Substantive Tests in the Revenue/Receipt Cycle: Sales, Receivables, Cash, and Management Discretion in Revenue Recognition

Based on the assessed levels of control and inherent risk for assertions within the revenue/receipt cycle, an auditor determines acceptable levels of detection risk and then designs substantive tests for the major financial statement accounts processed by the cycle: sales, accounts receivable, and cash. This chapter focuses on substantive tests of details for these accounts. The chapter begins by discussing how each of the financial statement assertions introduced in Chapter 4—existence or occurrence, completeness, rights and obligations, valuation or allocation, and presentation and disclosure—is tested for audits of sales, accounts receivable, and cash, and how audit risk and client strategies bear on the nature, timing, and extent of an auditor’s substantive tests. In turn, the chapter relates the assertions to substantive tests for these accounts and then describes and illustrates each test. Thereafter, the chapter illustrates how audit sampling, introduced in Chapter 8, can be used in substantive tests of receivables balances, and by

major topics discussed in this chapter are the:

• Relationship between financial statement assertions and audit procedures within the revenue/receipt cycle.
• Relationship among audit risk, client strategies, and the nature, timing, and extent of substantive tests.
• Substantive tests applicable to assertions about sales, accounts receivable, and cash balances.
• Application of audit sampling in substantive tests of accounts receivable.
• Computer-assisted audit techniques applicable to accounts receivable.
• Application of audit judgment to questions of earnings manipulation and revenue recognition.
discussing computer-assisted audit procedures applicable to the revenue/receipt
cycle. The chapter concludes by explaining common means to overstate revenue
by addressing audit, legal, and ethical questions that arise when the timing of rev-
enue recognition is subject to management’s discretion.

financial statement assertions, objectives, and audit procedures

As explained in Chapter 4, much of an auditor’s work during a financial state-
ment audit consists of obtaining and evaluating evidence about the assertions
embodied within an entity’s financial statements. For example, management as-
serts that recorded receivables and cash balances:

- Exist,
- Include all transactions that should be presented,
- Represent rights of the entity,
- Are valued appropriately, and
- Are presented and disclosed properly within the financial statements.

Each financial statement assertion translates to an audit objective for which audi-
tors design procedures to obtain evidence. For example, management’s assertion
that cash and receivables exist creates a corresponding audit objective to deter-
mine whether each asset actually does exist, and auditors generally use confir-
mation procedures to test their existence. Hence, financial statement assertions
are synonymous with audit objectives. But, specifically, what procedures do prac-
ticing auditors commonly use to address which financial statement assertions?
The following relates each financial statement assertion to audit procedures that
practitioners commonly use to audit revenue/receipt cycle accounts. The asser-
tions and procedures are summarized in Figure 10-1.

Existence or Occurrence

Within the revenue/receipt cycle, the existence or occurrence assertion addresses
whether all recorded sales, receivables, and cash balances actually exist and
whether all recorded transactions actually occurred. Existence is normally tested
by physical observation or confirmation with outside parties. In practice, the ex-
istence of receivables is often tested by confirming balances with debtors (cus-
tomers). The existence of cash on deposit is tested by confirming bank balances
with banks, and the existence of cash on hand can be observed physically and
counted. In addition, auditors use cutoff testing to determine whether recorded
sales transactions and related receivables and cash transactions are recorded in
the proper period.

Completeness

The completeness assertion addresses whether all receivables, sales, and cash
transactions that should be presented in the financial statements actually are
presented. Generally, completeness is tested by examining documentation and
by applying analytical procedures, such as making comparisons among related
accounts. For sales and receivables, completeness is tested by performing analyt-
ical procedures, which helps determine whether recorded receivables and sales
balances are reasonable at the balance sheet date, and by testing cutoff, which de-
termines whether transactions are recorded in the proper accounting period.
Auditors typically test completeness for cash balances by examining cutoff bank statements to assure that all receipts and disbursements are recorded in the proper period, and by examining bank reconciliations (or proofs of cash) and records of intercompany and interbank transfers.

Rights and Obligations

Within the revenue/receipt cycle, the rights and obligations assertion addresses whether an entity has property rights—for example, claims against third parties—for recorded receivables and cash balances. That is, does the company have legally binding claims against customers for receivables balances and against commercial banks and other depositories for recorded cash balances? Generally, an auditor tests rights by examining documentation and through confirmations and inquiries. Rights to receivables are typically tested by confirming balances with debtors and by reviewing the collectibility of confirmed and unconfirmed customer balances. In turn, rights to cash are tested primarily by confirming balances and deposit terms (e.g., demand deposits and compensating balances) with banks.
Valuation or Allocation

The valuation assertion addresses whether receivables, sales, and cash balances are reported in the financial statements at appropriate amounts. That is, are they valued in accordance with generally accepted accounting principles (GAAP)? In general, auditors test valuation by examining documentation, confirming, observing, performing mechanical tests, and making inquiries. More specifically, the carrying value of receivables is tested by confirming balances with debtors and reviewing collectibility—both of which also address rights and obligations—and by verifying the accuracy of management’s aged trial balance. Recorded values for cash are tested by confirming balances with banks, by verifying the mathematical accuracy of recorded cash balances, and by examining the details within cutoff bank statements.

Presentation and Disclosure

The presentation and disclosure assertion addresses whether recorded transactions and balances are properly classified, described, and disclosed in the financial statements. Generally, auditors address this assertion by comparing an entity’s financial statement presentation and disclosures with those required by GAAP. Presentation and disclosure guidelines, such as the AICPA’s annually updated Accounting and Audit Manual, are often used by practicing auditors to address this assertion.

As explained in Chapter 5, an auditor completes interim audit work by drafting preliminary year-end audit programs—that is, by planning substantive audit procedures, the nature, timing, and extent of which are based on:

- Detection risk (DR), the likelihood that error could occur and not be detected by audit procedures, which is based in turn on the auditor’s interim assessments of two other risks:
  - Control risk (CR), the likelihood that material error could occur and not be detected by internal control, and
  - Inherent risk (IR), the susceptibility of an account balance to material error for which there is no related internal control.

In Chapter 5 much was made of the role of client strategies and balanced scorecards in the assessment of audit risk. For example, discussion in Chapter 5 about Merck’s client strategy template (summarized in Figure 5-4, page 159) suggested two threats to the company’s business (Figure 5-7, page 170). First, consistent with the threat that Merck’s growth strategy may be at risk, a Deutsche Bank Securities analyst commented that the Company may need to “. . . consider a significant merger to boost its growth prospects,” and a Dow Jones News Service Report commented that “. . . there is concern in the market about its future growth . . . because the company faces a number of upcoming patent expirations.” Second, consistent with the claim that competitive pricing may threaten future earnings, Chapter 5 offered evidence that managed care groups are demanding discounts, federal and state legislatures are proposing reductions in health care costs, patient copayments are increasing for prescription drugs, physicians are facing incentives
to prescribe generic drugs, and employers are pressuring providers to curb increases in health care costs. Both threats would raise an auditor’s professional skepticism in this way: Since growth and pricing affect reported earnings, management has incentives to manipulate earnings in the wake of constricted market share and constrained pricing, and an auditor has reason to design audit procedures that will offer persuasive evidence bearing on reported earnings.

The audit programs illustrated in this chapter assume that an auditor has assessed control risk and inherent risk for the assertions of existence, completeness, rights, and valuation at the maximum for two reasons: First, assume that tests of controls over shipping, billing, and cash deposits (Chapter 9) reveal that internal control deficiencies are likely to produce aggregate error in excess of tolerable error for the following control procedures:

- **Shipping:** Shipping documents are accompanied by a sales order bearing credit and inventory control authorization.
- **Billing:** Sales invoices are agreed to shipping documents.
- **Deposits:** Deposits are compared with entries in the cash receipts journal.

Second, assume that, owing to an at-risk growth strategy and competitive pricing, the auditor is skeptical about management’s incentives to enhance reported earnings.

As a result, to hold audit risk to a minimum, the auditor assesses the acceptable level of detection risk at the minimum. That is, from Chapter 2:

$$DR = \frac{AR}{IR \times CR}$$

Assessing the acceptable detection risk at the minimum bears directly on the nature, timing, and extent of planned substantive tests as follows:

- **Nature:** Use more persuasive procedures (e.g., receivables confirmations).
- **Timing:** Perform procedures at the balance sheet date (i.e., rather than an interim date).
- **Extent:** Test more extensively (e.g., increase sample sizes).

Prior to performing substantive tests at year end, auditors review and evaluate any significant changes that might have occurred since assessing control and inherent risk at interim and revise the year-end audit programs as necessary. For example, if internal controls over shipping, billing, and cash deposits have changed since interim, an auditor could perform additional tests of controls, reevaluate control and inherent risk, reassess detection risk, and rethink the nature, timing, and extent of substantive tests.

In substantive tests of revenue/receipt cycle accounts, an auditor obtains and evaluates evidence about transactions and events that bear on an entity’s sales and collection activities. However, an auditor does not blindly apply the same audit procedures on every engagement, largely because both audit risk and materiality vary from engagement to engagement. In an effort to make clear the intuition underlying an auditor’s role in substantive tests of revenue/receipt cycle accounts, the following discussion proceeds through two categories of audit problems. First, tests for receivables (and sales) and cash balances, respectively,
are introduced in representative audit programs that assume control and inherent risk are at the maximum, and that are keyed to and discussed in the context of the financial statement assertions presented earlier: existence or occurrence, completeness, rights and obligations, valuation or allocation, and presentation and disclosure. Second, the discussion then focuses on problems an auditor confronts when, unlike typical sales transactions for which revenue is recognized at the point of sale, the recognition of revenue is less certain, such as accounting for area franchise fees.

Figure 10-2 illustrates a program of representative year-end substantive tests for accounts receivable and sales. The tests are explained in the context of the financial statement assertions that the tests address and, as illustrated above, assume maximum levels of control and inherent risks and a minimum level of acceptable detection risk. Again, not all of these procedures would necessarily be performed in every audit, since risk varies from engagement to engagement. For example, if control risk is assessed below the maximum, detection risk would be assessed above the minimum and, therefore, the auditor would plan less extensive substantive tests.

<table>
<thead>
<tr>
<th>Assertions</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuation</td>
<td>1. Verify mathematical accuracy of accounts receivable.</td>
</tr>
<tr>
<td></td>
<td>a. Obtain an accounts receivable aged trial balance from Accounts Receivable department personnel.</td>
</tr>
<tr>
<td></td>
<td>b. Foot (add columns) and cross-foot (add column totals across) the trial balance.</td>
</tr>
<tr>
<td></td>
<td>c. Compare total accounts receivable per the trial balance to accounts receivable in the general ledger.</td>
</tr>
<tr>
<td>Existence or occurrence</td>
<td>2. Confirm year-end accounts and notes receivable balances with debtors.</td>
</tr>
<tr>
<td>Completeness</td>
<td></td>
</tr>
<tr>
<td>Valuation</td>
<td>3. Test cutoff to determine whether sales and receivables are recorded in the proper accounting period.</td>
</tr>
<tr>
<td>Rights</td>
<td></td>
</tr>
<tr>
<td>Existence or occurrence</td>
<td>4. Review the collectibility of receivables, and determine the adequacy of the allowance for doubtful accounts.</td>
</tr>
<tr>
<td>Completeness</td>
<td></td>
</tr>
<tr>
<td>Valuation</td>
<td>5. Perform analytical procedures to determine whether recorded sales and receivables balances appear reasonable.</td>
</tr>
<tr>
<td>Rights</td>
<td></td>
</tr>
<tr>
<td>Presentation and disclosure</td>
<td>6. Review financial statements to determine whether:</td>
</tr>
<tr>
<td></td>
<td>a. Accounts and notes receivable and sales are properly classified and described.</td>
</tr>
<tr>
<td></td>
<td>b. Disclosures are adequate.</td>
</tr>
</tbody>
</table>
Verify Mathematical Accuracy

The financial statement assertion of valuation is addressed in part by recomputing the mathematical accuracy of amounts recorded in the client’s general ledger. For example, to accomplish tests of mathematical accuracy, an auditor could import a client’s aged trial balance into a spreadsheet file, such as the Microsoft Excel screen illustrated in Figure 10-3, and write commands to foot [e.g., =SUM(H10:H598)] and cross-foot [e.g., =SUM(C598:H598)] the trial balance and to compare and reconcile the trial balance total with the client’s recorded general ledger balance.

