criteria and tests the client's application. The auditor may also vouch unit prices to suppliers' invoices, open purchase orders, current supplier price lists or published prices and review records of internal usage and movement of inventory.

Materiality

The auditor uses materiality in the inventory area primarily as a means of identifying individually significant inventory items and regards items as individually significant because of their dollar size. The auditor usually includes these items among the items test counted and determines the number of test counts to make on the basis of risk and materiality considerations. The risk and materiality considerations will be influenced by whether the physical arrangement of items facilitates observation and accurate counting, and the extent of the client's planning, supervision and testing of the counts.

Audit risk

The extent of the auditor's coverage of the client's physical inventory is based largely on the review of the client's plans and arrangements and past experience. Many clients will have their inventory stocktake on or near to balance date. However, there will be others who will undertake the stocktake at an interim date.

Consideration of audit risk is a very important factor in deciding whether the observation of physical inventory can be made at the earlier date. The specific control objectives that are relevant to this consideration include those for recording accuracy for purchases, sales and cost accounting and safeguarding controls over inventory. Important controls for inventory are:

- for storage areas to be secured against unauthorised admission by protective measures such as guards, alarm systems, fences or locked areas, and admission by an identification badge or pass;
- inspection of all materials leaving the premises for authorised shipping documents; and
- use of prenumbered documents, with the sequence accounted for independently, for receiving, materials requisitions, production orders and shipping.

The auditor needs reasonable assurance that the relevant control procedures continue to function in the period between the date of the observation and the balance date. This means the auditor has to test the control procedures related to safeguarding around the balance date. If controls over recording accuracy for purchases, sales and cost accounting are functioning satisfactorily at an interim date, the auditor's understanding of these control procedures may also be updated by inquiry and observation. If there are deficiencies in these controls but safeguarding procedures are adequate, the auditor may be able to test transactions during the intervening period so as to enable the auditor to extend the conclusion based on the interim observation to the balance date. If there are serious deficiencies in safeguarding controls, or if the auditor believes there is a serious risk of management misrepresentations, then the observation of the physical inventory must be performed at or near the balance date.

Qu	lick review
	Due to the significance of inventory to the determination of net profit, and the associated high levels of activity and accounting complexities, inventory is often one of the most complex and high-risk areas to audit.
	The main assertions of interest to the auditor in undertaking tests of balances for inventory are existence and valuation.
	The main audit procedures are observation of physical inventory and tests of pricing and summarisation.
	When inventory is material the auditor is required to attend a physical inventory count unless impractical. To obtain assurance that management's procedures for the inventory count are adequately implemented the auditor observes employees' procedures and performs test counts.
	The auditor tests the summarisation of quantities from the inventory count to obtain reasonable assurance that all items counted are included in the inventory list, and that no items have been inappropriately added.
6	The auditor tests valuation by vouching items to suppliers' invoices and cost accounting records, and examines the client's review of obsolete, excess and slow-moving items.

ACCOUNTS PAYABLE AND PAYMENTS

A major part of accounts payable is trade creditors, which is related to the purchases/inventory/ cash payments cycle. When shipments of raw materials and finished goods are received and placed in inventory, this gives rise to an equivalent liability, trade creditors, until payment is made. Accounts payable is also comprised of other suppliers (such as suppliers of electricity or other items not used in production or resale), also sometimes termed 'other creditors'. The essential feature of direct tests of balances for accounts payable is emphasis on the specific audit objective related to *completeness*. This is a reflection of the fact that the auditor's major risk is in understatement of this account. For example, a major risk is that inventory is received and included as an asset, but the equivalent liability is not immediately taken up. The completeness objective is achieved primarily by a search for unrecorded accounts payable and analytical tests of related expense account balances.

Assertions, objectives and procedures

The financial report assertions, specific audit objectives and the common audit procedures traditionally used to achieve the objectives for accounts payable and related accounts are summarised in Table 10.5. As applied in the accounts payable area, these procedures have the following features:

Confirmation Confirmation procedures for accounts payable balances are less common in practice compared with confirmation of accounts receivable. Confirmation is generally considered relevant to achieving specific audit objectives related to existence, rights and obligations and to some extent valuation, and can be an efficient and effective procedure for achieving these specific audit objectives. However, some auditors use confirmation procedures for accounts payable balances when control objectives related to occurrence and measurement of associated transactions have serious deficiencies. Confirmation requests are sent to suppliers with whom the entity has done a relatively large volume of business during the period. The auditor is concerned with what should be recorded rather than what is recorded, so the emphasis is placed on selecting suppliers who are *likely* to have large

learning objective balances. The accounts payable balances selected may therefore include zero and small recorded balances. The normal form of confirmation request for payables is positive and asks the supplier to state the balance due from the client. The auditor's analysis of responses is similar to that for confirmation of receivables. A distinction must be made between discrepancies caused by payments and shipments in transit, such as a cheque drawn before year-end which the supplier doesn't receive until after year-end, and those caused by clerical errors, disputes and unrecorded invoices.

Financial report assertion	Specific audit objective	Common audit procedures to achieve objectives
Existence	Accounts payable and accrued liabilities are valid obligations to suppliers at the balance date.	ConfirmationVouching
Completeness	Accounts payable and accrued liabil- ities include all obligations owed to suppliers at the balance date.	Out-of-period liability searchGeneral procedures
Occurrence	Transactions giving rise to accounts payable occurred during period.	 Select transactions from accounts payable listing and agree to supporting documentation (e.g. suppliers' invoices)
Rights and obligations	Accounts payable and accrued liabilities are obligations owed by the entity.	ConfirmationGeneral procedures
Measurement	Accounts payable are recorded in the correct amount and period.	 Cut-off Check clerical accuracy of accounts payable listing Agree dollar value of accounts payable to supporting documents (e.g. suppliers' invoices)
Valuation	Accounts payable and accrued liabilities are presented at the appropriate amount.	RecomputationAnalytical procedures
Disclosure	Accounts payable and accrued liabilities are properly described and classified in the statement of financial position and related disclosures are adequate.	Inquiry and scanningGeneral procedures

TABLE 10.5 Assertions, objectives and procedures for accounts payable and related accounts

- Vouching Some auditors regard vouching recorded payables balances to suppliers' statements as equivalent in reliability to confirmation because the evidence originates outside the client's accounting system. Vouching is effective when recorded accounts payable are reconciled to monthly statements received from suppliers. However, if the client's system does not include an accounts payable subsidiary ledger or suppliers' master file, such a reconciliation can be time-consuming and difficult.
- Search for unrecorded liabilities The emphasis with this procedure is on identifying obligations that should have been recorded at the balance date. It directly tests the accounts payable balance for understatement and because it is the central procedure in the accounts payable area it is explained further in a separate section (below).

- General procedures The search for unrecorded liabilities focuses on detecting unrecorded accounts payable or accrued liabilities for goods or services received at the balance date. However, other unrecorded liabilities may arise from matters such as commitments under contracts, legal claims against the entity or other loss contingencies. The auditor normally relies on general procedures, such as reading minutes, contracts, loan agreements, leases and correspondence from government agencies, to detect unrecorded liabilities for which no indication exists in the accounting records or source documents. For example, the minutes of meetings of the board of directors may reveal an unrecorded dividend payable or a potential legal liability.
- Cut-off The auditor determines the last receiving report, last voucher and last payment of the current period by reference to the prenumbered sequence for those documents, and then checks that the transactions immediately before and after cut-off are recorded in the correct period.
- Analytical procedures Comparison of expenses, budgets and level of activity in the current period with similar information from previous periods can provide evidence for recorded expense and liability balances. In some cases an analytical test can substantiate the total expense and related accrued liability. For example, sales commission expense and accrued commissions payable can usually be reliably estimated based on recorded sales and knowledge of the terms for commissions.
- Recomputation Some accrued liabilities, such as electricity and telephone accounts, can be substantiated by examining payments in the subsequent period and calculating the portion attributable to the previous period under audit. In general, recomputation is used for accruals and deferrals that are recurring adjustments in closing the accounting records.
- Inquiry and scanning The auditor uses inquiry and scanning in conjunction with other general procedures to identify matters relevant to the description, classification and related disclosure of liabilities in the statement of financial position. For example, inquiry and scanning may identify related-party payables or losses under sales or purchase commitments.

Search for unrecorded liabilities

This procedure is also sometimes called 'the out-of-period liability search' or 'the review of subsequent payments'. This audit procedure is invariably included in audit programs for direct tests of the accounts payable balance.

The potential for unrecorded liabilities arises from both errors and irregularities. Errors result because of practical problems in closing the accounting records. Invariably some goods or services received before the end of the period do not become known and recorded until the next period. Controls over suppliers' invoices and receiving reports, matching of these source documents and investigation of unmatched items can minimise this problem. The auditor's objective is to obtain reasonable assurance that material liabilities have not been omitted.

Intentional omission of liabilities that exist at balance date does not change the auditor's objective. In fact, the same audit procedures should detect material omissions whether they are inadvertent or intentional. Goods or services received will ultimately have to be paid for in the next period to avoid disputes with suppliers, loss of credit lines or litigation with creditors.

The auditor selects from cash payments recorded in the subsequent period and traces them to the schedule of accounts payable outstanding at balance date, identifying those payments that pertain to the period under audit. Those identified payments not included in the schedule are unrecorded liabilities. The auditor also reviews and selects from unmatched receiving reports and suppliers' invoices received by balance date and suppliers' invoices received in the subsequent period in order to detect liabilities that should have been recognised at balance date.

Any suppliers' invoices representing unrecorded liabilities at balance date that are not received or paid before the auditor applies these procedures would not be detected. Thus, effectiveness is improved by doing the search for unrecorded liabilities relatively late in the audit. Confirmation of accounts payable balances is not subject to this disadvantage. It can therefore be an important complement to the search for unrecorded liabilities, particularly when the audit is scheduled for completion relatively close to balance date.

Materiality

In the search for unrecorded liabilities, materiality is used primarily to identify the items to be selected. In other words the auditor selects all cash payments, suppliers' invoices or receiving reports from the relevant period that exceed a cut-off amount. Since all items above the threshold amount are selected, audit sampling is not being used.

Audit risk

The inherent risk factors the auditor considers include the number of principal suppliers, supplier billing practices, the clients' purchasing methods and the principal types of goods or services purchased. Also, organisational considerations such as management's attitude to control and factors that predispose management to make material misrepresentations are particularly important.

