CHAPTER

23

Accounting Changes and Errors

OBJECTIVES

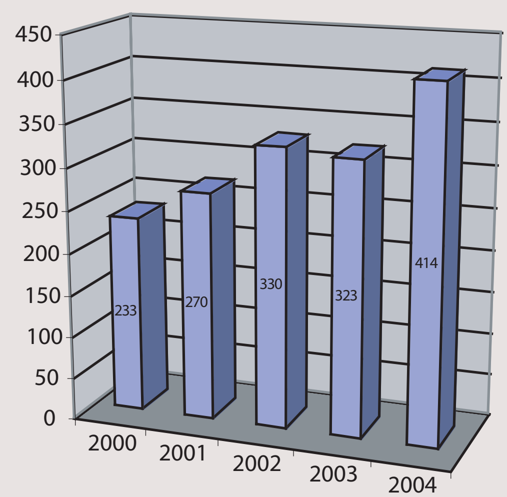
After reading this chapter, you will be able to:

1. Identify the types of accounting changes.
2. Explain the methods of disclosing an accounting change.
3. Account for a change in accounting principle using the retrospective adjustment method.
4. Account for a change in estimate.
5. Explain the conceptual issues regarding a change in accounting principle and a change in estimate.
6. Identify a change in reporting entity.
7. Account for a correction of an error.
8. Summarize the methods for making accounting changes and correcting errors.

Eating Up the Profits

According to a recent study released by Huron Consulting Group, the number of financial restatements climbed to record levels in 2004. After leveling off in 2003, the number of quarterly and annual restatements rose to the highest level since the group began its annual study.

Number of Financial Restatements by Year



Source: *Annual Review of Financial Reporting Matters*, Huron Consulting Group

Improper revenue recognition was cited as the leading cause of financial restatements. This was closely followed by errors involving share (stock) option accounting, earnings per share, and accounting for other equity instruments. Other significant causes of restatements were errors in accounts receivable and inventory reserves, restructuring reserves, accruals, and loss contingencies.

Credit: Newswire RED LOBSTER

Although large misstatements, such as **WorldCom's** $74.4 billion restatement in 2004 and **American International Group's** (**AIG**) $3.9 billion restatement in 2005, have received considerable attention from the financial press, many restatements are much smaller in size and result from simple misapplication of accounting principles. For example, many restaurant chains have recently restated their earnings after taking a closer look at the way they account for leases. **Darden Restaurants**, which operates Red Lobster and Olive Garden, announced an estimated restatement of $74 million. Other restaurant chains issuing restatements include **CKE Restaurants** (Hardee's, Carl's Jr.), **Brinker International** (Chili's, Macaroni Grill), and **Ruby Tuesday**. Whether the restatements were caused by fraud, aggressive accounting, or simple mistakes, one thing is clear: the restatements certainly took a bite out of profits!

For Further Investigation

For a discussion of financial restatements, consult the Business & Company Resource Center (BCRC):

- Following SEC Clarification on Lease Accounting, CKE Restaurants, Inc. Announces Restatement of Prior Financial Statements. *PR Newswire* April 14, 2005.
- Sipex Corporation Announces Approval of Change in Revenue Recognition Methodology and Restatement of Financial Statements. *PR Newswire* April 19, 2005.

One of the qualitative characteristics of accounting is consistency (which we discussed in Chapter 2)—the conformity of accounting principles, policies, and procedures from period to period. However, in some instances a company may improve its reporting by changing its accounting to adopt a preferable or newly mandated generally accepted accounting principle, or to reflect changing economic conditions. When a company changes an accounting principle, the consistency of its financial statements is impaired. Therefore, it is important to report the effects of the change in its financial statements. Accounting for the effects of a change in an accounting principle is the primary topic of this chapter. We also discuss the related issue of accounting for a change in an estimate. Finally, we discuss accounting for errors.