The mathematical accuracy of a client’s aged trial balance is crucial, since the trial balance is also used as the basic source for other receivables tests included in Figure 10-2. For example, the aged trial balance is typically used to select individual customer balances for confirmation, discussed next in the chapter, and to identify credit balances that should be reclassified to accounts payable under GAAP.

Confirm Receivables Balances

Confirming receivables balances with debtors—that is, asking a customer in writing whether a recorded receivable is the responding entity’s account payable—is a powerful audit procedure because confirmations address simultaneously no less than three financial statement assertions:

- Existence: Do recorded receivables exist at the balance sheet date?
- Rights: Do recorded receivables represent rights the audited entity holds over debtors (e.g., have the receivables been assigned or sold?)?
- Valuation: Are receivables reported at appropriate amounts?

As a result, there is a presumption in the profession that an auditor bears the burden of justifying his or her opinion on an entity’s financial statements when receivables are not confirmed. Given the information content of confirmations, under what circumstances might an auditor judge that confirmations are unnecessary? Statement on Auditing Standards No. 67, “The Confirmation Process,” lists three cases in which failing to confirm receivables is justifiable: (1) when receivables are immaterial to the financial statements, (2) when confirmations would likely be ineffective (e.g., the federal government does not respond to receivables confirmations), or (3) when audit risk is acceptably low. Receivables balances are usually confirmed as of the balance sheet date, although it is appropriate to confirm receivables at interim when an auditor is satisfied that internal control is effective (and, therefore, that control risk is below the maximum) and when the balances in receivables and sales accounts can be reconciled from the interim confirmation date (say, October 31) to the balance sheet date (say, December 31).

Confirming receivables balances requires direct communication in writing with customers through what are called positive or negative confirmation requests. Positive confirmations request that a customer review the account balance listed on the confirmation and respond to the auditor directly about whether the balance is correct or incorrect, as illustrated in Figure 10-4. (A variation on

1 Apart from these assertions, confirmations of accounts receivable are also used to test for lapping, a fraud introduced in Chapter 9.
### Figure 10.3: Accounts Receivable Aged Trial Balance

<table>
<thead>
<tr>
<th>Customer Name</th>
<th>Account Number</th>
<th>Balance Dec. 31, 2005</th>
<th>0-30 Days</th>
<th>31-60 Days</th>
<th>61-90 Days</th>
<th>6-90 Days</th>
<th>Over 90 Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrie Supplies</td>
<td>0103</td>
<td>$6,319.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alpine Roofing</td>
<td>0107</td>
<td>$1,754.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atwell's, Inc.</td>
<td>0110</td>
<td>$5,629.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bennington &amp; Co.</td>
<td>0111</td>
<td>$10,243.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,805.00</td>
</tr>
<tr>
<td>Blakely &amp; Schuster</td>
<td>0112</td>
<td>$7,250.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burns &amp; Alec</td>
<td>0115</td>
<td>$1,250.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Allen Sales</td>
<td>0960</td>
<td>$2,500.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victor Company, Inc.</td>
<td>0961</td>
<td>$16,000.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Webster Corporation</td>
<td>0967</td>
<td>$6,225.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wellington &amp; Shine</td>
<td>0968</td>
<td>$5,280.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellowstone Stores</td>
<td>0971</td>
<td>$17,250.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zelanie &amp; Aveno</td>
<td>0974</td>
<td>$5,621.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Schedule prepared by client*
positive confirmations, called “blank form” confirmations, request that the respondent supply the balance.) In contrast, negative confirmations request that a debtor respond to the auditor only if the balance in an attached statement is incorrect, as illustrated in Figure 10-5. For positive or negative confirmations inadvertently returned by fax rather than by mail, the auditor should call the respondent, confirm what the faxed confirmation reveals, and, for a sample of the faxed confirmations, request that the customer mail the original confirmation, thereby allowing the auditor to compare the return post mark to the customer’s address. If the customer has discarded the original confirmation, the auditor could mail a new one.

In general, positive confirmations are appropriate when individual account balances are relatively large or when substantial numbers of inaccuracies or frauds are expected. Negative confirmations are generally appropriate when internal control is adequate, balances are small, and the auditor has no reason to
believe that debtors will not return the confirmation request. In practice, auditors often use both types of confirmations for a particular engagement—for example, positive requests could be used for larger account balances, and negative requests for smaller balances. Regardless of the type of confirmation used, the request should be mailed in the auditor’s, not the client’s, envelope—that is, an envelope that includes the auditor’s return address—to assure that envelopes “returned to sender” by the Postal Service are mailed to the auditor, not the client, thereby precluding the client from tampering with the confirmation and allowing the auditor to test whether the customer actually exists. Likewise, the return self-addressed envelope included with the confirmation mailing (and referred to on the confirmation form—see Figures 10-4 and 10-5) should also be addressed to the auditor, not the client.

When positive confirmations are used, an auditor should mail second (and perhaps even third) requests to nonrespondents, attempting to maximize the number of responses. If a statistical sampling plan is used to select and evaluate the confirmations, a poor response rate could affect sampling risk, requiring that an auditor alter or abandon the sampling plan. However, despite the efforts expended to maximize response rates, a number of customers invariably will fail to respond, thereby requiring alternative audit procedures for those accounts. In the absence of a returned confirmation, an auditor could examine other evidence, such as:

- Reviewing subsequent cash collections to determine whether the customer has paid,
- Examining shipping documents to determine whether goods were shipped to the customer, and
- Examining sales invoices to determine whether the customer was billed.

Notes receivable confirmation requests are similar in substance to positive accounts receivable requests, although negative notes receivable confirmations are not commonly used in practice.

Leveraging off of SAS No. 67, one Big Five public accounting firm has significantly reduced the extent of receivables confirmations for low risk clients that agree to allow the firm off-site, online access to automated collections records. The firm uses software to monitor customer collection data, to compile collection profiles (e.g., days sales in receivables, percentage of receivables per aging category), and to confirm only those balances, if any, that appear unusual, such as erratic payment trends on past due accounts. The firm’s strategy is based in this

**Figure 10-5: Negative Accounts Receivable Confirmation**

Please examine the attached statement. If the statement disagrees with your records, respond directly to our auditors:

Cheever & Yates, LLP

who are auditing our financial statements. An envelope addressed to our auditors is enclosed.

THIS IS NOT A REQUEST FOR PAYMENT
logic: Although confirmations address no less than three assertions (existence, rights, valuation), they are also relatively expensive, since preparing and following up on confirmations is rather labor intensive. Hence, the firm balances audit evidence with audit effort in the face of audit risk.

Test Cutoff

Auditors acquire additional evidence of existence, and initial evidence of completeness, through cutoff tests that address whether sales transactions are recorded in the same period that title to the goods passed to the customer. Cutoff could be inaccurate if, for example, a December 31, 2004 year-end client inadvertently or intentionally recorded a $100,000 January 2, 2005 sales transaction as a 2004 sale: 2004 sales and receivables would be overstated by $100,000. To test cutoff, auditors examine a sample of sales entries recorded at or near the balance sheet date. For example, assuming a December 31, 2004 year end, an auditor might examine a sample of sales transactions recorded for a reasonable period around December 31, say, all recorded sales $\geq$ 50,000 from December 25 through January 5. For each sampled sale, the auditor obtains the related shipping documents and notes the shipping terms—FOB (free-on-board) shipping point versus FOB destination—to determine when title passed and therefore whether the sampled sales entry was recorded in the proper period. Sales should be reflected in the current year, 2004, if shipping terms were:

- **FOB shipping point** and the goods were shipped on or before December 31, 2004, or
- **FOB destination** and the goods were received by the customer on or before December 31.

However, assume that, owing to a client strategy template (Chapter 5) which revealed both an at-risk growth strategy and competitive pricing, an auditor’s professional skepticism about earnings manipulation may drive him or her to increase the scope of sales cutoff tests, say, to all recorded sales $\geq$ 25,000 for the period December 20 to January 10.

Review Collectibility of Receivables

Despite management’s policies and procedures for reviewing and approving customer requests for credit, the entity cannot eliminate completely the risk that some accounts will not be paid. As a result, the valuation or carrying value of receivables is usually less than the sum of all outstanding balances. An auditor evaluates the carrying value of receivables by reviewing their collectibility, and by determining the adequacy of an entity’s allowance for uncollectible accounts. For example, an auditor might obtain evidence of collectibility by examining an accounts receivable aged trial balance, by discussions with Credit department personnel, by reviewing post-balance-sheet-date collections, by reviewing available correspondence with delinquent debtors, and by examining credit ratings with recognized bureaus such as Dun & Bradstreet, Inc.

Perform Analytical Procedures

In general, the role of analytical procedures is to direct an auditor’s attention to accounts or balances that appear unusual or unreasonable, and therefore that may
require additional substantive tests of details in order to reduce audit risk to an acceptably low level. Thus, within the revenue/receipt cycle, analytical procedures can be used to identify accounts that appear to be either:

- Reasonable: That is, accounts appear to be behaving as expected, and therefore do not require additional testing, and
- Unreasonable (or unusual): That is, accounts do not appear to be behaving as expected, and therefore require additional testing beyond the extent of procedures planned.

Figure 10-6 presents in detail the intuition and potential explanations for several key analytical procedures, and lists several other procedures used commonly in practice. For example, consider the number of days sales in receivables and accounts receivable turnover. If the number of days sales in receivables was at or around 30 days and receivables therefore turned over 12 times (360 days/30 days) for four successive years, this would suggest that sales, receivables, and collection activity were behaving similarly for the four-year period and would not signal the need for additional substantive tests of details. However, if the number of days sales were at or around 30 days for the three preceding years and 45 days for the current year (turnover = 360/45 = 8 times), then this unexpected variation could indicate any one or more of the following potential explanations:

- Collection problems: Management could be extending credit more liberally than in prior years to increase sales.
- Overstated sales.
- Understated accounts receivable.

No one of the preceding analytical procedures will necessarily detect material misstatements. Rather, the procedures will direct an auditor’s attention to accounts or balances requiring additional inquiries or substantive tests of details.

**Review Financial Statement Presentation and Disclosure**

The audit program in Figure 10-2 concludes with the auditor’s review of financial statement presentation and disclosure of revenue/receipt cycle accounts. An auditor should determine whether the accounts, notes, and other receivables and related sales accounts are classified, described, and disclosed in accordance with GAAP.