Control risk generally focuses on specific control objectives related to completeness and reconciliation. Considerations that are particularly important in determining the extent of the out-of-period liability search are the effectiveness of:

- the client's review and investigation of unmatched prenumbered purchase orders and receiving reports at the end of the period;
- the client's reconciliation of suppliers' statements with accounts payable balances; and
- the client's monthly reconciliation of the schedule of accounts payable with the general ledger accounts payable balance.

Audit efficiency

Some audit efficiencies are possible in the accounts payable area. For example, because selection of suppliers for confirmation is based on the expected volume of purchases rather than the amount of the recorded balance, the confirmation requests can be sent before the accounts payable trial balance is prepared or tested. Also, sending the confirmation requests on or around the balance date allows the supplier to respond directly to the auditor with information they have gathered through their normal billing process. However, the primary efficiency consideration is co-ordination of the out-of-period liability search and confirmation of payable balances in order to avoid duplication of audit procedures to achieve specific audit objectives related to completeness and valuation.

Quick review

- The main assertion of interest to the auditor when undertaking tests of balances of accounts payable is completeness.
- The main audit procedures are a search for unrecorded accounts payable, confirmations and analytical procedures on related expense account balances.



NON-CURRENT ASSETS

The audit approaches for each of the account balances in this broad category are generally similar. The account balances are usually affected by a few large transactions, and amounts from previous periods have continuing significance; that is, the account does not turn over frequently. Thus, the approach to the direct tests of balances for account balances in this category is to directly test the transactions that affected the account during the period; this indirectly substantiates the ending balance. The related revenue and expense accounts are normally examined in conjunction with the statement of financial position accounts. For example, depreciation expense is tested in conjunction with property, plant and equipment.

Property, plant and equipment

The asset category of property, plant and equipment generally includes land, buildings and manufacturing equipment. It may also include office equipment, furniture and fixtures and even when these assets are classified separately the audit approach is generally the same as for property, plant and equipment.

The essential feature of direct tests of balances for property, plant and equipment is emphasis on specific audit objectives related to *existence, rights and obligations* and *valuation*, achieved primarily by *substantiating additions* and *identifying retirements* during the period, considering any revaluations undertaken during the year and analytically testing or recomputing related expense and allowance accounts. The *occurrence* of the transactions associated with purchases of property, plant and equipment is covered by verifying the *existence* of the additions to property, plant and equipment as listed at balance date.

Assertions, objectives and procedures

Table 10.6 summarises the financial report assertions, the specific audit objectives and the common audit procedures traditionally used to achieve the objectives for property, plant and equipment and related account balances. As applied in the property, plant and equipment area, these procedures have the following features:

- Vouching This procedure consists of inspecting the supporting documentation for additions, retirements and changes in valuation during the period. For example, the auditor examines the supplier's invoice and the receiving report for new equipment, and considers the appropriateness of capitalisation in light of entity policy and accounting principles. If assets are revalued, the new values may need to be sourced back to supporting documentation such as an independent expert's opinion.
- Physical examination The auditor obtains knowledge of additions and retirements through inquiries to client personnel, reviewing accounting records and touring the plant. The auditor notes whether any identified new equipment is entered in the accounting records and whether items in the accounting records can be located in the plant.
- Analytical procedures Several analytical procedures are useful for detecting misclassified additions, unrecorded retirements and miscalculation of depreciation expense. The auditor compares property, plant and equipment balances and depreciation expense with amounts of previous years and budgets, and current additions to the capital budget. Also, the auditor computes the ratio of depreciation expense and accumulated depreciation to equipment balances in the current and previous periods. The auditor also relates changes in property, plant and equipment balances to expected related changes in insurance expense, land taxes and repairs and maintenance expense.

TABLE 10.6Assertions, objectives and procedures for property, plant and
equipment

Financial report assertion	Specific audit objective	Common audit procedures to achieve objectives
Existence	Property, plant and equipment included in the statement of financial position physically exists. Retirements are removed.	Vouching to invoicesPhysical examination of additionsAnalytical procedures
Completeness	Property, plant and equipment includes all capitalisable costs (capitalisable costs are not expensed).	 Inquiry Scanning repairs and maintenance for items that were expensed rather than capitalised
Rights and obligations	The entity has legal title or equivalent ownership rights to property, plant and equipment included in the statement of financial position and the related lease obligation of capitalised leased assets is recognised.	General proceduresInquiry scanning
Measurement	Property, plant and equipment is recorded at its appropriate carry value. Cut-off is not an issue because there is not a continuous flow of transactions relating to this account. The tests as to whether the recording takes place in the correct period are usually under existence or completeness.	 Test clerical accuracy of property, plant and equipment listing
Valuation	Property, plant and equipment are appropriately valued and allowances for depreciation or depletion are computed on the basis of acceptable and consistent methods. Additions include only the capitalisable cost of assets purchased, constructed or leased.	 Recomputation Analytical procedures Vouching costs to invoices Inquiries about revaluations
Disclosure	Property, plant and equipment is properly described and classified in the statement of financial position, and related disclosures are adequate.	General proceduresInquiry and scanning

- Inquiry and scanning The auditor asks operating management and personnel about actual additions and retirements. Inquiries to executive management may reveal where revaluations have taken place. The auditor also asks about decisions, such as adding or discontinuing a product or a line of business or revaluing a class of assets, that affect additions and retirements or an asset valuation. A scan of the accounting records for miscellaneous revenue resulting from the sale of retired equipment may be undertaken in circumstances where the auditor considers that this amount may be potentially material.
- **Recomputation** The auditor recomputes depreciation expense and considers whether depreciation is calculated in accordance with an acceptable accounting method consistently applied. Usually, the auditor does not need to make a detailed recomputation when depreciable assets are voluminous. Depreciable assets may be grouped in categories with

similar lives and the same depreciation method, and the calculation made on an overall basis. Technically, this is an analytical procedure.

General procedures The general procedures relevant to property, plant and equipment include reading minutes, inspecting debt agreements and making inquiries to management in order to identify significant changes in the composition or valuation of property, plant and equipment and related liens and mortgages requiring disclosure.

Substantiation of additions

The auditor uses a combination of vouching (inspecting supporting documentation), physical examination (touring the plant) and analytical procedures to substantiate additions to property, plant and equipment. The vouching includes both additions recorded in property, plant and equipment accounts and items recorded in the repairs and maintenance expense account. In reviewing the charges to repairs and maintenance expense, the auditor is concerned with the specific audit objective related to *completeness* for property, plant and equipment. Repairs and maintenance expense may contain costs that should be capitalised rather than expensed. Whether the item is capitalised or expensed depends on conformity with approved accounting standards and adherence to entity policy.

Identifying retirements

In achieving the specific audit objective related to existence for property, plant and equipment, the auditor is concerned with detecting significant unrecorded retirements. Generally, the auditor uses a combination of vouching, physical examination and analytical procedures to identify them.

When vouching additions the auditor notes whether the item is new or a replacement, and traces the replacements to the recording of a retirement. The auditor observes whether or not significant recorded items are in the plant. A study of relationships between related accounts, such as property insurance, land taxes and miscellaneous revenue, may also disclose unrecorded retirements. For example, sale of retired equipment as scrap may be recorded as miscellaneous income. Also, the auditor's knowledge of the business can be an important factor in identifying unrecorded retirements. For example, the auditor's knowledge of the discontinuance of a particular product, combined with knowledge that certain equipment is used exclusively for making that product, lead the auditor to expect to see a recorded retirement or reclassification for that equipment.

Valuation of property, plant and equipment

The auditor must be satisfied that the carrying value of property, plant and equipment does not exceed the amount it would have been reasonable for the business to spend to acquire the asset at the end of the accounting period on a going-concern basis. In addition, accounting standard AASB 1010 'Recoverable Amount of Non-Current Assets' requires that the revaluation of a class of non-current assets should not result in the net value of any asset in that class exceeding the recoverable amount.

There are three principal ways of finding evidence of overvalued assets: observing obsolete or damaged units during a tour of the plant; identifying assets associated with discontinued activities but not yet disposed of; and inquiry of management as to budgets and forecasts in relation to the carrying value of assets.

Management sometimes chooses to revalue property, plant or equipment assets upwards so as to reflect their value to the business more fairly. AASB 1041 'Revaluation of Non-Current Assets' requires that any upward revaluation must be applied to a class of assets and not to individual assets within a class. Assets are required to be stated to their fair value. AUS 526/ISA 545 'Auditing Fair Value Measurements and Disclosures' outlines that substantive tests may involve:

- testing management's significant assumptions, the value model, and the underlying data (paragraphs .39–.49) and
- developing independent fair estimates to corroborate the appropriateness of the fair value measurement.

If the valuation is undertaken by an independent expert the auditor needs to be satisfied as to their skill, competence and objectivity. The auditor vouches the valuer's report, paying regard to the basis of valuation, and considers its appropriateness as a basis for determining the carrying amount of that class of assets in the financial report. Major revaluations should be discussed by the board of directors or audit committee, and the auditor should review minutes of such discussions. If classes of assets are revalued, the auditor must ensure that there is adequate disclosure, including the basis of revaluation and, if an independent valuer was used, the name and qualifications of this person.

If, after considering the available evidence, there is still a risk of a material misstatement, the auditor may consider getting an independent expert valuation. In such a situation the auditor needs to follow the standards and guidance outlined in AUS 606/ISA 620 'Using the Work of an Expert', discussed in Chapter 5.

Materiality and audit risk

The usual approach to substantiating additions is to vouch all those above a specified cut-off dollar amount. In the property, plant and equipment area, account balances are relatively more susceptible to misstatement caused by misapplication of accounting principles. The accounting principles for determining the proper costs to include in acquisition cost and the proper accounting treatment of significant repairs, improvements and similar matters are relatively complex. Also, the accounting standard related to capitalisation of leased assets (AASB 1008/ IAS 17 'Accounting for Leases') is relatively complex, increasing the associated risk.