Types of Accounting Changes

1 Identify the types of accounting changes.

The generally accepted accounting principles a company uses when it makes an accounting change are specified by **FASB Statement No. 154**, which defines three types of changes[1] as follows:

1. *Change in an Accounting Principle*. This type of change occurs when a company adopts a generally accepted accounting principle different from the one used previously for reporting purposes. For instance, changing from the LIFO to the FIFO inventory cost flow assumption is a change in accounting principle.
2. *Change in an Accounting Estimate*. This type of change is inherent in the periodic presentation of financial statements. Preparing financial statements requires the use of estimates to determine many revenues and expenses. These estimates sometimes must be changed as new events occur, as more experience is acquired, or as additional information is obtained. For example, a company may change the estimated life of a depreciable asset to reflect newly available information.
3. *Change in a Reporting Entity*. This type of change is caused by a change in the entity being reported. For example, a change in the subsidiaries that are included in a company's consolidated financial statements is a change in a reporting entity.

In addition to the preceding changes, *FASB Statement No. 154* specifies the accounting principles to be used when a company discovers an error in its published financial statements. *Errors* are not considered to be accounting changes, but are the results of mathematical mistakes or mistakes in the application of accounting principles.

Methods of Reporting an Accounting Change

2 Explain the methods of disclosing an accounting change.

There are two possible methods for a company to disclose an accounting change in its financial statements: (1) the **retrospective application of a new accounting principle** (restate its financial statements of prior periods, sometimes referred to as a **retrospective adjustment** or **restatement**), or (2) adjust for the change **prospectively**.

According to the provisions of *FASB Statement No. 154*:

- *A change in an accounting principle* is accounted for by the *retrospective application of the new accounting principle*.[2]
- *A change in an accounting estimate* is accounted for *prospectively*.
- *A change in a reporting entity* is accounted for by the *retrospective application of the new accounting principle*.

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1. "Accounting Changes and Error Corrections," *FASB Statement of Financial Accounting Standards No. 154* (Norwalk, Conn.: FASB, 2005), par. 2.
2. If it is not practical to determine the cumulative effect of applying a change in any accounting period, the new principle is applied as if the change was made prospectively at the earliest date practical, as we discuss later in the chapter.

We discuss each of these methods and rules in greater detail in the following sections of the chapter. We provide a summary in Exhibit 23-1 at the end of the chapter. Note that a company reports an accounting change in its financial statements only if the amount is material.

Accounting for a Change in Accounting Principle

FASB Statement No. 154 states that a change in accounting principle includes:

- A change from one generally accepted accounting principle to another generally accepted accounting principle when there are two or more generally accepted accounting principles.
- A change in accounting principle because the accounting principle formerly used is no longer generally accepted.
- A change in the method of applying an accounting principle.

Thus, a change in accounting principle can be a *voluntary* change from one generally accepted principle to another, or a *mandatory* change because the FASB has adopted a new principle. However, a change in an accounting principle does *not* include the initial adoption of a generally accepted accounting principle because of events or transactions occurring for the first time. It also does *not* include the adoption or modification of an accounting principle for transactions or events that are clearly different in substance from those previously occurring. Also, a change to a generally accepted accounting principle from one that is *not* generally accepted is a correction of an error and *not* a change in accounting principle.

Retrospective Adjustment Method

3 Account for a change in accounting principle using the retrospective adjustment method.

A company accounts for a change in accounting principle by the retrospective application of the new accounting principle to all prior periods as follows:

1. The company computes the cumulative effect of the change to the new accounting principle as of the beginning of the first period presented. That is, it computes the amounts that would have been in the financial statements if it had always used the new principle.
2. The company adjusts the carrying values of those assets and liabilities (including income taxes) that are affected by the change. The company makes an offsetting adjustment to the beginning balance of retained earnings to report the cumulative effect of the change (net of taxes) for each period presented.
3. The company adjusts the financial statements of each prior period to reflect the specific effects of applying the new accounting principle. That is, each item in each financial statement that is affected by the change is restated to the appropriate amount under the new accounting principle. The company uses the new accounting principle in its current financial statements.
4. The company's disclosures include (a) the nature and reason for the change in accounting principle, including an explanation of why the new principle is preferable, (b) a description of the prior-period information that has been retrospectively adjusted, (c) the effect of the change on income, earnings per share, and any other financial statement line item for the current period and the prior periods retrospectively adjusted, and (d) the cumulative effect of the change on retained earnings (or other appropriate component of equity) at the beginning of the earliest period presented.