Accounts and notes receivable are usually classified as current or noncurrent assets, depending on the terms of payment, and carried at net realizable value—that is, net of an allowance for uncollectible accounts, unearned discounts, interest, and finance charges. Some large companies disclose separately in a footnote to the financial statements the portion of current receivables attributable to customers and the portion attributable to associated companies. For example, General Electric discloses in a footnote current receivables for nine categories of business segments (including, aircraft engines, Power Systems, and NBC) and distinguishes customer from associated company receivables this way:

*General Electric*

Receivables balances at December 31, 2000 and 1999, before allowance for losses, included $6,323 million and $5,832 million, respectively, from sales of goods and services to customers, and $233 million and $296 million, respectively, from transactions with associated companies.
**Figure 10-6:** Analytical Procedures for Accounts Receivable and Sales

<table>
<thead>
<tr>
<th>Analytical Procedure</th>
<th>Intuition/Comparisons</th>
<th>Potential Explanations</th>
</tr>
</thead>
</table>
| Number of days sales in receivables: \[
\frac{\text{Credit sales}}{\text{Average accounts receivable}} \]
| Computes the number of days that receivables are outstanding. Compare to prior years and to industry data. Compare to credit sales terms. | **Increases**
- Slow collections
- Overstated sales
- Understated receivables

**Decreases**
- Fast collections
- Understated sales
- Overstated receivables |

| Receivables turnover: \[
\frac{360 \text{ days}}{\text{Number of days sales in receivables}} \]
| Computes the number of times receivables turn over during the year. Compare to prior years and to industry data. Compare to payables turnover. Compare to inventory turnover. | **Increases**
- Fast collections
- Understated sales
- Overstated receivables

**Decreases**
- Slow collections
- Overstated sales
- Understated receivables |

| Compare: Accounts receivable balance to Prior-year receivables balance + Credit sales – Cash receipts |
| Reconstructs the ending receivables balance from three sources: the prior-year balance, and additions to (credit sales) and deletions from (cash receipts) the prior-year balance. | *Accounts Receivable Balance* >
- Overstated receivables
- Understated credit sales
- Overstated cash receipts

*Accounts Receivable Balance* <
- Understated receivables
- Overstated credit sales
- Understated cash receipts |
**Figure 10-6: (continued)**

<table>
<thead>
<tr>
<th>Analytical Procedure</th>
<th>Intuition/Comparisons</th>
<th>Potential Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare: Sales to Market share × Industry sales</td>
<td>Estimates sales from industry data.</td>
<td>( Sales &gt; ) Overstated sales ( Sales &lt; ) Understated sales</td>
</tr>
<tr>
<td>Compare: Actual receivables write-offs to Provision for uncollectible receivables</td>
<td>Relates actual write-offs to prior provisions for receivables expected to have been written off.</td>
<td>( Actual \text{ Write-offs} &gt; ) Overstated bad debt expense Understated allowance for doubtful accounts ( Actual \text{ Write-offs} &lt; ) Understated bad debt expense Overstated allowance for doubtful accounts</td>
</tr>
</tbody>
</table>

**Other analytical procedures**

Compare product-line sales and gross margin percentages by month and by year to identify potential overstatements or understatements of sales.

Compare receivables aging categories (e.g., 0–30 days, 31–60 days, 61–90 days, etc.) and uncollectible accounts as percentages of accounts receivable for a series of years to test the reasonableness of the allowance for uncollectible accounts.

Compare actual bad debt write-offs with recorded bad debt expense for prior years to test the reasonableness of the provision for bad debts in the current year. Compare the ratio of the provision for bad debts to total receivables to the ratio for prior years to test the reasonableness of the provision for bad debts in the current year.

Compare both the average balance and the largest individual balances to prior years to test the reasonableness of the allowance for uncollectible accounts.
Trade notes and accounts receivable should be segregated from nontrade receivables, such as employee or officer receivables. All material information should be disclosed in the financial statements or in the notes to the financial statements. Disclosures should include, for example, information about pledged or assigned receivables.

Figure 10-7 presents a program of representative year-end substantive tests for cash balances. Each procedure is tied to related financial statement assertions and discussed in the following sections.

**Figure 10-7: Substantive Tests: Cash Balances**

<table>
<thead>
<tr>
<th>Assertions</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence, Rights</td>
<td>1. Confirm year-end cash balances with all banks and other depositories.</td>
</tr>
<tr>
<td>Valuation</td>
<td>2. Verify mathematical accuracy of recorded cash balances.</td>
</tr>
<tr>
<td></td>
<td>a. Foot cash journals.</td>
</tr>
<tr>
<td></td>
<td>b. Trace totals to the general ledger and to year-end bank reconciliations</td>
</tr>
<tr>
<td></td>
<td>prepared by the client.</td>
</tr>
<tr>
<td></td>
<td>c. Test cash on hand as necessary.</td>
</tr>
<tr>
<td>Existence</td>
<td>3. Test cutoff.</td>
</tr>
<tr>
<td>Completeness</td>
<td>a. Obtain cutoff bank statements directly from banks.</td>
</tr>
<tr>
<td>Valuation</td>
<td>(1) Verify accuracy of cutoff bank statements.</td>
</tr>
<tr>
<td></td>
<td>(2) Examine information (e.g., dates and amounts) on cutoff bank</td>
</tr>
<tr>
<td></td>
<td>statements and trace to reconciling items in year-end bank reconciliation</td>
</tr>
<tr>
<td></td>
<td>and to entries in cash journals.</td>
</tr>
<tr>
<td></td>
<td>(3) Consider necessity of preparing a proof of cash.</td>
</tr>
<tr>
<td></td>
<td>b. Reconcile recorded cash balances with returned bank confirmations.</td>
</tr>
<tr>
<td></td>
<td>c. Examine intercompany and interbank transfers near year end.</td>
</tr>
<tr>
<td>Presentation</td>
<td>4. Review financial statements to determine whether:</td>
</tr>
<tr>
<td>and disclosure</td>
<td>a. Cash balances are properly classified and described.</td>
</tr>
<tr>
<td></td>
<td>b. Disclosures are adequate.</td>
</tr>
</tbody>
</table>

**Confirm Cash Balances**

Cash deposited in banks (e.g., checking accounts and certificates of deposit) and in other depositories (e.g., money market funds) is confirmed by auditors in much the same manner as accounts receivable. However, unlike receivables, an auditor confirms all, rather than a sample, of the cash accounts using a standard form approved in 1990 by the AICPA, the American Bankers Association, and the Bank Administration Institute. All cash accounts are confirmed with banks because, as illustrated in Figure 10-8, the standard confirmation also requests information about whether the client was directly liable to the financial institution for
**Figure 10-8:** Bank Confirmation

**STANDARD FORM TO CONFIRM ACCOUNT BALANCE INFORMATION WITH FINANCIAL INSTITUTIONS**

We have provided to our accountants the following information as of the close of business on **Dec. 31, 2005**, regarding our deposit and loan balances. Please confirm the accuracy of the information noting any exceptions to the information provided. If the balances have been left blank, please complete this form by furnishing the balances in the appropriate space below.* Although we do not request nor expect you to conduct a comprehensive, detailed search of your records, if during the process of completing this confirmation, additional information about other deposit and loan accounts we may have with you comes to your attention, please include such information below.

Please use the enclosed envelope to return the form directly to our accountants.

---

**1.** At the close of business on the date listed above, our records indicated the following deposit balance(s):

<table>
<thead>
<tr>
<th>ACCOUNT NAME</th>
<th>ACCOUNT NO.</th>
<th>INTEREST RATE</th>
<th>BALANCE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Account</td>
<td>158-6798-321</td>
<td>None</td>
<td>$175,517.10</td>
</tr>
</tbody>
</table>

---

**2.** We were directly liable to the financial institution for loans at the close of business on the date listed above as follows:

<table>
<thead>
<tr>
<th>ACCOUNT NO./DESCRIPTION</th>
<th>BALANCE*</th>
<th>DATE DUE</th>
<th>INTEREST RATE</th>
<th>DATE THROUGH WHICH INTEREST IS PAID</th>
<th>DESCRIPTION OF COLLATERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>158-6799-322</td>
<td>$150,000</td>
<td>6/10/07</td>
<td>9.5</td>
<td>12/1/05</td>
<td>Warehouse</td>
</tr>
</tbody>
</table>

---

The information presented above by the customer is in agreement with our records. Although we have not conducted a comprehensive, detailed search of our records, no other deposit or loan accounts have come to our attention except as noted below.

**None**

---

*Ordinarily, balances are intentionally left blank if they are not available at the time the form is prepared.*

---

Approved 1990 by American Bankers Association, American Institute of Certified Public Accountants, and Bank Administration Institute. Additional forms available from: AICPA—Order Department, P.O. Box 1003, NY, NY 10106-1003

---

Please return this form directly to our accountants:

**Cheever & Yates, LLP**  
**Certified Public Accountants**
loans (question 2). For example, note in Figure 10-8 that the First National Bank discloses not only a $175,517.10 cash balance (question 1), but also a long-term loan of $150,000 (question 2), a disclosure that is crucial to the audit of the entity’s liabilities, as discussed in Chapter 11.

**Verify Mathematical Accuracy**

To test the mathematical accuracy of recorded cash balances, and therefore to address in part the valuation of cash balances, an auditor recomputes totals in the cash journals and in client-prepared bank reconciliations (such as the reconciliation illustrated in Figure 10-9). The auditor then traces the cash journal totals to postings in the general ledger and to the bank reconciliation caption “balance per books” (Figure 10-9, note f).

**Figure 10-9: Bank Reconciliation**

(Schedule prepared by client)  

A5  

SC 1/18/06  

The Wilson Company  

Bank Reconciliation: Peoples Bank—Acct. 1001  

December 31, 2005  

---

Balance per bank, 12-31-05 $17,551,710  
Add: Deposits in transit, 12-31-05 $1,578,143  
Check drawn by Martin Davis Co. charged to Marc David, Inc., by bank in error 275,000  
---

1,853,143  

Deduct outstanding checks:  
No. 5775 12-24 $1,431,000  
No. 5776 12-26 156,050  
No. 5779 12-26 181,021  
No. 5780 12-27 2,169,540  
No. 5781 12-29 1,589,176  
No. 5785 12-30 1,191,240  
---

(6,718,027) $12,686,826  

Adjusted bank balance, 12-31-05  

Balance per books, 12-31-05 $13,241,386  
Deduct: December bank service charge $28,500  
Check from Apex Services, Inc., deposited 12-15 returned for insufficient funds, 12-18 526,060  
---

(554,560)  

Adjusted book balance, 12-31-05 $12,686,826  
---

a Footed.  
b Agreed to 12-31-05 bank statement.  
c Agreed to cutoff bank statement and to cash receipts journal.  
d Agreed to cutoff bank statement.  
e Agreed to cutoff bank statement and to cash disbursements journal.  
f Agreed to general ledger.
Even though often immaterial in relation to the financial statements taken as a whole, cash funds on hand, sometimes called “petty cash,” is tested on some audit engagements, primarily because cash is highly susceptible to misappropriation. To test cash on hand, an auditor counts the cash fund in the presence of the fund custodian and examines undeposited cash receipts and paid vouchers that reconcile cash on hand to the imprest balance. For example, if cash on hand is imprest at $500 and $175 is on hand, undeposited receipts and paid vouchers should total $325.

**Test Cutoff**

Like tests of sales cutoff, tests of cash cutoff address the existence and completeness assertions, and question whether recorded transactions, in this case receipts and disbursements, are recorded in the proper accounting period. The tests reconcile internal documents created by the client, such as:

- Cash journals,
- The general ledger, and
- Bank reconciliations

with external documents created by banks, such as:

- Year-end bank statements,
- Cutoff bank statements, and
- Returned bank confirmations.

Item 3a of the audit program in Figure 10-7 requires that the auditor obtain cutoff statements directly from the bank (or banks) for each bank account. Unlike typical month-end bank statements, **cutoff bank statements** do not represent a full month’s transactions. Rather, they represent transactions (cleared checks, deposits, and miscellaneous debits and credits) for a short period after year end (e.g., seven to ten days) and are used by auditors to verify reconciling items appearing on year-end bank reconciliations prepared by the client. For example, December 31 year-end bank reconciliations usually include deposits in transit and outstanding checks that could not otherwise be verified until January bank statements are received in early February. Cutoff bank statements are requested in a cover letter attached to the standard bank confirmation request and, like receivables confirmations, are sent directly to the auditor by the bank, thereby providing the auditor with persuasive external evidence received directly from third parties rather than external evidence received, held, and potentially altered by a client. (When the auditor is finished testing the cutoff bank statement, it is given to the client and a statement for the remaining days in the month is forwarded by the bank directly to the client at month’s end.)

If returned by the bank, individual canceled checks, deposit slips, and debit/credit memoranda accompanying each cutoff bank statement should be compared with listings printed on the statement. Each item on the cutoff statement should then be traced to the client-prepared, year-end bank reconciliation and to cash journals. Dates of entries in cash journals and clearings on bank statements should be examined to verify that receipts and disbursements near year end are recorded in the proper period, thereby providing insights into two prominent misstatements:

- Delays in recording cash disbursements to present an overstated cash position on the balance sheet, and
• Checks written and recorded as disbursements prior to year end, but not mailed until after the balance sheet date to understate liabilities.

Copies of client-prepared bank reconciliations are typically included in the audit working papers as evidence of tests of cutoff. Figure 10-9 presents an illustrative year-end bank reconciliation with appropriate working paper indexes, tick marks, and explanations. Note that the reconciliation adjusts both the bank and the book balances, yielding a true cash balance at a particular date.