The auditor's assessment of control risk is also influenced by the results of tests of transactions for the expenditures cycle. The auditor might incorporate this assessment into the direct tests of balances for property, plant and equipment by adjusting the cut-off amount for additions to be vouched. Other factors the auditor considers in assessing the likelihood of material misstatement in property, plant and equipment include whether the client's procedures contain the following measures to reduce control risk:

- use of capital budgeting for acquisition of property, plant and equipment, with careful monitoring and follow-up;
- detailed property, plant and equipment ledgers maintained and periodically reconciled to general ledger control accounts;
- identification tags fixed to new property, plant and equipment and issued tags reconciled to detailed property, plant and equipment ledger; and
- formal policy for capitalisation/expense decisions, partial depreciation and procedures for reporting of retirements established and incorporated in procedures manuals.

Normally, entities do not make an annual physical inspection of property, plant and equipment comparable to a physical inventory count. Such inspections may be made every three to five years. The auditor normally does not insist on observing a physical inspection of property, plant and equipment unless there are very serious deficiencies in controls.

Quick review

- The main assertions of interest to the auditor when undertaking tests of balances for property, plant and equipment are existence/occurrence, rights and obligations, and valuation.
- The main audit procedures for property, plant and equipment are substantiating additions and identifying retirements during the period, checking supporting documentation for changes in valuation and establishing analytical procedures for related expense and allowance accounts.

Investments and intangible assets

The audit approach and the audit problems for investments and intangibles are similar to those for property, plant and equipment. The auditor focuses on directly testing the transactions that affect the balances during the period, and conformity with approved accounting standards is very important. However, investments in the ending balance are normally substantiated directly.

Investments

The form of investments can vary considerably. Investments may be in debt or equity securities; the securities may be marketable or non-marketable; the entities whose securities are held may be associated or non-associated. Also, an investment may be a loan or advance rather than a security. This discussion focuses on long-term investments. However, the primary distinction between long-term investments and investments classified as current assets is management's intention and ability to hold the investment for longer than one year. Thus, the discussion generally applies to most investments.

The financial report assertions, specific audit objectives and common audit procedures traditionally used to achieve the objectives for investments are summarised in Table 10.7. The essential features of direct tests of balances for long-term investments are emphasis on specific audit objectives related to *existence* and *rights and obligations*, achieved primarily by physical examination or confirmation and vouching; and emphasis on specific audit objectives related to *valuation*, achieved by a combination of recomputation, vouching and tracing or other specialised procedures. The *occurrence* of the transactions associated with investments is covered by verifying the *existence* of the investments at balance date.

If the investment has a physical existence and is in the client's possession, such as debt instruments that were purchased, physical examination is appropriate. If the investment has no physical existence, such as a loan or advance, or is held in safekeeping by an independent custodian, then the auditor should examine any documentary evidence such as a loan agreement and also consider sending a confirmation request to the investment custodian.

The difficult accounting and auditing issues in the long-term investment area usually relate to specific audit objectives concerned with valuation. Generally, the relevant auditing procedures are determined largely by the method of valuation that is most appropriate under the accounting standards.

Whether investments in securities are carried at cost or at market value depends on their nature and classification. Cost is substantiated by vouching the acquisition price in the accounting records, and market price is substantiated by comparing with published market quotations.

Financial report assertion	Specific audit objective	Common audit procedures to achieve objectives
Existence	Investments in securities (shares, bonds, notes) physically exist and loans and advances exist.	 Physical examination Confirmation
Completeness	All investments are included in the statement of financial position.	General procedures
Rights and obligations	The entity owns or has ownership rights to all investments included in the statement of financial position.	VouchingPhysical examinationConfirmation
Measurement	Investments are recorded in the correct amount. Cut-off is not usually a major issue because there is not a continuous flow of transactions relating to this account. Tests as to whether the recording takes place in the correct period are usually included under existence and completeness.	 Test clerical accuracy of listing of investments
Valuation	Investments are valued properly with respect to the accounting standards.	 Recomputation, vouching and tracing Inspection of market quotations or financial statements
Disclosure	Investments are properly described and classified in the statement of financial position and related disclosures are adequate.	General proceduresInquiry and scanning

TABLE 10.7 Assertions, objectives and procedures for investments

The direct tests of balances for investments also include tests of the related investment income and of gains or losses in investment transactions. By reference to the financial press, the auditor can substantiate dividend and interest income on investments and the trading price at the time of purchase or sale of securities.

Intangible assets

A variety of items fall into this asset category: patents, copyrights, intellectual property, organisational costs, franchise fees and goodwill acquired in a business combination. The essential feature of direct tests of balances for intangibles is emphasis on specific audit objectives related to *existence* and *valuation*, achieved primarily by vouching, inspection of legal documents and recomputation or analytical procedures. The primary risk of misstatement arises from misapplication of principles set out in approved accounting standards.

The accounting issues generally relate to whether or not a cost may properly be deferred and the appropriate amortisation period. For example, research and development costs must be accounted for in accordance with AASB 1011 (IAS 38) 'Accounting for Research and Development'. There are difficulties in identifying research and development costs and the recoverable amount, with capitalisation required where costs are expected beyond any reasonable doubt to be recoverable, and amortisation required in order to match such costs with related benefits.

For purchased goodwill, guidance and standards are provided by AASB 1013/IAS 22 'Accounting for Goodwill'. Again the difficult tasks are measuring goodwill and determining an appropriate method of amortisation.

Quick review

The main assertions of interest to the auditor when undertaking tests of balances for investments are existence, rights and obligations, valuation and disclosure.

The main audit procedures for the verification of existence and rights and obligations of investments are physical examination or confirmation and vouching. Evidence for valuation may be gained by recomputation, vouching and tracing or other specialised procedures. Evidence for disclosure requires an assessment of the form of the investment and management's intention and ability to hold the investment for longer than one year.

- The main assertions of interest to the auditor when undertaking tests of balances for intangibles are existence and valuation.
- The main audit procedures for intangible assets are vouching, inspection of legal documents and recomputation or analytical procedures.

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NON-CURRENT LIABILITIES AND OWNERS' EQUITY Non-current liabilities

Generally, non-current liabilities include loans, bonds, and notes payable that are due after one year from the balance date. The current portions of otherwise long-term obligations are classified as current liabilities, but are examined in conjunction with non-current liabilities. Also, interest expense and other related account balances are examined in conjunction with non-current liabilities.

The essential feature of direct tests of balances for non-current liabilities is the emphasis on the specific audit assertion of *completeness*, achieved primarily by confirmations, general procedures and analytical procedures.

Assertions, objectives and procedures

The financial report assertions, specific audit objectives and common audit procedures that are traditionally used to achieve those objectives for non-current liabilities are summarised in Table 10.8. As applied to non-current liabilities, these procedures have the following features:

- Confirmation Normally, the auditor confirms the balance and related details, such as security held, interest rate and terms and interest paid and accrued, directly with all significant debt holders. The form of confirmation is similar to that which is used for accounts payable. Where a trustee keeps the detailed records of debt holders and makes interest payments to them, the confirmation request is sent to the trustee. The standard bank confirmation form can be used for banks that are holders of debt. Details of compensating balances, lines of credit and contingent liabilities are also separately confirmed with the bank. Care should be taken to achieve the specific audit objectives related to completeness as well as those related to existence.
- General procedures For non-current liabilities, general procedures contribute more directly to the achievement of audit objectives than is often the case in other areas. The most important general procedures are reading minutes of meetings of the board of directors and reviewing debt agreements. The auditor is concerned with ascertaining that all obligations are authorised by the board of directors. Debt agreements are extremely important because violation of the terms may result in automatic acceleration of the due date on which the debt has to be repaid. When the debt is reclassified as current, this may materially affect the entity's financial position and its ability to meet its obligations on a timely basis. Debt agreements often contain provisions requiring maintenance of specified working capital and debt to equity ratios and

restricting the payment of dividends or other financing activities. Also, the debt may be secured by either specific or floating charges over assets of the entity. The auditor must also consider the possibility of the entity being placed in liquidation through violation of debt covenants.

- Analytical procedures Analytical procedures for non-current liabilities include comparison of balances with the previous period, and comparison of new debt proceeds and principal repayments with cash flow projections. Also, the auditor considers the reasonableness of the entity's average interest rate incurred (interest expense divided by the average of the beginning and ending debt balances). An unreasonably high average interest rate incurred might indicate unrecorded debt.
- Inquiry The classification of debt as current or non-current may depend on the intent and ability of management to refinance obligations. The auditor substantiates this ability by examining evidence of actual refinancing in the subsequent period or the non-cancellability of financing agreements. The auditor also makes inquiries of management to corroborate intent. Some obligations, such as obligations that arise when a decision is made to dispose of a segment of a business, are recognised before a liability is legally incurred, and it is important to ask management about such obligations.
- Recomputation, vouching and tracing The auditor tests interest expense by recomputing the amount based on the outstanding balance, interest rate and fraction of the year outstanding, with these details being agreed to loan documentation. Interest payments are vouched to cash payments records, and the proceeds of new issues are traced to cash receipts records. The volume of debt transactions is generally low and all items are tested. If volume is high, analytical procedures may be used.

Financial report assertion	Specific audit objective	Common audit procedures to achieve objectives
Existence	Debt and similar obligations in the statement of financial position exist at the balance date.	Confirmation of identified liabilitiesGeneral procedures
Completeness	The statement of financial position includes all debt and similar obligations incurred at the balance date.	General proceduresAnalytical procedures
Rights and obligations	Debt and similar obligations are legal or specific and definite obligations of the entity.	General proceduresInquiry
Measurement	Non-current liabilities are recorded in the correct amount. Cut-off is not usually a major issue because there is not a continuous flow of transactions relating to this account. Tests as to whether the recording takes place in the correct period are usually included under existence and completeness.	 Test clerical accuracy of listing of non- current liabilities
Valuation	Debt and similar obligations are presented at the proper amounts.	Recomputation, vouching and tracing
Disclosure	Debt and similar obligations are properly described and classified and related disclosures are adequate.	General proceduresInquiry

TABLE 10.8 Assertions, objectives and procedures for non-current liabilities

Materiality and audit risk

For non-current liabilities, consideration of materiality is not usually a significant factor in the nature, timing and extent of tests. There are usually a few large transactions or items and all of them are material.

Considerations of importance for audit risk include adherence to a stated policy that all noncurrent liabilities must be authorised by the board of directors, and formal assignment of responsibility for monitoring compliance with the requirements and restrictions of debt agreements.

Accounting principles, including disclosure requirements, for non-current liabilities are voluminous and complex, so more audit emphasis is placed on the specific audit objective related to *disclosure*.