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Example: Retrospective Adjustment A retrospective adjustment requires that a company change the prior financial statements to what they would have been had it used the new method in previous periods. Examples 23-1, 23-2, 23-3, 23-4, and 23-5 illustrate a retrospective adjustment. In this example the Werner Company changes *from* the LIFO *to* the FIFO inventory method at the beginning of 2008. Example 23-1 shows the basic information for Werner Company.

EXAMPLE 23-1 Retrospective Adjustment for a Change in Accounting for Inventory

1. Werner Company starts operations on January 1, 2006.
2. The Werner Company changes from the LIFO method to the FIFO method on January 1, 2008.
3. The company reports the previous year's financial statements for comparative purposes. Therefore, the beginning of the first period presented is January 1, 2007.
4. Retained earnings on December 31, 2006 is $231,000. The company paid no dividends in 2006, 2007, and 2008.
5. The company's tax rate is 30% and there are no temporary or permanent differences.
6. The company pays its income taxes in a single payment in the following year.
7. The company must repay the taxes saved by using LIFO according to IRS rules but has *not* yet made any payments.
8. The company has 100,000 shares outstanding (for simplicity we only compute basic earnings per share).
9. The company calculated its inventory and cost of goods sold amounts under LIFO and FIFO as follows:

	Inventory Determined by		**Cost of Goods Sold Determined by**	
	LIFO Method	***FIFO Method***	***LIFO Method***	***FIFO Method***
12/31/2006	$ 70,000	$120,000	$720,000	$670,000
12/31/2007	90,000	160,000	780,000	760,000
12/31/2008	130,000	210,000	860,000	850,000

Example 23-2 shows the Werner Company's comparative income statements for 2007 and 2006. For those years, the company was using the *LIFO* method.

EXAMPLE 23-2 Comparative Income Statements under the LIFO Method

Werner Company
Income Statement
For Years Ended 12/31/2007 and 12/31/2006

	2007	***2006***
Sales	$1,700,000	$ 1,500,000
Cost of goods sold	(780,000)	(720,000)
Operating expenses	(500,000)	(450,000)
Income before income taxes	$ 420,000	$ 330,000
Income tax expense	(126,000)	(99,000)
Net income	$ 294,000	$ 231,000
Earnings per share	$ 2.94	$ 2.31

Since the Werner Company changed from the LIFO method to the FIFO method on January 1, 2008 and presents the previous year's (2007) financial statements for comparative purposes, it must report its comparative income statements for 2008 and 2007 using the *FIFO* method. Example 23-3 shows these statements. The income statement for 2007 shows the retrospective application of the change from the LIFO method to the FIFO method. Note that the 2007 income statement presented in 2008 is different than when it was originally presented in 2007. The cost of goods sold under FIFO is $760,000, whereas it was $780,000 under LIFO (see Example 23-2). This $20,000 difference also increased the 2007 income before income taxes, increased income tax expense by $6,000 ($20,000 × 0.30), and increased net income by $14,000 [$20,000 × (1 − 0.30)]. Although we don't show the balance sheet and statement of cash flows, Werner would also have reported these financial statements using the FIFO method for both 2008 and 2007.