Internal auditors typically prepare a form of reconciliation called a proof of cash at one or more times during the year to verify the reliability of monthly bank reconciliations. However, if the client lacks an internal audit department or if discrepancies are observed in client-prepared, year-end bank reconciliations, the independent auditor may decide to prepare a proof of cash for one or more periods.

Routine monthly bank reconciliations, audited in item 3b of Figure 10-7 (and illustrated in Figure 10-9), focus on cash balances, while a proof of cash focuses both on balances and on transactions. Figure 10-10 depicts a four-column proof of cash for two successive months, November and December, 2005. Like the bank reconciliation in Figure 10-9, the proof of cash adjusts both the bank and book balances, yielding a true cash balance, although for two successive months rather than one particular date.

Item 3c from Figure 10-7, cutoff tests applicable when an entity engages in intercompany transactions or maintains more than one bank account, are illustrated in Figure 10-11. Intercompany cash transfers at or near year end should be tested to determine whether they are recorded properly, as both a receipt by one entity and a disbursement by another in the same accounting period; if not, cash balances for the consolidated group of entities could be misstated. For example, if a subsidiary records a $10,000 cash receipt from a parent on December 31, but the parent defers recording the disbursement until January 1, consolidated December 31 financial statements would overstate cash by $10,000, because the related receipt and disbursement are recorded in different accounting periods. Intercompany transfers can be tested by reviewing all transfers between related entities for a period, for example, five days before and after year end; corresponding receipt and disbursement entries should accompany each transfer and should be recorded in the same accounting period.

Interbank transfers, similar in nature to intercompany transfers, can also be tested by examining transactions near the year-end date. For each transfer of funds between banks, a receipt and corresponding disbursement should be recorded in the same period; otherwise, cash will be misstated on the balance sheet. While tests of interbank transfers may reveal understatements of cash (i.e., a disbursement recorded on or before year end and the corresponding receipt recorded after year end), the tests are designed primarily to detect cash overstatements. For example, concealment of a cash shortage could be attempted by transferring funds from one bank account to another and recording the receipt on or before year end and the disbursement after year end. Overstating cash through interbank transfers is called **kiting**.

**Review Financial Statement Presentation and Disclosure**

The audit program in Figure 10-7 concludes with a review of financial statement presentation and disclosure. An auditor should determine whether cash balances are classified, described, and disclosed in accordance with GAAP.
**Figure 10-10:** Proof of Cash

(Schedule prepared by client)

<table>
<thead>
<tr>
<th>Date</th>
<th>Receipts</th>
<th>Disbursements</th>
<th>12/31/05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance per bank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/30</td>
<td>$8,576,110&lt;sup&gt;b&lt;/sup&gt;</td>
<td>$41,954,430&lt;sup&gt;b&lt;/sup&gt;</td>
<td>$8,836,365&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>12/31</td>
<td>2,170,050&lt;sup&gt;d&lt;/sup&gt;</td>
<td>(2,462,590)</td>
<td>2,170,050</td>
</tr>
<tr>
<td>Outstanding checks:</td>
<td>11/30</td>
<td>(3,156,129)&lt;sup&gt;e&lt;/sup&gt;</td>
<td>2,876,582</td>
</tr>
<tr>
<td>12/31</td>
<td>2,170,050&lt;sup&gt;d&lt;/sup&gt;</td>
<td>(1,933,212)&lt;sup&gt;f&lt;/sup&gt;</td>
<td>(1,933,212)</td>
</tr>
<tr>
<td>Adjusted bank balance:</td>
<td>$7,882,571&lt;sup&gt;a&lt;/sup&gt;</td>
<td>$41,661,890</td>
<td>$8,793,656&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Balance per books</td>
<td>$7,905,571&lt;sup&gt;g&lt;/sup&gt;</td>
<td>$41,661,890&lt;sup&gt;h&lt;/sup&gt;</td>
<td>$8,818,656&lt;sup&gt;g&lt;/sup&gt;</td>
</tr>
<tr>
<td>Bank service charge:</td>
<td>11/30</td>
<td>$23,000&lt;sup&gt;j&lt;/sup&gt;</td>
<td>23,000</td>
</tr>
<tr>
<td>12/31</td>
<td></td>
<td>(25,000)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>(25,000)</td>
</tr>
<tr>
<td>Adjusted book balance</td>
<td>$7,882,571&lt;sup&gt;a&lt;/sup&gt;</td>
<td>$41,661,890</td>
<td>$8,793,656</td>
</tr>
</tbody>
</table>

---

*Footnotes:

- a Footed.
- b Agreed to December bank statement.
- c Agreed to December bank statement and cash receipts journal.
- d Agreed to cutoff bank statement and to cash receipts journal.
- e Agreed to December bank statement and to cash disbursements journal.
- f Agreed to cutoff bank statement and cash disbursements journal.
- g Agreed to general ledger.
- h Agreed to cash receipts journal.
- i Agreed to cash disbursements journal.
- j Agreed to November bank statement.*
Amounts presented as cash and cash equivalents in the current assets section of a balance sheet should represent cash on hand, unrestricted deposits, and investments with rather short term maturities, usually three months or less. For example, Wal-Mart’s 2000 annual report discloses cash and cash equivalents of $1.8 billion and in Note 1, Summary of Significant Accounting Policies, explains the maturity terms of cash equivalents:

**Wal-Mart**
The Company considers investments with a maturity of three months or less when purchased to be cash equivalents.

In addition to three-month maturity, General Electric’s 2000 Summary of Significant Accounting Policies footnote discloses a second hurdle for including securities as cash equivalents: Securities must not be designated as available for sales and classified as investment securities:

**General Electric**
Debt securities with original maturities of three months or less are included in cash equivalents unless designated as available for sale and classified as investment securities.

Special-purpose funds, such as cash set aside for plant expansion, should be reported separately from cash. Balances subject to withdrawal restrictions, such as compensating balances and certificates of deposit, should be reported as separate...
components of cash or described and disclosed in the balance sheet or in notes to the financial statements.

To integrate material presented in this chapter with the statistical sampling plans introduced in Chapter 8 and with the tests of revenue/receipt cycle controls introduced in Chapter 9, assume a continuing audit engagement for the Madison Corporation, a manufacturer and supplier of health care equipment, whose fiscal year ends December 31. Madison is publicly held and has been an industry leader for over two decades. The objective in this case is to accomplish program step 2, Figure 10-2: confirm accounts receivable balances with debtors.

**Updating the Interim Assessment of Control Risk**

Assume that interim tests of controls were accomplished during September and revealed that controls over customer order, credit, shipping, billing, recording, and cash collection—Madison’s major revenue/receipt activities—were effective and that undetected control deficiencies were not likely to produce aggregate error in excess of tolerable error. The auditor assesses control risk below the maximum. However, because of employee turnover since September and to assure that controls remained effective during the remaining period (i.e., from September to year end), the auditor

- Updated tests of controls through December 31 by applying nonstatistical sampling to transactions recorded in October, November, and December, and
- Made inquiries of management about any significant changes to revenue/receipt cycle controls.

Consistent with the interim tests of controls, the auditor’s updated tests for October through December reveal no significant inaccuracies in recorded receivables, despite Madison having replaced two key employees on October 1. No other personnel or procedures had changed since September 30. Although unaudited earnings for the first three quarters match analysts’ forecasts, the auditor learns that November shipments were below management’s expectations, threatening Madison’s ability to meet analysts’ full-year forecasted earnings, and raising the auditor’s assessment of the likelihood that management may overstate fourth quarter earnings.

**Planning the Receivables Confirmation and Selecting a Sampling Plan**

In this case, the auditor elects to use positive confirmations to control detection risk. In turn, the auditor selects PPS sampling for this reason: Although prior-year sampling results offer no reason to expect material differences between audited and recorded amounts, the auditor has reason to control the risk of overstatement errors, since management has incentives to overstate earnings. Note carefully that, rather than an accusation that management has engaged (or will engage) in earnings manipulation, the strategy to use PPS sampling, and therefore to test for overstatement errors, is a timely precaution to control risk. Nothing more, nothing less.
Accounts receivable consist of approximately 1,550 customer accounts, each represented by detailed subsidiary records totaling $1,250,000 at December 31. None of the customer accounts carries a credit balance. Because in PPS sampling the so-called logical unit (called the “sampling unit” in other sampling plans) is each individual dollar captured within the population, population size is 1,250,000. An aged trial balance spreadsheet is obtained from accounts receivable personnel, footed, cross-footed, traced in part to detailed subsidiary records, and agreed in total with the general ledger. Based on results from the prior-year sampling plan, the auditor estimates current year anticipated overstatement error to be $10,000, an amount that represents less than 1 percent of recorded receivables.

To continue the sampling plan, the auditor requires estimates of tolerable error and of the risk of incorrect acceptance, which is used to determine the reliability factor for overstatement differences and the expansion factor for anticipated error. Tolerable error, the maximum monetary error that may exist without causing the financial statements to be misstated materially, is judged to be $90,000 by the auditor. The auditor sets the risk of incorrect acceptance at .05, a relatively low level, largely because no other procedures within the audit program in Figure 10-2 address directly whether trade receivables exist at December 31.

From Figure 8-4, page 299, $RF$ (the reliability for overstatement differences) is 3.00, the intersection of the column associated with a .05 risk of incorrect acceptance and the row associated with zero overstatement differences. From Figure 8-5, page 300, $EF$ (the expansion factor for anticipated error) is 1.6, the entry associated with a 5 percent risk of incorrect acceptance.

Recapping, the following variables are known or have been estimated:
- Population size ($B$) = 1,250,000
- Tolerable error ($TE$) = $90,000
- Reliability factor ($RF$) = 3.0
- Anticipated error ($AE$) = $10,000
- Expansion factor ($EF$) = 1.6

From this information, sample size is calculated as follows:

$$n = \frac{RF \times B}{TE - (AE \times EF)}$$

$$= \frac{3.0 \times 1,250,000}{90,000 - ($10,000 \times 1.6)}$$

$$= 50$$

Thus, given the auditor’s acceptable risks and tolerable error, 50 randomly selected customer accounts must be confirmed in order to acquire evidence bearing on whether the 1,550 customer accounts are fairly stated at December 31. The sampling interval is 25,000 ($1,250,000/50$).

To select the 50 sample accounts, the auditor arrays the customer accounts alphabetically and, similar to the illustration in Chapter 8,
adds a column to the spreadsheet that compiles by customer a cumulative listing of all logical units ranging from 1 to 1,250,000. A spreadsheet command imports 50 seven-digit random numbers ranging from 0000001 to 1250000 and highlights the customer account names that attach to each of the randomly selected logical units.

All confirmations are mailed in early January, and second requests are sent to nonrespondents within ten days. For disputed balances and for nonrespondents, the auditor applies alternative procedures, which include:

1. Determining whether the account was paid subsequent to year end and, therefore, was collectible at December 31,
2. Examining copies of sales invoices to determine if and when billing occurred, and
3. Examining shipping documents to determine if and when goods were shipped.

**Evaluate Sample Results.** Assume that from compiled confirmation responses and alternative procedures for disputed accounts and nonrespondents, the sampling plan reveals one overstatement error. A customer’s recorded account balance is $8,400 and the audited balance is $8,065, an overstatement difference of $335 that translates to a projected error of $1,000, as follows:

<table>
<thead>
<tr>
<th>Error Number</th>
<th>Book Value</th>
<th>Audited Value</th>
<th>Difference (a) – (b)</th>
<th>Tainting Percentage (c) ÷ (a)</th>
<th>Sample Interval (d)</th>
<th>Projected Error (e) × (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$8,400</td>
<td>$8,065</td>
<td>$335</td>
<td>.04</td>
<td>25,000</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

The **allowance for sampling risk** requires two separate calculations: basic precision and an incremental allowance for sampling risk. **Basic precision** is determined by multiplying the sampling interval by the reliability factor in Figure 8-4:

- Sampling interval: $25,000
- $RF$, reliability factor for .05 risk of incorrect acceptance: $\times 3.0$
- Basic precision: $75,000$

The **incremental allowance** is determined from the projected error for the one logical unit in the illustration recorded at less than the sampling interval, as follows:

<table>
<thead>
<tr>
<th>Error Number</th>
<th>Projected Error</th>
<th>Incremental Change in Reliability Factor</th>
<th>Projected Error Increment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. of Errors</td>
<td>Reliability Factor</td>
</tr>
<tr>
<td>0</td>
<td>3.00</td>
<td>1</td>
<td>4.75</td>
</tr>
<tr>
<td>1</td>
<td>$1,000</td>
<td>1</td>
<td>4.75</td>
</tr>
</tbody>
</table>

Now, the allowance for sampling risk is:

- Basic precision: $75,000$
- Incremental allowance: $1,750$
- Allowance for sampling risk: $76,750$

From these results, the auditor would reach the following statistical conclusion:

*There is a 5 percent risk (i.e., the risk of incorrect acceptance) that the recorded book value, $1,250,000, is overstated by $76,750 or more.*
Or, stated another way:

There is a 95 percent probability (i.e., 1 – the risk of incorrect acceptance) that the recorded book value, $1,250,000, is not overstated by more than $76,750.