Owners' equity

Equity accounts differ depending on the form of organisation. This discussion focuses on shareholders' equity in a company.

The specific audit objectives and common audit procedures for shareholders' equity are substantially the same as for non-current liabilities, so a separate table summarising them is not presented. The primary differences for particular procedures are as follows:

- Confirmation Many companies use the services of independent share registry offices to maintain detailed records of shareholders. In that case, confirmation requests are sent to those agents. If a company keeps its own share records, the auditor examines the records rather than sending confirmations to shareholders. The auditor's chief concern when the company keeps shareholder records is with the specific objective related to completeness. The auditor examines the shareholder register and observes company procedures to ensure that all issued shares are recorded and that all unissued shares are safeguarded.
- General procedures In addition to reading the minutes of meetings of the board of directors, the auditor would read the company's constitution. The description of shares as presented in the financial report should correspond to the information in the company's constitution. Authorisation of dividends should be in the minutes of board meetings.
- Recomputation, vouching and tracing The auditor's procedures for cash dividends are similar to those for interest payments.

Quick review

- The main assertions of interest to the auditor when undertaking tests of balances for non-current liabilities are completeness and disclosure.
- 2 The main audit procedures are confirmations, reading minutes of meetings of the board and examining debt agreements.
- The main assertions of interest to the auditor when undertaking tests of balances for owners' equity are completeness and disclosure.
- 4 The main audit procedures are inspection of shareholders' registers or confirmation with an independent share registrar, and reviewing the minutes of the meetings of the board of directors.



THE STATEMENT OF FINANCIAL PERFORMANCE

As explained earlier, direct tests of balances generally focus on statement of financial position accounts. In all of the explanations of assertions, objectives and procedures for components of the

financial report in previous discussions, the specific audit objectives are stated for statement of financial position accounts. This section explains the relationship between specific audit objectives for statement of financial performance account balances and those for statement of financial position accounts. This is also an area where controls, such as budgets and variance analyses, are very important in undertaking tests of balances.

Assertions and objectives

The financial report assertions presented in Chapter 5 are broadly worded to cover both statement of financial position and statement of financial performance accounts. The broad categories of financial report assertions that focus on statement of financial performance accounts are similar to those applied to transactions, as follows:

- **Occurrence** Reported revenues and expenses actually occurred during the period covered by the statement of financial performance.
- Completeness All revenue and expense transactions that occurred in the period covered by the statement of financial performance are included.
- Rights and obligations Reported revenues and expenses represent transactions to which the client entity was actually a party.
- Measurement Revenues and expenses are measured properly, and are recorded in the correct period.
- **Disclosure** Revenues and expenses are properly described and classified in the statement of financial performance, and related disclosures in the financial report are adequate.

In a double-entry accounting system, testing one side of a transaction automatically tests the other side. Thus a procedure that achieves an audit objective for one side of a transaction should achieve a comparable audit objective for the other side.

Audit procedures for statement of financial performance accounts

The account balances in the statement of financial performance are generally tested by one of the following procedures:

- Substantiation indirectly by simultaneous tests This category includes those statement of financial performance account balances that are tested indirectly as a result of direct tests of balances of related statement of financial position accounts. The primary statement of financial performance account balances that usually fall in this category are sales, cost of sales and many of the expense accounts.
- Substantiation directly in conjunction with statement of financial position accounts Some statement of financial performance account balances are subjected to direct tests of balances in conjunction with tests of related statement of financial position accounts. Examples of these account balances, with the related statement of financial position accounts shown parenthetically, are as follows:
 - depreciation expense (property, plant and equipment)
 - amortisation expense (intangible assets)
 - investment income (investments)
 - interest expense (loans or notes payable).
- Substantiation directly by analytical procedures The auditor usually applies several analytical tests to statement of financial performance account balances as additional overall

tests of reasonableness, or to provide necessary assurances on appropriate classification or completeness. Statement of financial performance account balances are compared with amounts of previous periods and budgets. Also, the relationships of amounts that are expected to follow a predictable pattern are considered. For example, a relationship should exist between the amount of sales, cost of sales, accounts receivable and doubtful debt expense. When there are significant variances from logical or historical relationships, the auditor should obtain explanations, consider whether they are reasonable and follow up on information gained through these explanations, as required by AUS 512/ISA 520 and by law (refer to the Pacific Acceptance Corporation case in Chapter 4). Analytical procedures may be particularly important for considering the appropriate classification of expenses.

Substantiation directly by separate direct tests Some statement of financial performance account balances are usually substantiated by separate direct tests of balances. Generally, these fall into two broad categories—individually significant transactions or events and account balances of intrinsic interest.

Individually significant transactions or events

Some statement of financial performance items that enter into the determination of net profit are individually significant, and the auditor applies separate direct tests of balances to these items. Generally, the following items are significant:

- Discontinued operations The results of discontinued operations and any related gain or loss are reported separately from continuing operations. Usually, the amount is very material and complex accounting issues are involved in the recognition of gain or loss.
- Extraordinary items and specific revenues and expenses An item is extraordinary if it is both unusual and unlikely to be recurring. Extraordinary items are reported separately from profit and loss from continuing operations. The auditor also carefully considers any specific revenues or expenses from ordinary activities which, because of their size and effect on operating profit, are highlighted separately in the statement of financial performance in accordance with AASB 1018/IAS 1 'Statement of Financial Performance'. The auditor may directly test the underlying transaction or event, and will carefully consider the required disclosure.
- Accounting principle changes The cumulative effect of changing to a new accounting principle also needs to be considered. The auditor needs to obtain evidence to evaluate management's justification for the change, the accounting effect and treatment of the change, the acceptability of the new accounting principle and the adequacy of the disclosures associated with the change.

All of these items generally involve complex accounting issues. The auditor uses recomputation to test the proper application of accounting principles, but audit procedures are also usually necessary to substantiate the underlying transactions or event. In specific circumstances, other transactions or events, such as a sale of land and buildings, may be individually significant and would be tested directly.

Account balances of intrinsic interest

Some account balances are analysed and the details of items in the balance are vouched to supporting documents because there is some interest in the account balance that is out of proportion to the effect of the balance on net profit. For example, *travel and entertainment expenses* and *officers' salaries* often fall into this category because of the income tax implications of these items, in particular potential obligations of fringe benefits tax. Another common

example is *legal fees*. The auditor is concerned with identifying all solicitors consulted by management during the period. An analysis of the legal fees account is a good way to identify the solicitors consulted and why they have been consulted. Because separate disclosures of all *auditors' fees* and *directors' fees* are required, transactions underlying these accounts may also be separately vouched.

Quick review

- Some statement of financial performance accounts are substantiated indirectly by tests of balances of related statement of financial position accounts. These include sales, cost of sales and many expenses.
- Some statement of financial performance accounts are substantiated directly in conjunction with tests of balances of related statement of financial position accounts. These include investment income, depreciation, amortisation and interest expenses.
- Necessary assurances on many statement of financial performance accounts are provided by analytical procedures. These are account balances where the relationship of amounts is expected to follow a predictable pattern, or account balances which individually are not of sufficient risk or materiality.
- Some statement of financial performance account balances are individually significant because of their nature or size. These include extraordinary items, specific significant revenues and expenses from ordinary activities, and items of intrinsic interest such as travel and entertainment expenses and legal, auditors' and directors' fees. Details of items in these accounts are usually vouched to supporting documents.

AUDITING WITH THE COMPUTER: TESTING CLIENT FILES

If client files are voluminous, it can be efficient to apply audit procedures to records in their computer-readable form. For example, a very large entity may have master files with over 100 000 individual records in applications such as inventory and accounts receivable. In these circumstances it may be more efficient for the auditor to use a computer program to automate the auditing procedures. An auditor's program may be used with master files or transaction files, so the audit procedures may be tests of details of transactions or balances. However, it is more common to use an auditor's program to test a client's master files. One of the main ways is to use a program that is designed to read the data existing on a client's file, and undertake auditing tasks on this data, including identifying items deemed to be of risk or material. How this is done will be described in more detail below.

AGS 1060/IAPS 1006 'Computer Assisted Audit Techniques' (CAATs) identifies a number of categories of CAATs. These include a number of evidence-gathering techniques involving the use of computer programs:

Generalised audit software (GAS)

The most widely used form of CAAT is generalised audit software, which is also referred to in AGS 1060/IAPS 1006 as **package programs**. A software package is used to perform specific audit tasks, such as footing and comparing items, on a computer-readable file. A generalised program that can perform several audit tasks for many clients is more efficient than programs specially written for particular clients and tasks. However, a generalised package is not an all-purpose device. The auditor's software must interact with the operating system of the client's

learning objective computer. Particular packages are designed for families of hardware that use particular operating systems. Large auditing firms have developed their own packages, and some software vendors offer audit packages. In some cases, versions have been developed for different hardware and operating systems.

Since there are many audit software packages, this discussion describes the general features of this type of software. When generalised software is run, the first programmed step is to read the client's file. The processing is performed on a copy of the client's file and the client's data are not changed. The other two aspects of generalised audit software are:

- 1 File formats Client file formats vary considerably. For example, the number, type and size of fields in a record on an accounts receivable master file differ widely from client to client. One of the advantages of generalised audit software is its ability to deal with different file formats. The file format is defined by the auditor as part of the input specification. Some packages reformat the data in a standardised manner. The auditor specifies the file layout and the fields and their location in the file.
- 2 **Processing instructions** Generalised audit software is designed to perform several types of processing tasks. The package provides some means for the auditor to determine the particular tasks to be performed. Several approaches are used. In many cases, the auditor fills out coding or specification sheets to identify the tasks. In others, the auditor writes a simplified program in a specially designed command language.

Generalised audit software programs that are currently available perform an extensive range of functions and can:

- select sample items (e.g. select customer balances for positive and negative confirmation);
- identify records meeting specified criteria (exception reporting) (e.g. identify customer balances over credit limit);
- test and make calculations (e.g. recalculate interest charges);
- compare data in separate fields or on separate files (e.g. compare change in balance of an account with details on transactions files);
- summarise data (e.g. summarise accounts receivable by age (one month, two months, etc.)); and
- write reports (e.g. an accounts receivable confirmation letter or work paper account analysis).