EXAMPLE 23-3 Comparative Income Statements under the FIFO Method

Werner Company
Income Statement
For Years Ended 12/31/2008 and 12/31/2007

	2008	*2007 As adjusted*
Sales	$2,000,000	$ 1,700,000
Cost of goods sold	(850,000)	(760,000)
Operating expenses	(550,000)	(500,000)
Income before income taxes	$ 600,000	$ 440,000
Income tax expense	(180,000)	(132,000)
Net income	$ 420,000	$ 308,000
Earnings per share	$ 4.20	$ 3.08

Werner Company must also adjust its beginning retained earnings for the cumulative effect of the change from LIFO to FIFO (net of taxes) for 2007 and 2008. Example 23-4 shows Werner Company's retained earnings statements for these years.

EXAMPLE 23-4 Comparative Retained Earnings Statements

Werner Company
Retained Earnings Statement
For Years Ended 12/31/2008 and 12/31/2007

	2008	**2007**
Beginning unadjusted retained earnings	$525,000	$231,000
Plus: Adjustment for the cumulative effect on prior years' of retrospectively applying the FIFO inventory method (net of income taxes of $21,000 in 2008 and $15,000 in 2007)	49,000	35,000
Adjusted beginning retained earnings	$574,000	$266,000
Net income	420,000	308,000
Ending retained earnings	$994,000	$574,000

The $231,000 unadjusted beginning retained earnings for 2007 is the net income for 2006 under LIFO because Werner Company paid no dividends in 2006 (remember that we also assumed that the company started operations on January 1, 2006). The $35,000 retrospective adjustment to the beginning retained earnings for 2007 is the cumulative effect of the change from LIFO to FIFO for 2006. It is the difference between the $231,000 net income reported under the LIFO inventory method for 2006 and the $266,000 net income ($1,500,000 sales − $670,000 cost of goods sold − $450,000 operating expenses = $380,000 income before income taxes − $114,000 income taxes) that would have been reported under the FIFO method for 2006. The $266,000 adjusted beginning retained earnings is the retained earnings balance that Werner would have reported at the beginning of 2007 if it had been using FIFO during 2006. The $308,000 net income that Werner would have reported for 2007 if it had been using FIFO is then added to the $266,000 adjusted beginning retained earnings to determine the $574,000 ending adjusted retained earnings for 2007.

The $525,000 unadjusted beginning retained earnings for 2008 consists of the $231,000 unadjusted retained earnings balance at the end of 2006, plus the $294,000 net income for 2007 under LIFO because the company paid no dividends. The $49,000 retrospective adjustment to the beginning retained earnings for 2008 is the cumulative effect of the change from LIFO to FIFO for all previous years, which in this example is 2006 and 2007. It is the difference between the $525,000 cumulative net income ($231,000 for 2006 and $294,000 for 2007) under LIFO and the $574,000 cumulative net income ($266,000 for 2006 and $308,000 for 2007) under FIFO. The $574,000 adjusted beginning retained earnings is the balance that Werner would have reported at the beginning of 2008 if it had been using FIFO for 2006 and 2007. The $420,000 net income for 2008 (under FIFO) is then added to the $574,000 adjusted beginning retained earnings balance for 2008 to determine the $994,000 ending adjusted retained earnings for 2008.

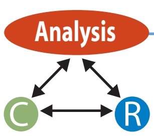
At the beginning of 2008, Werner Company records the retrospective adjustment as follows:

Inventory	70,000	
Income Taxes Payable		21,000
Retained Earnings		49,000

Werner Company adds the $70,000 increase (debit) in the Inventory account to the $90,000 balance (under LIFO, see Example 23-1) to increase the balance to $160,000 (the beginning balance for 2008; see Example 23-1). The $21,000 increase (credit) in Income Taxes Payable is the amount that Werner is obligated under the Internal Revenue Code to repay for the income taxes it saved in 2006 and 2007 when the company was using LIFO. The $49,000 increase (credit) in Retained Earnings is the cumulative effect of the change from LIFO to FIFO for 2006 and 2007, net of income taxes, that we explained earlier in Example 23-4.