Since the allowance for sampling risk, $76,750, is less than tolerable error, $90,000, the results support concluding that the recorded book value in the population is not overstated by more than tolerable error at the specified risk of incorrect acceptance, .05, leading to the following audit conclusion:

Based on audit procedures applied, I am satisfied that Accounts Receivable, excluding the allowance for uncollectibles, is fairly stated at December 31.

When a client’s revenue/receipt cycle activities are recorded, classified, and summarized wholly or in part by computer, an auditor’s substantive tests of details can be accomplished in part by computer-assisted audit techniques. Figure 10-12 lists several audit procedures and related computer-assisted techniques common to audits of accounts receivable.

To illustrate the application of computer-assisted audit techniques, assume an auditor wishes to accomplish portions of the following three substantive tests (included in Figure 10-12):

- Verify mathematical accuracy of the accounts receivable subsidiary records.
- Age receivables according to computer-stored invoice dates.
- List credit balances in accounts receivable for reclassification to accounts payable.

The auditor may either design software to accomplish these procedures or use generalized audit software. Generalized software is available from outside vendors, including some of the larger public accounting firms. Auditor-prepared software, in contrast, is designed for each client application and requires that the

<table>
<thead>
<tr>
<th>Audit Procedure</th>
<th>Computer-Assisted Substantive Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test mathematical accuracy.</td>
<td>Verify footings, cross-footings, and extensions of the accounts receivable aged trial balance and/or the subsidiary records.</td>
</tr>
</tbody>
</table>
| Summarize data for further testing or analysis. | Age receivables according to invoice dates.  
List credit balances in accounts receivable for reclassification to accounts payable.  
Print accounts receivable confirmations. |
| Test accuracy of recorded data.      | Trace details in subsidiary records with source documents. |
| Select samples.                      | Select samples from random number generators and aged trial balances (or subsidiary records). |
| Compare similar data files.          | Compare aged trial balance with accounts receivable subsidiary records. |
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The auditor accomplish all of the tasks normally associated with software preparation, including developing systems flowcharts and software specifications, coding, testing, and debugging, before the software is applied in a specific audit engagement.

Figure 10-13 flowcharts the tasks necessary to accomplish the three preceding substantive tests and would be identical whether the auditor used a generalized software package or prepared tailored software. As illustrated in Figure 10-13, the computer-assisted tests require three separate files: the client’s accounts receivable master file, the client’s sales journal, and the auditor’s software. The software would be designed to perform the following tasks for each substantive test.

<table>
<thead>
<tr>
<th>Substantive Test</th>
<th>Computer Software Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verify mathematical accuracy</td>
<td>Foot and cross-foot the amounts recorded in each customer account within the accounts receivable master file. Total the balances of all customer accounts, leading to a total for all receivables. Display/print exceptions.</td>
</tr>
<tr>
<td>Age receivables</td>
<td>Trace individual customer balances on the accounts receivable master file to related sales entries in the sales journal. For each customer, print balances by invoice dates (i.e., 0–30 days, 31–60 days, 61–90 days, 91–120 days, and over 120 days). Display/print aged trial balances.</td>
</tr>
<tr>
<td>List credit balances</td>
<td>Scan the accounts receivable master in receivables file for net credit balances. Display/print listing of credit balance accounts.</td>
</tr>
</tbody>
</table>

The software would be run on the client’s computer, either directly by the auditor or by client personnel under the auditor’s supervision. The exception report, aged trial balances, and credit balance listing—the output depicted in Figure 10-13—would be accessed by the auditor directly. The output and computer-assisted tests are then documented in the auditor’s working papers and used in conjunction with other audit evidence to help form conclusions about whether receivables are fairly stated at the balance sheet date.

The discussion thus far has addressed the audit of revenue/receipt cycle accounts when the point of sale is known and therefore when, fraud aside, there is little opportunity for management to manipulate the recognition of revenue. That is, the discussion assumed two critical revenue-recognition criteria in *FASB Statement of Financial Accounting Concepts (SFAC) No. 5*, “Recognition and Measurement in Financial Statements of Business Enterprises” had been met:

- The amount and timing of revenue is reasonably determinable, and
- The earnings process is complete or virtually complete.
But what if the criteria hadn’t been met? When the timing of revenue is not reasonably determinable or the earnings process is not complete, management may exercise discretion in the timing of revenue recognition, which can sometimes translate into a deliberate misreporting of earnings, often called earnings manipulation (or “earnings management”).

**The SEC Criticizes Earnings Manipulation**

In a 1998 speech, “The Numbers Game,” Arthur Levitt Jr., SEC chairman, acknowledged the Commission’s view that earnings manipulation was serious and was motivated in part by the resolve of some public companies to meet analysts’ earnings forecasts:

> Increasingly, I have become concerned that the motivation to meet Wall Street earnings expectations may be overriding common sense business practices. Too many corporate managers, auditors, and analysts are participants in a game of nods and winks. In the zeal to satisfy consensus earnings estimates and project a smooth earnings path, wishful thinking may be winning the day over faithful representation. As a result, I fear that we are witnessing an erosion in the quality of earnings, and therefore, the quality of financial reporting. Managing may be giving way to manipulation; Integrity may be losing out to illusion.²

Research confirms Levitt’s suspicions. For example, a 1999 Commission of Sponsoring Organizations (COSO) study of fraudulent financial reporting occurring

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between 1987 to 1997 found that 50 percent of the 204 sampled companies overstated revenue, primarily by recording revenue prematurely or fictitiously.\(^3\) Confirming the COSO findings, a 2000 Panel on Audit Effectiveness study of 96 SEC Accounting and Auditing Enforcement Releases involving Big Five firms found that approximately 70 percent of the public companies studied had overstated revenue, again by reporting revenue prematurely or fictitiously.\(^4\) The findings are clear: Manipulation occurs most often in revenue and revenue-related accounts (e.g., receivables). For example, the Panel on Audit Effectiveness study reported that misreporting expenses, the second most common manipulation, occurs about half as often as misreporting revenue.

The SEC Responds: Staff Accounting Bulletin No. 101, “Revenue Recognition”

Responding to Chairman Levitt’s criticisms, the SEC in December 1999 issued *Staff Accounting Bulletin* (SAB) No. 101, “Revenue Recognition,” which establishes the Commission’s view on recognizing revenue when a revenue transaction is not governed by an existing accounting pronouncement. For example, although existing accounting pronouncements govern revenue recognition for several types of transactions (e.g., SFAS No. 50, product financing) and in several industries (e.g., SFAS No. 51, the cable television industry), the literature still leaves considerable room for interpretation, in particular for managements motivated more by the illusion of earnings than by selling product in the normal course of business. Absent a transaction- or industry-specific accounting pronouncement, an auditor’s guidance for judging whether a client should recognize revenue appears in SFAC No. 5 and, assuming a public company, SAB No. 101.

SFAC No. 5 states that revenues should be recognized when an entity has:

- Substantially accomplished what it must do to be entitled to the benefits represented by the revenues.

And, “Substantial accomplishment” usually occurs:

- By the time product or merchandise is delivered or services are rendered to customers.

As summarized in Figure 10-14, SAB No. 101 adds clarity to the SEC’s interpretation of SFAC No. 5 by adding four criteria the staff views as essential for recognizing revenue. Because policies for recognizing revenue are not generally standardized across industries—or even for companies within industries—companies disclose revenue recognition polices in a footnote to the financial statements. For example, Union Carbide, a major marketer of chemical and plastic products, discloses the company’s revenue recognition policies as follows:

**Union Carbide**

Revenue Recognition: Sales of products and services, and related costs and allowances, are recognized when title transfers to the purchaser, generally upon shipment, as services are rendered, or in relation to licensee production levels.

---


\(^4\) The Panel on Audit Effectiveness, *Report and Recommendations*, Stamford, CT, 2000, Appendix F.
Although nothing in the disclosure suggests that Union Carbide’s policies are inconsistent with SAB No. 101, the company’s 1999 Management Discussion and Analysis (MD&A), a required part of Form 10-K, the annual report to the SEC, warns that management is evaluating undisclosed details of the company’s policy for compliance with SAB No. 101.

Union Carbide MD&A: In 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin (SAB) 101, “Revenue Recognition in Financial Statements,” which summarizes the staff’s views regarding the application of generally accepted accounting principles to selected revenue recognition issues. The corporation is evaluating whether SAB 101 will cause any change in its revenue recognition policies and procedures.

Union Carbide’s MD&A points to a subtle reality: Revenue recognition is complex, in part because arm’s length negotiations between sellers and buyers contemplate a wealth of conditions intended to protect each side’s interests. Most companies are faithful to policies that comply with SFAS No. 5 and SAB No. 101. On the other hand, some companies are not. The following explains some of the means companies have used to manipulate earnings.

Common Means to Manipulate Earnings

Adapted from an AICPA Practice Alert and the COSO and Panel on Audit Effectiveness reports, Figure 10-15 lists a number of means used commonly over the years to accelerate revenue and manipulate earnings. For example, companies in a variety of industries have manipulated earnings through means such as bill and hold, canceled orders, conditional sales, improper cutoff, kickbacks, pre-invoicing, premature sales, side agreements, and unauthorized shipments, among others, all of which are explained briefly in Figure 10-15.

However, the means used to manipulate earnings are sometimes peculiar to accounting principles used in a specific industry. Two examples: First, consider the case of Chambers Development, a Pittsburgh-based, solid waste-disposal

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**Figure 10-14: SEC Revenue Recognition Criteria**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Persuasive evidence of an arrangement exists.</td>
<td>A final agreement was executed by personnel authorized by the customer.</td>
</tr>
<tr>
<td>2. Delivery has occurred or services have been rendered.</td>
<td>The customer has taken title and assumed the risks and rewards of ownership for products specified in the customer’s purchase order or sales agreement.</td>
</tr>
<tr>
<td>3. The seller’s price to the buyer is fixed or determinable.</td>
<td>The customer does not have the unilateral right to terminate or cancel the contract and receive a cash refund.</td>
</tr>
<tr>
<td>4. Collectibility is reasonably assured.</td>
<td>There is no reason to believe the customer is unable to pay.</td>
</tr>
</tbody>
</table>

Source: SEC Staff Accounting Bulletin No. 101, “Revenue Recognition.”
company that ceased trading in the 1980s to became a wholly-owned subsidiary of USA Waste Services (now Waste Management). GAAP allows waste-disposal companies to capitalize identifiable, quantifiable, and recoverable landfill construction costs until the landfill is ready to receive waste. However, Chambers