Note that in general, audit software is used to test computer file data. It is difficult to test system logic, except implicitly by the results that appear in the data files. These programs contain no explicit testing of programmed controls. The existence of controls may be inferred. For example, take a programmed control which does not allow the account balance to exceed the credit limit. By undertaking an exception report, and observing no records where the account balance is greater than the credit limit, the existence of this control may be inferred. However, the control has not been directly tested—this would require the use of one of the auditing through the computer techniques outlined in Chapter 9.

To make effective use of generalised software the auditor needs to plan carefully. Specific audit objectives remain the same whether audit procedures are applied manually or with generalised software. The starting point in both cases is to develop specific audit objectives from financial report assertions. However, in using generalised software, it is extremely important to specify objectives and criteria in advance of testing. The auditor who manually selects specified items from the accounting records may notice other unusual items. When generalised software is used, an item cannot be selected unless the auditor has completely specified the criteria for its selection in advance.

EXAMPLE 10.4 Use of CAATs

You are auditing the accounts receivable of your client. The accounts receivable master file contains the following fields:

Field Field Title

- 1 Debtor Number
- 2 Debtor Name
- 3 Debtor Address
- 4 Credit Limit
- 5 Outstanding Balance
- 6 Balance < 30 days
- 7 Balance 30–60 days
- 8 Balance > 60 days
- 9 Total dollar value of transactions this year
- 10 Date of last transaction

Required

Describe how the auditor may use audit software to aid in verifying the existence and valuation assertions of the debtors' master file.

Solution

The main way in which the auditor verifies existence is to undertake a debtors' confirmation procedure or verify subsequent receipts from the debtors. Both of these techniques will involve the auditor selecting a group of auditors' outstanding balances to be tested. Thus the auditor would use the sampling function of the audit software.

In testing for the valuation assertion, the auditor needs to identify accounts where there may be a difficulty of payment. This will involve the auditor using the exception reporting function of the audit software. Some of the exception reports may include:

- Accounts with Outstanding Balance (field 5) greater than Credit Limit (field 4)
- Accounts with amounts outstanding > 60 days (field 8 > 0)
- Accounts where total dollar value of transactions (field 9) is less than outstanding balance (field 5).

If these accounts are identified, they too may be included in the debtors' confirmation procedure or review of subsequent receipts.

Specialised audit software (SAS)

If generalised audit software cannot be used on a particular client's computer, the auditor might consider having a program written to accomplish specific audit tasks. SAS is also commonly referred to as **purpose-written programs**.

Alternatively, there is currently available a wide range of SAS for specific industries, and it is more efficient for major routines in these industries. For example, in the insurance industry there are purpose-written programs for the calculation of premium income and reinsurance premiums, which are major issues in the insurance industry. Another example of an application for purposewritten programs is municipal council audits, where the calculation of rates is a major issue.

Specialised software can be written by auditors, outside programmers, software vendors or client programmers. In deciding how to develop it, there is a trade-off between cost and independence. Use of client programs or programmers, while normally cheaper, is less independent.

Utility programs

Software and hardware vendors have developed software designed to accomplish common tasks and routines, such as sorting records or merging files. These types of routines are commonly available in most major applications. The auditor can use a utility program to print the entire contents of a file, merge files or sort records in a file into a sequence useful for an audit task (such as size or location).

Systems management programs

Systems management programs are defined in AGS 1060/IAPS 1006 as enhanced productivity tools that are typically part of a sophisticated operating systems environment, for example data retrieval software or code comparison software. These programs are sometimes suitable to assist with the auditor's objectives, performing functions such as retrieving data which meets specific criteria. Management also has an interest in identifying and following up on records that are large or unusual, for example debtors that haven't paid for over 60 days, and this can be aided by such programs.

EXAMPLE 10.5 Using audit software: your chance to use ACL

The development of audit software, such as ACL, has resolved a persistent problem plaguing auditors—the difficulty of directly accessing client computer information. Recent innovations have allowed auditors with little or no computer background to perform tasks that used to be reserved for information system auditors. With the increased usage of personal computers (PCs) in the business community and other advances in technology, auditors now enjoy greater access to client data, directly from their PCs. Today's auditors are able to quickly access data to perform such tasks as sorting files, sampling, exception reporting and analytical procedures.

In summary, Computer Assisted Audit Techniques (CAATs) are changing the way auditors perform their responsibilities, allowing them to complete their audits more efficiently *and* more effectively. Audit software is being used to analyse large data files, identify anomalies, compare fields, perform queries, develop reports and document audit steps. More importantly, tests performed with the aid of audit software can be performed on entire populations, rather than just samples. Internal auditors can report to management on the basis of '100 per cent' tests, thus giving management a complete picture of the area in question.

For example, audit software may assist an auditor in comparing an Accounts Payable file, a Payroll file and a Contractor file, to determine whether any current employees are being paid as contractors. Similarly, lists of vendor addresses can be compared to employee address files to see whether employees are paying invoices to companies that they own or operate. Finally, auditors can play a consultative role by instructing clients on how to use CAATs for their own benefit.

For the most part, the widely used audit software packages are very similar. Most have been developed from standard spreadsheet applications with which students are already familiar. These specialised spreadsheet applications, however, have been modified such that common audit tasks can be performed through accessing redeveloped macros at the touch of a button. In addition, the audit software packages can handle much larger data sets than most spreadsheet packages.

The CD with this book contains a tutorial on using ACL audit software. It will allow you to become familiar with the audit tests that can be applied using ACL. The CD also contains a case study using ACL. If you wish to explore ACL further, there is also a web site demo http://www.acl.com> that is free for students. ACL asks you to indicate that you are a student, so that a salesperson will not follow up on the contact.

Quick review

- The major technique for testing the client's files involves a program under the auditor's control. The program can be used to read the client's files and identify areas where the auditor may wish to concentrate audit testing, and also to automate many time-consuming processes.
- **2** Auditing with computer techniques includes the use of:
 - generalised audit software—used with many clients;
 - specialised audit software—programs especially written for a client, task or industry;
 - utility programs—routines designed to accomplish common tasks for many clients;
 - systems management programs—enhanced productivity tools that are typically associated with sophisticated systems environments.
- The functions that can be performed by such software include selecting sample items, exception reporting, testing and making calculations, summarising data and report writing.

EFFECT OF STRATEGIC BUSINESS RISK ON SUBSTANTIVE TESTS OF BALANCES



Based on the evidence gathered during the strategic business risk evaluation, including extensive analytical procedures, the auditor develops an expectation about each of the material accounts and the key underlying assertions. If there is agreement between the auditor's expectation and the account balance, then it is expected that the auditor will reduce the amount of substantive testing of balances.

It is anticipated that there will be decreased emphasis given to substantive tests of **routine transactions**, as it is expected that these will be well controlled and will carry little risk of material misstatement. The auditor will use tests of controls to ensure that the expected controls are in operation. The auditor will, however, pay attention to **non-routine transactions** (adjustments by management to the accounts, such as provisions for doubtful debts or loans, provisions for obsolescence of inventory, accrued revenue) of a material nature. Under the financial risk analysis approach, these transactions should also have received audit attention. Thus the major effect of the strategic business risk approach with regard to tests of transactions is that substantive testing of routine transactions should be reduced.

The strategic business risk analysis approach emphasises a 'top-down' approach. The auditor gains a sound and comprehensive understanding of the client's business, strategy, associated risks and industry to develop valid expectations about financial report assertions. This is supported by increased sophistication in the use of analytical procedures and developing a 'model' of expectations of the financial position and performance of the entity. The traditional financial risk audit is effectively a combination of 'top-down' and 'bottom-up' approaches. The top-down component includes an assessment of inherent risks facing the entity, industry and economy. It also includes a bottom-up component where the auditor gains an understanding of the business by selecting and testing specific transactions and balances, and inspecting and validating supporting documentation. Thus there will be less emphasis on the testing of account balances and inferring financial position and performance under the strategic business risk approach compared with the traditional financial risk approach.



Impact of proposed business risk standards

The major change in the business risk standards affecting Chapter 10 is the changes in substantive procedures required due to the changes in assertions. These changes in assertions were outlined in the Chapter 5 Stop Press! The assertions are now categorised around:

- classes of transactions and events;
- account balances; and
- presentation and disclosure of financial information.

The major change is that the auditor will have to undertake more substantive procedures around presentation and disclosure to ensure that adequate audit evidence is gathered to support the assertions under this category.

<u>S u m m a r y</u>

The auditor undertakes the most efficient and effective combination of tests of controls and substantive tests of transactions and balances to achieve a required level of audit risk. In undertaking substantive tests the auditor is verifying the following assertions contained in account balances or classes of transactions: existence, occurrence, completeness, rights and obligations, measurement, valuation and disclosure. For each of the major accounts or classes of transactions, this chapter has identified the relative importance of the assertions and the substantive audit procedures that would be used to gather audit evidence for those assertions. The chapter has also outlined the computer-assisted audit techniques that would be used in the gathering of audit evidence.

<u>Keyterms</u>

Bank confirmation requests	444	Physical inventory count	454
Bank reconciliations	446	Positive form of debtors' confirmation	450
Bank transfer schedule	447	Pricing and summarisation	460
Complete inventory count	455	Purpose-written programs	479
Completeness	441	Retail inventory method	455
Confirmation	448	Rights and obligations	441
Cycle count	455	Routine transactions	481
Disclosure	442	Standard cost system	455
Dual-purpose tests	437	Stocktake	454
Existence	440	Substantive tests of transactions	437
Measurement	442	Systems management programs	480
Negative form of debtors' confirmation	450	Tracing	437
Non-routine transactions	481	Valuation	442
Occurrence	440	Vouching	437
Package programs	477		

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MaxMARK) Assignments

MAXIMISE YOUR MARKS! There are approximately 30 interactive questions on substantive tests of transactions and balances available online at www.mhhe. com/au/gay2e

REVIEW QUESTIONS

- 10.1 The following questions relate to audit procedures for inventories. Select the *best* response.(a) During a client's stocktake you select a sample of items from the floor, count them and trace the quantities to the inventory summary sheet. Which financial report assertion
 - is this audit procedure related to?
 - A rights and obligations
 - **B** valuation
 - **C** existence
 - **D** completeness

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- (b) Your client sells a high-technology product which is subject to frequent technological improvements and design changes in order to keep current with the market. Based on this information, for the inventory account, the assertion upon which you should concentrate your audit procedures is:
 - A existence
 - **B** valuation
 - C rights and obligations
 - D completeness
- (c) An auditor, having accounted for a sequence of inventory tags, traces information on a representative number of tags to the physical inventory sheets. The purpose of this procedure is to obtain assurance that:
 - A the final inventory is valued at cost
 - B inventory sheets do not include untagged inventory items
 - C all inventory represented by an inventory tag is bona fide
 - **D** all inventory represented by an inventory tag is listed on the inventory sheets
- (d) A client maintains perpetual inventory records in both quantities and dollars. If the assessed level of control risk is high, an auditor would probably:
 - A apply gross profit tests to ascertain the reasonableness of the physical accounts
 - **B** insist that the client perform physical counts of inventory items several times during the year
 - **C** request the client to schedule the physical inventory count at the end of the year
 - D increase the extent of tests of controls of the inventory cycle
- (e) Your client's inventory turnover has decreased from 8.2 times to 5.6 times during the year. Based on this decrease, which financial report assertion would you be least concerned with?
 - A rights and obligations
 - **B** existence
 - C completeness
 - **D** valuation
- **10.2** The following questions relate to audit procedures for accounts receivable. Select the *best* response.
 - (a) During the process of confirming receivables as of 30 June, a positive confirmation was returned indicating the 'balance owed as of 30 June was paid on 9 July'. The auditor would most likely:
 - A reconfirm the zero balance as of 9 July
 - **B** verify that the amount was received
 - C determine whether there were any changes in the account between 1 July and 9 July
 - **D** determine whether a customary trade discount was taken by the customer
 - (b) An auditor reconciles the total of the accounts receivable subsidiary ledger to the general ledger control account, as of 31 October. By this procedure, the auditor would be most likely to learn which of the following?
 - **A** An opening balance in a subsidiary ledger account was improperly carried forward from the previous accounting period.
 - **B** An account balance is past due and should be written off.
 - **C** An October invoice was improperly computed.
 - **D** An October cheque from a customer was posted in error to the account of another customer with a similar name.

- (c) Which of the following is not a primary objective of the auditor in undertaking substantive testing of accounts receivable?
 - A Establish existence of the receivables
 - **B** Determine the completeness of the recorded receivables
 - C Determine the approximate amount that can be expected to be received
 - D Determine the adequacy of the internal control structure
- (d) An auditor should perform alternative procedures to substantiate the existence of accounts receivable when:
 - A collectibility of the receivables is in doubt
 - **B** pledging of the receivables is probable
 - **C** no reply to a positive confirmation request is received
 - **D** no reply to a negative confirmation request is received
- (e) Once an auditor has determined that accounts receivable have increased due to slow collections in a 'tight money' environment, the auditor would be likely to:
 - A review the credit and collection policy
 - **B** expand tests of collectibility
 - $C \quad \text{increase the balance in the allowance for bad debts account} \\$
 - **D** review the going-concern ramifications
- **10.3** The following questions relate to audit procedures for investments. Select the *best* response.
 - (a) Which of the following is not one of the auditor's primary objectives in an examination of marketable securities?
 - A To determine whether securities are the property of the client
 - **B** To determine whether securities are properly classified on the statement of financial position
 - **C** To determine whether securities are authentic
 - **D** To determine whether securities actually exist
 - (b) Which of the following is the most effective audit procedure for verification of dividends earned on investments in marketable equity securities?
 - A Comparing the amounts received with dividends received in the preceding year
 - **B** Tracing deposit of dividend cheques to the cash receipts book
 - **C** Recomputing selected extensions and footings of dividend schedules and comparing totals to the general ledger
 - **D** Reconciling amounts received with published dividend records
 - (c) To establish the existence and ownership of a long-term investment in the shares of a publicly traded company, an auditor ordinarily performs a security count or:
 - **A** determines the market price per share at the statement of financial position date from published quotations
 - **B** confirms the number of shares owned with the issuing company
 - **C** relies on the client's internal control structure if the auditor has reasonable assurance that the control procedures are being applied as prescribed
 - **D** confirms the number of shares owned that are held by an independent custodian
- **10.4** The following questions relate to audit procedures for property, plant and equipment. Select the *best* response.
 - (a) In the examination of property, plant and equipment, which of the following does the auditor not try to determine?
 - A The capital nature of items included in repairs and maintenance
 - **B** The reasonableness of the depreciation
 - C The adequacy of future replacement funds
 - **D** The extent of property disposed of during the year

- (b) In violation of company policy, Warren Ltd erroneously capitalised the cost of painting its warehouse. The auditor examining Warren's financial report would most likely detect this when:
 - A observing during the physical inventory observation that the warehouse had been painted
 - **B** examining maintenance expense accounts
 - C discussing the capitalisation policies with Warren's financial controller
 - D examining the construction work orders supporting items capitalised during the year
- (c) An auditor analyses repairs and maintenance accounts primarily to obtain evidence that:
 - A non-capitalisable expenditures for repairs and maintenance have been recorded in the proper period
 - B expenditures for property, plant and equipment have been recorded in the proper period
 - **C** non-capitalisable expenditures for repairs and maintenance have been properly charged to expenses
 - D expenditures for property, plant and equipment have not been charged to expenses
- **10.5** The following questions relate to audit procedures for non-current liabilities and shareholders' equity.
 - (a) When a client company does not maintain its own share records, the auditor should obtain written confirmation from the transfer agent and registrar concerning:
 - A guarantees of preferred share liquidation value
 - **B** the number of shares subject to agreements to repurchase
 - C the number of shares issued and outstanding
 - **D** restrictions on the payment of dividends
 - (b) The primary reason for preparing a reconciliation between interest-bearing obligations outstanding during the year and interest expense presented in the financial report is to:
 - A detect unrecorded liabilities
 - B ascertain the reasonableness of accrued interest
 - C assess control risk for securities
 - **D** determine the validity of prepaid interest expense
 - (c) An auditor would be least likely to use confirmations in connection with the examination of:
 - A property, plant and equipment
 - B long-term debt
 - C shareholders' equity
 - **D** inventories
- **10.6** The following questions relate to the use of computer-assisted audit techniques. Select the *best* response.
 - (a) Which of the following is true of generalised audit software packages?
 - **A** They each have their own characteristics which the auditor must carefully consider before using in a given audit situation.
 - **B** They enable the auditor to perform all manual test procedures less expensively.
 - **C** They can be used only in auditing online computer systems.
 - **D** They can be used on any computer without modification.
 - (b) Auditors often make use of computer programs that perform routine processing functions such as sorting and merging. These programs are made available by CIS companies and others and are specifically referred to as:
 - A utility programs
 - **B** user programs
 - C compiler programs
 - **D** supervisory programs

- (c) A primary advantage of using generalised audit software in the audit of an advanced CIS system is that it enables the auditor to:
 - A verify the performance of machine operations which leave visible evidence of occurrence
 - **B** gather and store large quantities of supportive evidential matter in machinereadable form
 - C substantiate the accuracy of data through self-checking digits and hash totals
 - **D** utilise the speed and accuracy of the computer
- (d) An auditor using audit software would probably be *least* interested in which of the following fields in a computerised perpetual inventory file?
 - A date of last purchase
 - **B** quantity sold
 - C economic order quantity
 - **D** warehouse location
- (e) While undertaking the audit of the debtors' balance, you use your audit software to extract from the accounts receivable master file a report which shows those debtors with a positive balance owing and which is overdue by greater than 30 days. At which of the following account balance assertions is this report aimed?
 - A valuation
 - **B** completeness
 - C existence
 - **D** occurrence

Nature of substantive tests

10.7 What are the major differences between tests of controls and substantive tests of transactions?

Assertions associated with substantive tests

10.8 Cut-off tests relate to testing transactions around balance date. To which assertion does cut-off relate, what is its purpose and for which transactions is cut-off usually tested?

Testing of specific accounts

- **10.9** What factors influence the auditor in determining whether to use the negative or positive confirmation method for accounts receivable?
- **10.10** What alternative audit procedures are acceptable in obtaining satisfaction about inventory quantities?
- 10.11 What assertion is the auditor's primary concern in tests of balances for liabilities? Why?
- **10.12** What are the auditor's major concerns when auditing accounting estimates?

Use of computer-assisted audit techniques

- **10.13** Identify and explain the types of computer programs that are available for testing the client's files.
- **10.14** What functions of generalised audit software are useful for audit tests?

primary learning 2

486

learning objective

10

learning <u>object</u>ive

earning <u>objective</u>

earning objective

DISCUSSION PROBLEMS AND CASE STUDIES

Tests of transactions and balances

10.15 Basic You are carrying out the 30 June year-end audit of Riverina Limited, a large listed company. As part of year-end testing, your audit manager has obtained a report of all transactions processed by the client in the month of June. The objective of the report was to obtain information on all large and unusual transactions processed during the month, so that follow-up testing could be performed. The manager has selected the following transactions for follow-up:

		Dr \$000	Cr \$000
1	Provision for obsolescence	400	
	Inventory		400
2	Cash		100
	Investments—shares in XYZ Pty Ltd		80
	Gain on disposal of shares		20
3	Lease liability	84	
	Interest expense	6	
	Cash		90

Required

- (a) Explain the likely transaction underlying each of the above journal entries.
- (b) Describe the audit evidence you would gather in relation to each of the above journal entries. Include discussion of the implications for other areas of the audit where applicable.
- **10.16 Moderate** John's Jobs (JJ) is a small business providing home maintenance services in the Blue Mountains area of New South Wales. John is interested in purchasing some new machinery for his business and has approached a bank for funding. In order to be given a loan the bank has requested an audited financial report. John has approached your firm for this service and you have been allocated the task of auditing JJ. Your preliminary review of the business indicates that a substantive testing approach would be appropriate and you are now preparing audit programs. In particular you are working on the testing for the revenue cycle.

The information you have obtained from your review is as follows:

- John usually works 50 hours a week. Part of this time is spent travelling between clients and is not charged to the clients. The remaining time is charged at \$40 per hour, regardless of the task undertaken.
- John is usually paid in cash, except for a small number of regular small-business customers who John allows to pay on account on a monthly basis by cheque.
- In all cases John provides the customer with a written receipt. Receipts are prepared manually from a receipt book purchased at the newsagency. The book contains prenumbered blank receipts, which are completed in duplicate.