**Figure 10-15:** Common Means to Manipulate Earnings

<table>
<thead>
<tr>
<th>Common Means to Manipulate Earnings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill and hold</td>
<td>Recognize revenue on shipments held in third-party warehouses for future delivery to a buyer who had not initiated the bill and hold.</td>
</tr>
<tr>
<td>Cancelled orders</td>
<td>Recognize revenue on cancelled or duplicate orders.</td>
</tr>
<tr>
<td>Conditional sales</td>
<td>Recognize revenue before all contingencies are resolved (e.g., responsibility for third-party carrier insurance).</td>
</tr>
<tr>
<td>Consignment sales</td>
<td>Recognize revenue for goods shipped on consignment or on trial.</td>
</tr>
<tr>
<td>Continuing involvement</td>
<td>Recognize revenue on sales for which the seller remains involved after delivery (e.g., installation of software).</td>
</tr>
<tr>
<td>Improper cutoff</td>
<td>Recognize revenue on shipments before the title to goods or the risks of ownership pass to the buyer.</td>
</tr>
<tr>
<td>Kickback sales</td>
<td>Recognize revenue in amounts that inflate the selling price to accommodate kickbacks.</td>
</tr>
<tr>
<td>Overstated completion</td>
<td>Recognize revenue in amounts that inflate the percentage of completion on construction contracts.</td>
</tr>
<tr>
<td>Partial shipments</td>
<td>Recognize revenue on an order for which a significant portion of the goods ordered have not yet been shipped.</td>
</tr>
<tr>
<td>Pre-invoicing</td>
<td>Recognize revenue on goods ordered but still in production.</td>
</tr>
<tr>
<td>Premature shipment</td>
<td>Recognize revenue on goods ordered but not yet authorized by the purchaser for shipment.</td>
</tr>
<tr>
<td>Premature sales</td>
<td>Recognize revenue on goods ordered but not yet shipped.</td>
</tr>
<tr>
<td>Sham sales</td>
<td>Recognize revenue on falsified shipments.</td>
</tr>
<tr>
<td>Side agreements</td>
<td>Recognize revenue despite agreements between the seller and buyer that forestall completion of the earnings process.</td>
</tr>
<tr>
<td>Uncertain performance</td>
<td>Recognize revenue on sales for which the seller’s performance is uncertain.</td>
</tr>
<tr>
<td>Uncertain realization</td>
<td>Recognize revenue on sales for which collection is uncertain or unlikely.</td>
</tr>
<tr>
<td>Unauthorized shipments</td>
<td>Recognize revenue on shipments not authorized by the buyer.</td>
</tr>
</tbody>
</table>

violated GAAP to sustain profit margins that had suffered from declining landfill capacity. The SEC concluded that “Chambers had capitalized expenses to the extent necessary to meet its earnings per share requirements,” a so-called “bottom-up approach” in which management first determines earnings requirements and then records amounts for revenue and expenses that meet the requirements.

Second, consider MicroStrategy, a software company that became in the 1990s the highest profile accounting fraud action the SEC took against a software developer. Although GAAP in the software industry allows companies to recognize revenue only when the earnings process is complete, the SEC accused MicroStrategy of recognizing software revenue before determining the full extent of services the company would provide to buyers. The attorney who negotiated a settlement for MicroStrategy observed that “This is a company that grew dramatically, and frankly its operations and growth outstripped its ability to comply with applicable accounting regulations for software revenue recognition.” The lessons learned from Chambers and MicroStrategy are that the means to manipulate are sometimes imbedded in accounting principles specific to an industry and that, consistent with Chairman Levitt’s suspicions in the 1990s, companies sometimes stretch the limits of discretion to meet the expectations of financial analysts.

**Management and Auditor Incentives**

Accelerating the timing of revenue recognition is crucially important to auditors for two reasons. First, management has incentives to manipulate reported earnings since, as research reveals, earnings is the most important determinant in management compensation contracts, and poor earnings increases both the likelihood of replacing a chief executive officer and the threat of a hostile takeover. Second, auditors have incentives to detect earnings manipulation, since shareholders entrust independent auditors to act as monitors over management’s stewardship function and, under the Securities Exchange Act of 1934 (Chapter 20), may bring action against an auditor for negligently overlooking inflated earnings. In response to the problems posed by earnings manipulation, the AICPA in 1999 published Audit Issues in Revenue Recognition, an influential report that discusses the responsibilities of management, directors, and audit committees for reliable financial reporting; summarizes key guidance about whether and when revenue should be recognized; identifies problematic circumstances and transactions; and describes procedures that may help control audit risk. To demonstrate the audit implications of competing incentives and earnings manipulation, the following illustrates issues auditors confront when auditing a franchisor’s accounting for area franchise fees.

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Area Development Franchises

Franchise operations such as Taco Bell, Burger King, Century 21, and Radisson Inns grant local franchisees the exclusive right to market trade-name products or services within a clearly defined geographical area. In the typical franchise arrangement, both the franchisor and franchisee can accrue benefits not otherwise available to either party: The franchisor establishes control over a sales outlet without a capital investment, and the franchisee markets an established product or service without incurring the cost of development. To illustrate, consider the case of a fast food franchisor’s accounting for area franchise fees—that is, the up-front, lump sum fee a franchisee must pay Grinder Shoppe Restaurants, Inc., to operate counter-service sandwich stores within a greater metropolitan area.

Grinder Shoppe, a publicly traded national chain, offers area development franchises which, under the company’s Uniform Franchise Offering Circular (a disclosure document required by the Federal Trade Commission), grants franchisees exclusive rights to open and operate at least two but no more than three Grinder Shoppe restaurants within five years from the inception of the agreement. The development schedule calls for Grinder Shoppe’s approval of store locations, construction, and interior design. Prior to opening the first store, the franchisee attends a two-week training program. The first two weeks of all first, second, and third store operations are supervised by an on-site manager assigned by Grinder Shoppe’s national office. The on-site manager returns for two-day visits after each store’s first two six-month periods of operation. The area development fee is:

- Fully refundable if the franchisee cannot obtain construction and working capital financing within 90 days of signing the development agreement,
- Fifty percent refundable after the first store is opened, and
- Nonrefundable after the second store is opened.

Although Grinder Shoppe had been highly successful in the first decade of operations, the company’s earnings have flattened and the stock price has declined. To rescue both earnings and the stock price, Grinder Shoppe management proposes that area franchise fees be recognized as revenue when an area franchisee obtains financing to construct the first store in an area. Management argues that, once financing is obtained, few if any area franchisees renege on the area franchise agreement.

Audit Judgment: Accounting, Liability, and Ethics

As noted in Chapter 1, “auditors are accountants first,” and they are because accounting and auditing are inextricably related. This suggests that, in the case of Grinder Shoppes, the auditor need first search the professional literature to identify GAAP that bear on accounting for area franchise fees. Grinder Shoppe apparently proposes that revenue be recognized when area franchisees have obtained financing—that is, the point at which area development fees are no longer fully refundable. Does GAAP concur? And if it doesn’t, are there legal liability and ethical issues the auditor need address?

FASB Statement No. 45, “Accounting for Franchise Fee Revenue,” bears on Grinder Shoppe’s proposed accounting. Paragraph 8 reveals that for area franchise fees:
. . . revenue ordinarily shall be recognized when all material services or conditions relating to the sale(s) have been substantially performed or satisfied by the franchisor. If the franchisor’s substantial obligations under the franchise agreement relate to the area franchise and do not depend significantly on the number of individual franchises to be established, substantial performance shall be determined using the same criteria applicable to individual franchises (paragraph 5). However, if the franchisor’s substantial obligations depend on the number of individual franchises established within the area, area franchise fees shall be recognized in proportion to the initial mandatory services provided. Revenue that may have to be refunded because future services are not performed shall not be recognized by the franchisor until the franchisee has no right to receive a refund.

Every sentence in paragraph 8 bears on the auditor’s judgment that, in the Grinder Shoppe case, revenue should be recognized in proportion to the services management provides to area franchisees, not fully when a franchisee obtains financing. That is, in the Grinder Shoppe franchise agreement:

- **Material services are not substantially performed by the franchisor until well beyond the point that a franchisee obtains financing:** Two, two-day, on-site visits occur during and after each store’s first year of operations.
- **The franchisor’s obligations depend on the number of individual franchises established within the area:** The franchisee must open at least two stores, and the fee is partially refundable after the first store is opened and nonrefundable only after the second store is opened.

Clearly, management’s proposal violates GAAP, specifically *FASB Statement No. 45*, leaving the client no discretion in manipulating the timing of area franchise fee revenue. If the client insists on accelerating earnings, the auditor has no alternative but to alert the client that:

- Accelerating the recognition of revenue is a departure from GAAP,
- A departure from GAAP will cause the auditor to issue a qualified or adverse opinion, depending on materiality, and an explanatory paragraph that discloses the effect of the departure on reported earnings (Chapter 3, Figure 3-9),
- The change in accounting for area franchise fees is also an inconsistency in the application of accounting principles which management cannot justify, since the change is from a generally accepted principle to a practice that is not generally accepted, and
- Research reveals that qualified opinions are associated with declines in stock prices, a risk that runs contrary to management’s apparent objectives.¹⁰

Make no mistake about it: What the auditor must conclude is not what the client wants to hear. As a result, there is some likelihood that the client may exert influence on the auditor—for example, by threatening to put next year’s engagement out to bid. If the auditor considers concurring with the client to violate *FASB Statement No. 45*, the legal and ethical implications are enormous. Since Grinder Shoppes is publicly traded, statutory law applies and Sections 10(b) and 18 of the *Securities Exchange Act of 1934* (Chapter 20) provide shareholders with a means to

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recover losses resulting from false or misleading statements. In this case, shareholders could likely recover under Section 10(b) because the auditor knew that revenue had been accelerated and that FASB Statement No. 45 had been violated, although the plaintiff’s basis for action, Section 10(b) or Section 18, would be arranged in consultation with an attorney. Further, the auditor could be liable for treble damages under the Racketeer Influenced and Corrupt Organizations (RICO) Act (Chapter 20), since Reves v. Arthur Young, a 1993 U.S. Supreme Court case, does not provide relief from RICO when, as is the case in Grinder Shoppe, he or she participated directly with management to perpetrate the fraud.

Interestingly, the case raises at least two ethical issues. First, the auditor violates the Code of Professional Conduct, Rule 203—Accounting Principles (Chapter 19), which provides that an AICPA member cannot issue an unqualified opinion if the financial statements contain a departure from an “accounting principle promulgated by bodies designated by Council.” In the Grinder Shoppe case, the accounting principle violated is that “area franchise fees shall be recognized in proportion to the initial mandatory services provided” (FASB Statement No. 45) and the body issuing the principle is the Financial Accounting Standards Board. Violating Rule 203 can result in an administrative reprimand, such as suspension to practice before the SEC or, worse still, revocation of a CPA’s license to practice public accountancy. Second, unethical business practices impose upon an offending auditor the risk of losing the set of characteristics on which his or her reputation capital rests: integrity, objectivity, and credibility. What, after all, does the public rely on us for if not for our claims to credibility?

As discussed in Chapter 9, the revenue/receipt cycle encompasses two major business functions—selling resources to customers and, subsequently, collecting cash for resources sold. In turn, these functions are reflected in three major financial statement accounts: sales, accounts receivable, and cash, each of which is discussed in this chapter in the context of substantive tests. When performing substantive tests of sales, receivables, and cash balances, an auditor’s objectives are to determine that each account balance exists, represents all transactions that should be presented, represents rights of the entity, is valued appropriately, and is presented and disclosed properly in the financial statements. Importantly, the material presented in Chapter 6 on computer auditing and in Chapter 8 on audit sampling is directly applicable to substantive tests of sales, receivables, and cash, since many U.S. companies now process most all of their revenue/receipt cycle transactions by computer.

When the timing of revenue is not reasonably determinable or if the earnings process is not complete, management has some discretion in timing the amount of revenue recognized, creating opportunities for earnings manipulation. Auditors should be aware that management may have incentives to overstate earnings, since reported earnings is typically the most important variable in management compensation contracts and poor earnings performance increases both the likelihood of replacing a chief executive officer and the threat of a hostile takeover. Undetected earnings manipulation can result both in legal liability and ethical implications for the auditor.
key terms

Area franchise fees 396  Negative confirmations 373
Cutoff bank statements 382  Positive confirmations 371
Earnings manipulation 391  Revenue/receipt cycle 365
Kiting 383

references

Auditing Standards

Accounting Standards

Professional Reports and Speeches

Articles

questions

1.  What are financial statement assertions, audit objectives, and audit procedures? How are they related?
2.  How does an auditor test whether recorded accounts receivable exist?
3. Why does an auditor perform analytical procedures on receivables?
4. How does an auditor test whether recorded receivables represent bona fide rights of the client?
5. How does an auditor test the valuation of accounts receivable and sales?
6. Describe and distinguish between positive and negative confirmation requests.
7. Explain the purpose and nature of sales cutoff tests.
8. How does an auditor test whether cash balances actually exist?
9. Aside from cash balances, what other information is requested by an AICPA standard form (Figure 10-8) to confirm account balance information with financial institutions?
10. Identify the internal and external documentation available to an auditor to test cutoff.
11. Explain the purpose and nature of cutoff tests of cash balances.
12. How and why does an auditor test intercompany and interbank transfers?
13. Describe some computer-assisted substantive tests an auditor might apply to accounts receivable.
14. What conditions must an entity meet before recognizing revenue for financial statement reporting purposes?
15. What advantages do both franchisors and franchisees enjoy by entering into a franchise agreement, rather than conducting the entire scope of operations individually?