Required

Provide one procedure you could use to audit each of the assertions of measurement, completeness and occurrence for JJ's revenue balance.

- **10.17 Moderate** Consider each of the following material independent situations:
 - (i) You are auditing the sales and trade debtors of Eastern Block Limited (EB). All of EB's customers are in Eastern Europe. Due to language differences, and the current political situation in many countries, direct confirmation of debtors' balances is unlikely to give satisfactory results.
 - (ii) You are auditing the purchases and trade creditors at FE Pty Limited (FE). One of FE's major creditors is very slow in sending invoices for goods delivered. Also, owing to a quality control problem a large number of goods supplied by FE have been deemed faulty and have had to be returned with a request for credit.

- (a) Identify the key audit assertion(s) at risk in relation to the balances described in each of the situations above.
- (b) Describe the audit procedures you would perform in order to gather sufficient, appropriate audit evidence on each of these assertions.

- **10.18 Complex** You have been assigned to the audit of LMN Limited (LMN), a large listed company with diverse operations. During the audit you become aware of the following:
 - (i) LMN has a \$5 million investment in RBT Pty Limited (RBT), a controlled entity based in Russia. This company imports and sells Australian wheat, flour, yeast and other bakery products to Russian manufacturers. With the devaluation of the rouble, sales have plummeted and many customers are unable to settle their accounts. By yearend, RBT expects to have incurred losses of over \$3 million.
 - (ii) LMN's trade creditors are recorded in a ledger that is produced monthly. Lately accounting staff have been having difficulties with the ledger as it has reached the maximum permissible number of creditor accounts. Management have approved an upgrade of the system, but in the meantime staff are having to keep extensive manual records in order to derive accurate creditor figures.
 - (iii) One of LMN's controlled entities, ICE Pty Limited (ICE), is an ice-cream manufacturer. Part of ICE's agreement with its distributors is that ICE will supply a freezer complete with advertising signs for the distributor's use. These freezers are rented out to the distributors and recorded as fixed assets in the books of ICE. Most distributors are either service stations or corner shops.
 - (iv) As with many other businesses, LMN is finding it extremely difficult to recruit and retain skilled factory staff. Accordingly it has been decided that staff in the most difficult to retain award categories will be rewarded with annual bonuses. These are calculated using a relatively complex formula that takes into account employee's length of service, award rate, seniority and estimated contribution to profit.

Required

For each independent item (i) to (iv) above:

- (a) Identify up to two key audit assertion(s).
- (b) Outline the audit procedures you would perform to gather sufficient appropriate audit evidence on each assertion.

Source: This question was adapted from the Professional Year Programme of The Institute of Chartered Accountants in Australia—1999 Accounting 2 Module.

Substantive tests of cash, cash receipts and payments

- **10.19 Moderate** C Pty Ltd (C) is a large company operating in the tourism industry. C has a number of subsidiaries formed to concentrate on specific aspects of C's activities (e.g. ecotourism, harbour cruises, holidays, etc.). C and each of its subsidiaries have a bank account, but the main banking activities of the group are undertaken through the bank account of C. All of the accounts are maintained and monitored by Ms X, the senior banking clerk of C. Your preliminary discussions with Ms X indicate the following:
 - Subsidiary bank accounts are used for depositing the proceeds of the tourism operations.
 - All expenses of the group are paid by C. These expenses include the costs of tourism operations.
 - Each of the subsidiaries then reimburses C for costs associated with its activities together with a management fee. Reimbursement occurs on a monthly basis and is completed via a direct transfer between the bank accounts authorised by the financial controller of C and the CEO of the relevant subsidiary.
 - Ms X is responsible for preparing a schedule of transfers each month and reconciling each of the bank accounts.

Required

(a) Identify the assertions that are most likely to be assessed as high risk for the cash balances of C and its subsidiaries. Provide reasons for your decision.

primary learning objective

(b) Provide three procedures which could be used to minimise this risk. For each procedure indicate the assertion addressed.

Testing of accounts receivable

- **10.20 Moderate** You are the audit senior assigned to the audit of Chocorama Pty Ltd (C), a manufacturer and wholesaler of chocolate products. Your assistant has performed a positive debtors' circularisation of 50 of C's debtors, with the following results:
 - 1 No reply has been received for eight confirmations.
 - 2 Four debtors' confirmation letters have been returned unopened marked 'No longer at this address'.
 - **3** One confirmation letter was returned signed but with no indication on the confirmation letter whether the account balance was correct or incorrect.
 - 4 Four confirmations were received indicating that the balance was incorrect. The assistant followed this matter up with the debtors clerk and found that C had issued credit notes after year-end and the balance confirmed by the debtors reflected the details of the credit notes.

Required

Indicate the effect of the above findings on the audit approach, specifically identifying the risk that has been highlighted as a result of the audit testing performed, and any additional procedures which you consider that your assistant should perform.

- **10.21 Moderate** R Inc. is an 'Aussie Rules' club operating in the suburbs of Melbourne. You have been assigned to the audit of unearned revenue and accounts receivable for the club. Unearned revenue comprises membership fees paid in advance and accounts receivable comprises late membership fees. Your discussion with the club's manager has indicated the following:
 - The club was formed for the purpose of supporting a local Aussie Rules competition. It provides sporting and social facilities for its 15 000 members.
 - Membership fees are \$30 per person payable annually. Membership is usually paid in advance in December of the previous year. If members do not pay by 31 December the club allows non-financial members to use the club's facilities for a period of three months. After this time they must pay their membership or they will not be allowed to use the facilities. The club accounts for the 'past-due' members' fees as accounts receivable. Where membership is not renewed after the three months the debt is written off.
 - Past experience indicates that approximately 60 per cent of members will pay in advance. Of the remaining 40 per cent, 20 per cent of total members will pay in January and 15 per cent will pay in February. Only 5 per cent of members do not renew membership.

Required

- (a) Indicate two procedures you could use to audit unearned revenue for the 31 December review of R Inc.'s financial report.
- (b) Indicate two procedures you could use to audit accounts receivable for the 31 December audit of R Inc.'s financial report.

Testing of purchases and inventories

- **10.22 Basic** In auditing a company engaged in wholesaling goods, you find that a very substantial part of the inventory of merchandise is on consignment to customers in other cities and at independent warehouses in other cities. State the procedures you would follow in your tests of the inventory on consignment and in warehouses.
- **10.23 Complex** Your client, Sharina Ltd, manufactures baby carriages as its only product. The corporation maintains perpetual inventory records in quantities and values, and also takes a complete physical inventory each 30 April. You observed the physical inventory on





30 April 20X0 and were satisfied with the procedures followed. From your test counts, you are satisfied that the client's counts were substantially accurate. There were differences between the client's count and the perpetual records for about 75 per cent of the items. Before adjusting the inventory records for the larger differences, of which there were about 25, the records were checked and the items were recounted. Typical examples of adjustments for the larger differences are as follows:

	Perpetual record before adjustment	Perpetual record after adjustment
Black paint (in litres)	662	647
Cotter pins (in dozens)	2260	2160
Hub caps	8592	8703
Assembled wheels	6901	6883

Sharina Ltd made no further physical tests of inventories during 20X0. For its year-end closing at 30 June 20X0, the company used inventory quantities shown by perpetual inventory records.

Required

Prepare in outline form an audit program setting out the essential procedures to be followed in your audit of inventories as of 30 June 20X0. Do not include procedures unless you believe them to be essential under the conditions as stated.

Source: AICPA adapted

Substantive tests of accounts payable and cash payments

10.24 Moderate In auditing trade creditors, the audit assistant has:

- selected a sample of creditors from the year-end creditors' ledger;
- vouched each creditor's balance to selected invoices and subsequent cash payments; and
- agreed the total of the creditors' ledger to the trial balance and general ledger.

Required

- (a) Which audit assertion is each of the procedures performed by the assistant directed towards?
- (b) Identify the assertions you believe the assistant should perform further testing on. Ignore disclosure issues.
- (c) In relation to the assertions identified in (b), what additional procedures would you advise the assistant to perform in order to gather sufficient appropriate audit evidence?

Source: This question was adapted from the Professional Year Programme of The Institute of Chartered Accountants in Australia—1999 Accounting 2 Module.

Substantive tests of non-current assets

10.25 Basic You have been assigned to the audit of Investments for P Ltd (P) and its subsidiaries. The treasury department of P undertakes investments on behalf of P and its subsidiaries. P has an 'active' investment strategy, involving the purchase and sale of all types of investments, including listed and unlisted shares and fixed interest securities. Investments are currently valued at \$5 million.

Required

- (a) Which assertion(s) are likely to be considered the highest risk for the audit of investments at P?
- (b) Provide three procedures that could be used to test the valuation assertion for investments at P.

objective



10.26 Complex You are the audit senior on the audit of ABC Limited, a chemicals manufacturer. A significant asset in the statement of financial position of ABC Limited is the property, plant and equipment balance, which is made up as follows:

	Estimated balance at year-end \$000s
Freehold land and buildings (at cost)	25 000
Provision for depreciation	<u>(4 000)</u>
	_21 000
Chemical plant and equipment	140 000
Provision for depreciation	<u>(37 000)</u>
	103 000
Office furniture and equipment	750
Provision for depreciation	<u>(280)</u>
	470
Capital works-in-progress	12 000

ABC Limited has other assets of \$95 million and other liabilities of \$170 million. From discussions with management you are aware of the following:

- The directors have decided to revalue the freehold land and buildings as land values have risen and they consider that the 'statement of financial position will look better' with a higher asset value. The revaluation of freehold land and buildings is to be performed by Mr X, an independent valuer.
- The ammonia plant (with a carrying value of \$10 million) is currently shut down. Due to low market prices it has been cheaper for ABC Limited to import ammonia for use in the production of other chemical compounds than to produce it themselves.
- The capital works-in-progress relates to a new hydrochloric acid plant which is expected to be completed five months after year-end. This will replace the existing hydrochloric acid plant, which will be dismantled once the new plant is commissioned.

Required

- (a) Identify the audit objectives for the property, plant and equipment balance of ABC Limited.
- (b) Identify the main areas of inherent risk in the property, plant and equipment balance.
- (c) Outline specific procedures you would include in the audit program for the property, plant and equipment at ABC Limited.

Source: This question was adapted from the Professional Year Programme of The Institute of Chartered Accountants in Australia—1995 Accounting 2 Module.

Substantive tests of liabilities and owners' equity



- **10.27 Moderate** You have been assigned to the audit of shareholders' equity of AB Ltd (AB), a large publicly listed company. AB uses the services of ShareReg Pty Ltd, an independent share registry office, to maintain detailed records of their shareholders. Your preliminary review of this area has revealed the following information:
 - One month prior to year-end AB had a large share issue. The share issue was 90 per cent subscribed.
 - Prior to the share issue, AB declared a dividend to its existing shareholders. The dividend remains unpaid at year-end.

Required

Outline the audit procedures you would undertake in order to obtain sufficient appropriate audit evidence in respect of the share issue and dividend payment.



Substantive testing of statement of financial performance

10.28 Moderate In auditing payroll expense, the audit assistant has:

- selected a sample of individual pays from the monthly payroll listings of May and June;
 - vouched the pay rates used to the related industrial awards;
- checked the calculations of each pay;
- traced any annual, sick and other leave to authorised forms; and
- agreed the balance of the payroll listings for May and June to the general ledger.

Required

- (a) Which audit assertion is each of the procedures performed by the assistant directed towards?
- (b) Identify the assertions you believe the assistant should perform further testing on. Ignore disclosure issues.
- (c) In relation to the assertions identified in (b), what additional procedures would you advise the assistant to perform in order to gather sufficient appropriate audit evidence?

Source: This question was adapted from the Professional Year Programme of The Institute of Chartered Accountants in Australia—1999 Accounting 2 Module.

Use of computer-assisted audit techniques

10.29 Basic F Financing Pty Ltd (FF) is a subsidiary of F Ltd, a large motoring company established to provide finance to purchasers of F Ltd's products. One of the largest balances in FF's accounts is interest income. Interest income is calculated using software specifically designed for FF. You are currently designing a testing strategy for this balance and believe that the use of computer-assisted auditing techniques (CAATs) may be appropriate, but you are unsure of the type of CAAT which should be used. You have approached a colleague in the information systems audit area who has suggested that you use either generalised audit software or test data.

Required

- (a) Indicate how each of generalised audit software and test data could be used to assist with the audit of interest income at FF.
- (b) Identify and describe the key factors that should be considered when choosing between the two types of CAATs identified.
- **10.30 Moderate** KJA Pty Limited is a manufacturer of fishing equipment and has recently installed a computer system to maintain its inventory records.

An inventory listing can be obtained from the computer system, which provides data in the following format:

- item code—a six-digit number, the first two digits indicating the physical location of the item
- item description
- quantity on hand
- unit cost
- total value on hand
- · date of last sale
- quantity sold during the year and the sales value of the stock sold
- supplier's code number (the company has a list of preferred suppliers).

Required

Prepare a list of reports that could be obtained from the stock ledger of KJA Pty Ltd by the use of GAS and indicate ways in which those reports could be used to achieve audit objectives. *Source*: This question was adapted from the Professional Year Programme of The Institute of Chartered Accountants in Australia—1994 Accounting 2 Module.

10.31 Complex Simbuck Ltd is a medium-sized printing company. As part of its management incentive policy, top management are given a bonus equivalent to 50 per cent of their

objective

salary if they increase the return on total assets ratio (operating profit to total assets) above that of last year, which was 2 per cent. An interim financial report has been prepared by the client which shows a return on total assets of 2.1 per cent.

Your assessment of inherent risk suggests that a major audit exposure lies in the area of non-current assets. It was noted during the planning phase that the majority of this year's additions to non-current assets are building improvements. Practically all of the work was done by Simbuck Ltd employees, and the cost of materials and overheads was paid by Simbuck Ltd. Because of the immaterial nature of these additions last year, no follow-up audit work was undertaken.

It is also noted that the company had revised its depreciation rates at the beginning of the year.

The non-current assets master file contains the following information:

Field no.	Field title	
1	Asset number	
2	Description	
3	Asset category 01—land	
	02—buildings	
	03—equipment	
	04—fixtures and fittings	
4	Invoice costs	
5	Additions/improvements during year	
6	Date of purchase	
7	Last date of improvement	
8	Depreciation rate	
9	Accumulated depreciation (beginning-of-year)	
10	Depreciation expense for year	
11	Accumulated depreciation (end-of-year)	
12	Written-down value (end-of-year)	
13	Estimated residual value	
14	Date sold	
15	Proceeds from sale	
16	Profit/loss on sale	

This master file is updated monthly for additions, improvements and deletions. The additions transactions file contains the following fields: field nos 1, 3, 4, 5, 6, 8. The improvements transactions file contains the following fields: field nos 1, 5, 7. The deletions transactions file contains the following fields: field nos 1, 14, 15.

- (a) After a review of the general control environment you have concluded that tests of control of application controls are appropriate. Identify programmed controls that you may expect to see in the program which creates the additions transactions file. Using as an example one of these controls identified, describe the procedures by which the auditor would gain confidence that the control is working.
- (b) A batch-input batch-processing system is used for updating the non-current assets master file. Give examples of application controls, other than programmed application controls, that the auditor may expect to see associated with such a system and which would provide evidence of the completeness and accuracy of input and processing.
- (c) (i) Given the return on total assets identified in the interim financial report of 2.1 per cent, would the auditor be more concerned with upward or downward movements in depreciation rates from last year? Why?

- (ii) Outline an exception report that may be useful to the auditor in identifying depreciation rates on which the auditor should concentrate audit attention, and in identifying which audit steps should be undertaken with regard to this report.
- **10.32 Complex** You are auditing the superannuation fund of your audit client. This client maintains its own superannuation fund for its employees. The employees are paid fortnightly, and at every pay period 7 per cent of their gross wage (not including any overtime) is deducted from each and every employee's account and transferred to an equivalent account for that employee which is maintained on the superannuation fund master file. Thus every employee who is included on the payroll master file should be included on the superannuation fund master file. The employees can be identified on both master files by their unique employee number. The company then contributes an equivalent amount to the superannuation fund for every employee.

This total amount is invested in government bonds at a rate of 10 per cent per annum. After a 2 per cent management fee is taken out, these earnings are added to a field on the superannuation fund master file called 'interest earned on invested funds (during the year)'.

Your evaluation of the general controls indicates that they are reliable.

You have access to the superannuation fund master file, the payroll master file and the 26 payroll transaction files. The superannuation fund master file contains the following fields:

Field no. Field title

- 1 Employee number
- 2 Employee name
- 3 Employee address
- 4 Superannuation contributions by employee (beginning-of-year balance)
- 5 Superannuation contributions by employee (during the year)
- 6 Superannuation contributions by employee (end-of-year balance)
- 7 Superannuation contributions by employer (beginning-of-year balance)
- 8 Superannuation contributions by employer (during the year)
- 9 Superannuation contributions by employer (end-of-year balance)
- 10 Interest earned on invested funds (beginning-of-year balance)
- 11 Interest earned on invested funds (during the year)
- 12 Interest earned on invested funds (end-of-year balance)
- 13 Total employee entitlement (end-of-year balance)

The arithmetic checks (field 4 +field 5 =field 6, field 7 +field 8 =field 9, field 10 +field 11 =field 12, field 6 +field 9 +field 12 =field 13) have already been carried out by the auditor.

- (a) Detail where and how the auditor may use analytical procedures in verifying the valuation assertion contained in field 13 for the superannuation fund. Detail also how analytical procedures can aid in auditing payroll expense, a field on the payroll master file of the audit client.
- (b) Detail how the auditor would use computer-assisted audit techniques (CAATs) to aid in the assessment of control risk.
- (c) Describe how the auditor would use CAATs to aid in verifying the completeness of the superannuation master file.
- (d) Compare and contrast the major differences between audit software approaches and test data approaches.
- (e) Describe how an integrated test facility could be used in the superannuation fund system and whether it would provide evidence of a compliance and/or a substantive nature.
- **10.33 Complex** You are currently auditing S Credit Union (S), a small state-based organisation with branches in regional locations. S holds a portfolio of around 2000 mortgages

over residential owner-occupied properties. The mortgage ledger is maintained on a computer file which includes the following fields:

Field Description

- 1 Mortgage registration number
- 2 Date of commencement
- 3 Original principal
- 4 Mortgage term
- 5 Interest rate
- 6 Balance outstanding: due within 12 months
- 7 Balance outstanding: due after 12 months
- 8 Provision amount (if applicable)
- 9 Credit rating (A to D)

Your manager has decided that generalised audit software should be used to perform as many of the tasks involved in auditing mortgages as possible.

Required

- (a) Describe the reports you would have the generalised audit software produce. Include details of the report title, fields used, the use you would make of the report and the audit objectives each report would help achieve.
- (b) Assume S Credit Union's internal audit department has offered to lend you the software program they use to verify mortgages outstanding. In comparison to using your generalised audit software, what are the advantages and disadvantages of accepting their offer?

Source: This question was adapted from the Professional Year Programme of The Institute of Chartered Accountants in Australia—1999 Accounting 2 Module.

CONTINUOUS CASE STUDY

10.34 Complex This is a continuation of question 9.28. It may be completed independently of that question.

You are currently involved in the audit of HomeChef Pty Ltd (HC), a large private company operating in the boutique food and beverages market. The company has a balance date of 31 December. To maximise audit efficiency, the audit partner has decided to use the work of the internal audit group (IAG) to assist with the testing of controls.

The manager of IAG has given you a copy of the work performed to ensure payments made to creditors throughout the year were in accordance with procedures laid down in the Accounting Manual. After assessing the adequacy and competency of the work performed by IAG and the results of their testing you believe it will not be possible to rely on controls in the creditors area and have decided to use a substantive approach to audit this area.

The balance of trade creditors at 31 December 20X1 is \$111 680 000. The net assets and net loss of HC at the same date are \$11 520 000 and \$167 442 000. Total liabilities are approximately \$607 million. This balance includes secured loans of \$424 million of which \$380 million is current. The loans are secured by a charge over the company's property and are subject to a covenant agreement which requires that the company maintain a net tangible asset ratio which is positive. Current assets are \$90 138 000.

- (a) Identify the financial report assertions that carry the greatest risk in the audit of HC's creditors.
- (b) For each of the risk areas identified indicate two procedures which could be used to provide audit evidence.