Multiple choice questions

1. Which of the following might be detected by sales cutoff tests?
   a. Overstated receivables.
   b. Overstated sales.
   c. Kiting.
   d. Misappropriated inventory.

2. To test whether all sales transactions have been recorded, an auditor should test a sample drawn from an entity’s file of:
   a. Receiving reports.
   b. Bills of lading.
   c. Sales orders.
   d. Sales invoices.

3. Positive accounts receivable confirmations are appropriate when:
   a. There is reason to believe that a substantial number of accounts may be in dispute.
   b. Control risk is low.
   c. Accounts receivable consists of many small balances.
   d. Confirmations are mailed during an interim period.

4. An auditor requests a cutoff bank statement primarily to:
   a. Verify the cash balance reported on the bank confirmation.
   b. Verify reconciling items on the client’s bank reconciliation.
   c. Detect lapping.
   d. Detect kiting.

5. Which of the following procedures could reveal unrecorded sales at the balance sheet date?
   a. Comparing shipping documents with sales records.
   b. Applying gross profit percentages to inventory shipped during the period.
   c. Tracing payments received after the balance sheet date to accounts receivable records.
   d. Sending accounts receivable confirmations.
6. Assuming cash receipts from credit sales have been misappropriated, which of the following is likely to conceal the misappropriation and unlikely to be detected?
   a. Understating the sales journal.
   b. Overstating the accounts receivable control account.
   c. Overstating the accounts receivable subsidiary ledger.
   d. Overstating the cash receipts journal.

7. Which of the following cash transfers misstates cash at December 31, 2005?

<table>
<thead>
<tr>
<th>Interbank Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disbursement</td>
</tr>
<tr>
<td>Recorded in books</td>
</tr>
<tr>
<td>a. 12/31/05</td>
</tr>
<tr>
<td>b. 01/04/06</td>
</tr>
<tr>
<td>c. 12/31/05</td>
</tr>
<tr>
<td>d. 01/04/06</td>
</tr>
</tbody>
</table>

8. Which of the following accounting issues is most likely to raise an auditor’s professional skepticism about earnings manipulation?
   a. Progress payments.
   b. Allowance for doubtful accounts.
   c. Sales returns.
   d. Cash receipts.

9. Which of the following is most likely to provide management with incentives to overstate earnings?
   a. Projected quarterly dividends.
   b. Issuance of preferred stock.
   c. Unbudgeted increases in materials prices.
   d. A projected stock split.

10. Under which of the following circumstances does management have some discretion in timing the recognition of revenue?
    a. The timing of revenue is not reasonably determinable and the earnings process is not complete.
    b. The amount and timing of revenue is reasonably determinable.
    c. The earnings process is complete or reasonably complete.
    d. The transaction is at arm’s length.

10-1 Relating Errors, Frauds, Audit Procedures, and Assertions in Substantive Tests of Accounts Receivable

Following are errors, frauds, or other circumstances that an auditor might encounter as a result of applying year-end substantive tests to accounts receivable as of December 31, 2005:
   a. Sales totaling $12,500 were shipped on January 2, 2006 and recorded on December 31, 2005.
   b. Balances in selected individual customer accounts do not reconcile with supporting documentation (e.g., sales invoices, cash receipts).
   c. Not all sales transactions are recorded.
d. The aged trial balance prepared by the client includes a customer account within the 30–60 day category that is actually 120 days old.

e. Positive confirmations were not returned by 27 of 100 mailed receivables confirmations.

f. Actual write-offs during 2005 of receivables arising from 2004 sales were greater than the December 31, 2005 allowance for doubtful accounts.

**Required:** For each of the preceding items indicate (1) procedures that might address the error, fraud, or circumstance and (2) the financial statement assertion addressed by each procedure.

**10-2 Receivables Confirmations**

An independent auditor is engaged to audit the financial statements of a manufacturing company that, consistent with prior years, maintains a significant balance in trade accounts receivable. The auditor is satisfied that the accounts are properly summarized and classified and that reclassifications and valuations are made in accordance with generally accepted accounting principles. The auditor is planning to use accounts receivable confirmation requests to satisfy the third standard of field work.

**Required:**

1. Identify and describe the two forms of accounts receivable confirmation requests commonly used in practice and indicate what factors the auditor will consider to determine which form to use.

2. What alternative procedures could the auditor use to address no replies?

**10-3 Drafting a Tailored Audit Program for Credit Sales Transactions**

You have audited the financial statements of the Heft Company, a December 31 year-end client, for several years. The interim phase of the engagement, completed on August 31, included confirming accounts receivable and indicated that internal controls over receivables are effective and therefore that control risk is below the maximum.

Credit sales are made principally to manufacturers. Of 1,500 active trade accounts receivable, about 35 percent represent 65 percent of the total dollar balance. Receivables are maintained alphabetically in five subsidiary files, and the files are controlled by one general ledger account.

Sales are posted by an operation that simultaneously updates the customer’s balance (and monthly statement) and records the transaction in the sales journal. All cash receipts are in the form of customer checks that, when posted, simultaneously update the customer’s ledger balance, monthly statement, and the cash receipts journal. Information for posting cash receipts is obtained from remittance advices that are returned in envelopes with the customers’ checks. The bookkeeper compares the remittance advices with the list of checks that was prepared by another person when the mail was received.

Summary totals are produced monthly by the bookkeeper for posting to general ledger accounts such as Cash, Sales, and Accounts Receivable. An aged trial balance for each subsidiary is prepared monthly.

Sales returns and allowances and bad debt write-offs are summarized periodically and recorded in the general journal. Supporting documents for these journal entries are available. The usual documents arising from billing and shipping are also available.

**Required:** Prepare an audit program to test Heft Company’s year-end trade accounts receivable. Use the substantive tests introduced within the chapter as a guide, but not as a final and complete answer.

(AICPA Adapted)

**10-4 Analytical Procedures, Accounts Receivable, and Sales**

Cheryl Ralston is planning analytical procedures for the December 31, 2005 financial statement audit of Singulair, Inc., a publicly traded manufacturer of small electrical appliances, including mixers, toasters, can openers, and electric blankets. The appliances are marketed to low-end retailers throughout North America. An industry trade publication estimates
Singulair’s 2005 market share at 12 percent. Singulair’s December 31, 2005 and 2004 balance sheets and statements of operations follow.

Singulair, Inc.  
Balance Sheets  
December 31, 2005 and 2004  
(000 omitted)

<table>
<thead>
<tr>
<th>Assets</th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 42,000</td>
<td>$ 52,500</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>325,500</td>
<td>175,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>252,000</td>
<td>234,500</td>
</tr>
<tr>
<td>Other current assets</td>
<td>17,500</td>
<td>21,000</td>
</tr>
<tr>
<td>Noncurrent assets, net of depreciation</td>
<td>210,000</td>
<td>280,000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$847,000</strong></td>
<td><strong>$763,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Equities</th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade accounts payable</td>
<td>$133,000</td>
<td>$143,500</td>
</tr>
<tr>
<td>Taxes payable</td>
<td>105,000</td>
<td>50,400</td>
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<tr>
<td>Noncurrent liabilities</td>
<td>70,000</td>
<td>140,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>245,000</td>
<td>245,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>294,000</td>
<td>184,100</td>
</tr>
<tr>
<td><strong>Total liabilities and equities</strong></td>
<td><strong>$847,000</strong></td>
<td><strong>$763,000</strong></td>
</tr>
</tbody>
</table>

Singulair, Inc.  
Statements of Operations  
Years Ended December 31, 2005 and 2004  
(000 omitted)

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net credit sales</td>
<td>$5,894,000</td>
<td>$4,375,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>3,244,500</td>
<td>2,485,000</td>
</tr>
<tr>
<td>Selling and administrative expenses</td>
<td>2,387,000</td>
<td>1,764,000</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>$ 262,500</td>
<td>$ 126,000</td>
</tr>
<tr>
<td>Tax expense</td>
<td>105,000</td>
<td>50,400</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td><strong>$ 157,500</strong></td>
<td><strong>$ 75,600</strong></td>
</tr>
</tbody>
</table>

Total industry-wide sales approximated $37.5 billion in 2002. The allowance for doubtful accounts was $24,500,000 in 2005 and $35,000,000 in 2004, and accounts receivable, net, was $200,000,000 in 2003.

Required: Using Figure 10-6, Analytical Procedures for Accounts Receivable and Sales, as a guide:

1. Perform analytical procedures you think appropriate for Singulair’s December 31, 2005 audit. For example, the balance sheets and statements of operations include information that can be used to calculate the numbers of days sales in receivables and receivables turnover and to make several informative comparisons.
2. Explain the results for each ratio or comparison. For example, an increase in receivables turnover could signal understated sales or overstated receivables, among other things.
3. Discuss substantive tests appropriate for the results explained in requirement 2. For example, an analytical procedure that signals overstated receivables could prompt an auditor to increase the extent of accounts receivable confirmations.
Martin Kline, engagement partner on RCT Manufacturing Company, a February 28, 2005 year-end client, is performing analytical procedures to better understand RCT’s business and to determine where audit effort ought to be concentrated. The balance sheets and statements of operations for 2004 and 2005 follow.

### RCT Manufacturing Company
#### Balance Sheets
February 28, 2005 and 2004

**Assets**

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$12,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>93,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>72,000</td>
<td>67,000</td>
</tr>
<tr>
<td>Other current assets</td>
<td>5,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Plant and equipment, net of depreciation</td>
<td>60,000</td>
<td>80,000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$242,000</strong></td>
<td><strong>$218,000</strong></td>
</tr>
</tbody>
</table>

**Liabilities and Equities**

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$38,000</td>
<td>$41,000</td>
</tr>
<tr>
<td>Federal income tax payable</td>
<td>30,000</td>
<td>14,400</td>
</tr>
<tr>
<td>Long-term liabilities</td>
<td>20,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Common stock</td>
<td>70,000</td>
<td>70,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>84,000</td>
<td>52,600</td>
</tr>
<tr>
<td><strong>Total liabilities and equities</strong></td>
<td><strong>$242,000</strong></td>
<td><strong>$218,000</strong></td>
</tr>
</tbody>
</table>

**RCT Manufacturing Company**

#### Income Statements
Years Ended February 28, 2005 and 2004

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$1,684,000</td>
<td>$1,250,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>927,000</td>
<td>710,000</td>
</tr>
<tr>
<td><strong>Gross margin on sales</strong></td>
<td><strong>$757,000</strong></td>
<td><strong>$540,000</strong></td>
</tr>
<tr>
<td>Selling and administrative expenses</td>
<td>682,000</td>
<td>504,000</td>
</tr>
<tr>
<td>Income before federal income taxes</td>
<td>$75,000</td>
<td>$36,000</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>30,000</td>
<td>14,400</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td><strong>$45,000</strong></td>
<td><strong>$21,600</strong></td>
</tr>
</tbody>
</table>

Additional information:

a. Cash sales are insignificant.

b. Year-end figures are comparable to the average for each respective year.

Required: For each year, compute accounts receivable turnover and, based on turnover, identify and discuss procedures Kline should include in the audit of accounts receivable.

(AICPA Adapted)

### 10-6 Sales Cutoff Tests
During an audit of the financial statements of Houston Wholesalers, Inc., for the year ended June 30, 2005, an auditor performs several cutoff tests.

**Required:**
1. What are cutoff tests and why are they performed?
2. The auditor wishes to test Houston’s sales cutoff at June 30, 2005. Discuss procedures that should be included in the test.
**10-7 Relating Errors, Frauds, Audit Procedures, and Assertions in Substantive Tests of Cash**

Following are errors, frauds, or other circumstances that an auditor might encounter as a result of applying substantive tests to cash balances as of December 31.

a. The petty cash fund is short $75.

b. Cash in banks is overstated by $1,500.

c. Several checks were issued on December 31, but were postdated January 2.

d. Outstanding checks per the bank reconciliation do not agree with the cash disbursements journal.

e. On December 31, the sum of $15,000 was transferred from an account in the First National Bank to an account in Tower Savings Bank.

f. The December 31 bank reconciliation contains several discrepancies.

g. On December 31, the client transferred $25,000 to a wholly owned subsidiary.

**Required:** Indicate a specific procedure (or procedures) that might detect each error, fraud, or circumstance and identify the assertion(s) addressed by each procedure.

**10-8 Cash Cutoff Tests**

During year-end substantive procedures for cash balances as of June 30, 2005, an auditor obtains a July 10, 2005 bank statement directly from a bank.

**Required:** Explain how the auditor will use the cutoff bank statement:

1. When auditing the June 30, 2005 bank reconciliation.

2. To obtain other audit information.

**10-9 Auditing a Client-Prepared Bank Reconciliation**

The following client-prepared bank reconciliation is presented to Kautz during an audit of the financial statements of Cynthia Company.

<table>
<thead>
<tr>
<th>Cynthia Company</th>
<th>BANK RECONCILIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village Bank Account 2</td>
<td>December 31, 2005</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance per bank (a)</td>
<td>$ 18,375.91</td>
</tr>
<tr>
<td>Deposits in transit (b)</td>
<td>12/30 $1,471.10</td>
</tr>
<tr>
<td></td>
<td>12/31 2,840.69 4,311.79</td>
</tr>
<tr>
<td></td>
<td>Subtotal $ 22,687.70</td>
</tr>
<tr>
<td>Outstanding checks (c)</td>
<td>$6,000.00 671.80</td>
</tr>
<tr>
<td></td>
<td>1944 1,855.42 3,621.22</td>
</tr>
<tr>
<td></td>
<td>1987 2,576.89 (19,466.21)</td>
</tr>
<tr>
<td></td>
<td>Subtotal $ 3,221.49</td>
</tr>
<tr>
<td>NSF check returned  (d)</td>
<td>200.00</td>
</tr>
<tr>
<td>Bank charges</td>
<td>5.50</td>
</tr>
<tr>
<td>Error, Check No. 1932 (e)</td>
<td>148.10</td>
</tr>
<tr>
<td>Customer note collected by the bank ($2,750 plus $275 interest)</td>
<td>(3,025.00)</td>
</tr>
<tr>
<td>Balance per books (f)</td>
<td>$ 550.09</td>
</tr>
</tbody>
</table>

**Required:** Indicate one or more audit procedures Kautz should perform to gather evidence to support each of the items (a) through (f). (AICPA Adapted)
10-10 Computer-Assisted Audit Tests

After determining that computer controls are valid, Hastings is reviewing the sales system of Rosco Corporation to determine how computer-assisted audit techniques may be used to assist in performing tests of Rosco’s sales records. Rosco sells corn from one central location. All orders are received by mail or fax and indicate the preassigned customer identification number, desired quantity, proposed delivery date, method of payment, and shipping terms. Since price fluctuates daily, orders do not indicate a price. Price sheets are printed daily, and details are stored on computer. The details of orders are also maintained on computer.

Each morning the shipping clerk receives a computer printout that indicates details of customers’ orders to be shipped that day. After the orders have been shipped, the shipping details are entered in the computer, which simultaneously updates the sales journal, perpetual inventory records, accounts receivable, and sales accounts. The details of all transactions, as well as daily updates, are maintained on computer and are accessible by Hastings.

Required:
1. How may Hastings use computer-assisted audit techniques to perform substantive tests of Rosco’s sales records?
2. What other auditing procedures should Hastings perform in order to complete the audit of Rosco’s sales records?

(AICPA Adapted)

10-11 Identifying and Criticizing a Receivables Confirmation

An entry-level staff member in the Providence, Rhode Island, office of DeMarinis & Harrison, LLP, has drafted the following receivable confirmation for the Newman Crosby Company, a December 31, 2005 year-end client.

January 2, 2006

Newman Crosby Company
305 Columbus Avenue
Pawtucket, RI 02861

Carter, Rice, Storrs & Bement
Industrial Highway
Providence, RI 02906

Please confirm the correctness of your December 31, 2005 account balance, $45,897, directly to us. Our auditors are DeMarinis & Harrison, CPAs. This is not a request for payment.

_________________________
Tess Gallagher, Controller

_____ The above balance is correct.
_____ The above balance is incorrect, as noted below:

Required:
1. What type of confirmation is illustrated?
2. What is wrong with the confirmation?

10-12 Interpreting Working Paper Evidence

Following is partial evidence from an audit working paper.

<table>
<thead>
<tr>
<th>Disbursement Date</th>
<th>Receipt Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Books</td>
<td>Per Bank</td>
</tr>
<tr>
<td>Per Bank</td>
<td>Per Books</td>
</tr>
<tr>
<td>12/31</td>
<td>01/01</td>
</tr>
<tr>
<td>12/31</td>
<td>01/01</td>
</tr>
<tr>
<td>01/01</td>
<td>01/01</td>
</tr>
<tr>
<td>12/31</td>
<td>01/01</td>
</tr>
</tbody>
</table>
Required:
1. What is the evidence attempting to detect?
2. Did it? Why or why not?

10-13 Interpreting Working Paper Evidence
Following is partial evidence from an audit working paper.

<table>
<thead>
<tr>
<th>Shipped</th>
<th>Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOB: Destination</td>
<td>December 31</td>
</tr>
<tr>
<td>FOB: Shipping Point</td>
<td>December 30</td>
</tr>
<tr>
<td>FOB: Destination</td>
<td>January 1</td>
</tr>
<tr>
<td>FOB: Shipping Point</td>
<td>December 31</td>
</tr>
<tr>
<td>FOB: Destination</td>
<td>January 1</td>
</tr>
</tbody>
</table>

Required:
1. What is the evidence attempting to detect?
2. Did it? Why or why not?

10-14 Working Paper Review: Bank Reconciliation
Following is an audit working paper that documents an auditor’s tests of a client’s bank reconciliation.

Ansonia Wire and Cable Co., Inc.  
Bank Reconciliation  
December 31, 2005

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance per bank, 12/31/05</td>
<td>$17,551,710@</td>
</tr>
<tr>
<td>Add: DIT, 12/31/05</td>
<td>1,578,143*</td>
</tr>
<tr>
<td>Less: O/S checks:</td>
<td></td>
</tr>
<tr>
<td>No. 5775 12/24</td>
<td>1,431,897&amp;</td>
</tr>
<tr>
<td>No. 5776 12/26</td>
<td>156,050&amp;</td>
</tr>
<tr>
<td>No. 5777 12/27</td>
<td>234,875&amp;</td>
</tr>
<tr>
<td>No. 5779 12/29</td>
<td>2,169,549&amp;</td>
</tr>
<tr>
<td>No. 5780 12/31</td>
<td>1,191,240&amp;</td>
</tr>
<tr>
<td>Adjusted bank balance</td>
<td>(5,183,611)</td>
</tr>
<tr>
<td>Adjusted book balance</td>
<td>$13,946,242</td>
</tr>
</tbody>
</table>

Balance per books, 12/31/05  
Less: Check from Apex, Inc., deposited 12/15, returned NSF on 12/18  
(526,856)@

Adjusted book balance  
$13,946,242

@  Agreed to 12/31/05 bank statement obtained from client/ARE  
* Agreed to cash receipts records/ARE  
& Agreed to cash disbursements records/ARE  
# Agreed to client bank reconciliation/ARE

Required: List the deficiencies in this working paper.

10-15 Earnings Manipulation and Area Franchise Fees
Burger Chef Restaurants grants area franchises to operate up to two restaurants within a 100-square-mile area. The Uniform Franchise Offering Circular reveals that, following payment of the lump sum fee, Burger Chef agrees to assist in selecting franchise locations and obtaining financing, negotiate lease terms for existing structures or construction costs for a new building, and provide both initial management training and periodic on-site consultation. The area franchise fee can be refunded. To date, no area franchisees have either reneged on the franchise agreements or gone out of business. In most markets, Burger Chef ranks at least fourth in marketwide fast food revenue. The product line consists of beef, fish, and poultry sandwiches and a full-service salad bar.
Required: Identify, and explain the motive for, the key questions an auditor would address to judge when area franchise fees may be recognized as revenue.

Internet cases are available at http://ricchiute.swcollege.com

1. **Management Discretion and Earnings Manipulation**

   Earnings manipulation has been the subject of considerable attention both in the financial press and in academic research. For example, *The Wall Street Journal*, *Forbes Magazine*, and *Business Week* have all carried pieces on suspicious income and the 1988 Supplement to the University of Chicago’s *Journal of Accounting Research* is devoted exclusively to studies addressing earnings management. Interestingly, many of the earnings manipulation issues disclosed by the press have resulted in professional pronouncements intended to improve the quality of reported earnings, among them *FASB Statement No. 45*, “Accounting for Franchise Fee Revenue.”

   **Required:** Using the annual report file in an online research service (e.g., LEXIS-NEXIS, the SEC’s EDGAR [http://www.sec.gov]) or copies of annual reports in a library, select the annual reports of two national franchisors (e.g., Burger King, Century 21, Holiday Inn, McDonald’s, Radisson Inns, Taco Bell, U-Haul) and draft a report that accomplishes both of the following:

   1. Compare the footnote and line-item disclosures for area development and individual site franchises.
   2. Using *FASB Statement No. 45*, paragraphs 5 through 11, as a guide, list and explain the questions an auditor would ask the management of either of the franchisors to monitor whether the franchisor complied with generally accepted accounting principles.

2. **Revenue Recognition and Earnings Manipulation**

   Not unlike a number of other articles appearing in the national press, E. MacDonald, in “Auditors Miss a Fraud and SEC Tries to Put Them Out of Business” (*The Wall Street Journal*, January 6, 2000), reports about an SEC investigation of the auditors of California Micro Devices, a computer chip maker alleged to have overstated revenue:

   *Within weeks, it became clear they had missed an audacious accounting fraud. An internal Cal Micro investigation uncovered “preposterous” revenue numbers “almost immediately,” . . . One-third of the company’s $45 million of fiscal 1994 revenue was spurious. Undetected by auditors . . . were a dozen or more accounting tricks that various employees, at various levels of management, had deployed to keep the stock buoyant. They included one particularly bold one: booking bogus sales to fake companies for products that didn’t exist.*

   The article is a sobering warning for auditors to be mindful that clients have incentives to overstate revenue. In fact, the Panel on Audit Effectiveness goes further by recommending that auditors introduce a “forensic-type fieldwork phase” to every financial statement audit. The Panel explains:

   *During this phase, auditors should modify the otherwise neutral concept of professional skepticism and presume the possibility of dishonesty at various levels of management, including collusion, override of internal control and falsification of documents. The key question that auditors should ask is ‘Where is the entity vulnerable to financial statement fraud if management were inclined to perpetrate it?’*
The Journal’s account of Cal Micro and the Panel’s recommendation suggest that detecting overstated revenue starts in the planning stage of the engagement.

**Required:** Using the annual report file in an online research service (e.g., LEXIS-NEXIS, the SEC’s EDGAR [http://www.sec.gov]) or copies of annual reports in a library, select the annual report of a publicly traded company. Draft a report that accomplishes the following:

1. Compile from the annual report the company’s major revenue-producing transactions. For example, the notes to General Electric’s financial statements reveal that the company generates revenue from seven major sources, including aircraft engines, appliances, industrial products, NBC, and plastics.

2. Using Figure 10-15, “Common Means to Manipulate Earnings,” as a guide, explain how the company’s management could overstate revenue to manipulate earnings.