Example 23-5 shows the Werner Company's disclosures for its retrospective adjustment, as required by *FASB Statement No. 154*. Section 1 of Example 23-5 shows Werner's discussion of the nature and reason for the change from LIFO to FIFO, an explanation of why the new principle is preferable, and a description of the prior-period information that has been retrospectively adjusted. In Section 2 of Example 23-5, Werner discloses the effects of the change from the LIFO method to the FIFO method by reporting the effects on the entire income statement, but only on the line items affected for the balance sheet and statement of cash flows. (Under *FASB Statement No. 154*, a company may disclose the entire statements or just the line items affected.)

The first part of Section 2 shows the effects of the change from LIFO to FIFO on the line items of Werner Company's income statement for 2007 under both the old (LIFO) and the new principle (FIFO). Note that this shows how the new principle changed the income statement line items that were reported (and analyzed by users) under the old principle. It allows the user to understand how the income in 2007 under the new accounting principle (FIFO) is different from that reported under the old principle (LIFO).



EXAMPLE 23-5 Disclosure of the Effects of a Change in Accounting Principle

Section 1: Description of Accounting Change

On January 1, 2008, the company changed its method of valuing its inventory and cost of goods sold to the FIFO method from the LIFO method used in all previous years. The new method of accounting for inventory and cost of goods sold was adopted to recognize…(state justification for the change in accounting principle)…and financial statements of prior years have been retrospectively adjusted to apply the new method. The effect on retained earnings at January 1, 2007 was an increase of $35,000.

Section 2: Effects on Financial Statements

The following financial statement line items for 2008 and 2007 were affected by the change from the LIFO to the FIFO inventory method.

Werner Company
Income Statement Effects
For Year Ended 12/31/2007

	As Originally Reported under LIFO	*As Adjusted to FIFO*	*Effect of Change*
Sales	$1,700,000	$1,700,000	$ 0
Cost of goods sold	(780,000)	(760,000)	20,000
Operating expenses	(500,000)	(500,000)	0
Income before income taxes	$ 420,000	$ 440,000	$20,000
Income tax expense	(126,000)	(132,000)	(6,000)
Net income	$ 294,000	$ 308,000	$14,000
Earnings per share	$ 2.94	$ 3.08	$ 0.14

Werner Company
Income Statement Effects
For Year Ended 12/31/2008

	As Computed under LIFO	*As Reported under FIFO*	*Effect of Change*
Sales	$2,000,000	$2,000,000	$ 0
Cost of goods sold	(860,000)	(850,000)	10,000
Operating expenses	(550,000)	(550,000)	0
Income before income taxes	$ 590,000	$ 600,000	$10,000
Income tax expense	(177,000)	(180,000)	(3,000)
Net income	$ 413,000	$ 420,000	$ 7,000
Earnings per share	$ 4.13	$ 4.20	$ 0.07

Werner Company
Balance Sheet Effects
12/31/2007

	As Originally Reported under LIFO	*As Adjusted under FIFO*	*Effect of Change*
Inventory	$ 90,000	$160,000	$70,000
Income taxes payable	126,000	147,000[a]	21,000
Retained earnings	525,000[b]	574,000[c]	49,000

[a] ($50,000 × 0.3) + $132,000
[b] $231,000 + $294,000
[c] $231,000 + ($50,000 × 0.7) + $308,000

EXAMPLE 23-5 (Continued)

Werner Company
Balance Sheet Effects
12/31/2008

	As Computed under LIFO	*As Reported under FIFO*	*Effect of Change*
Inventory	$130,000	$210,000	$80,000
Income taxes payable	177,000	201,000[a]	24,000
Retained earnings	938,000[b]	994,000[c]	56,000

[a] $147,000 – $126,000 + $180,000
[b] $525,000 + $413,000
[c] $574,000 + $420,000

Werner Company
Statement of Cash Flows Effects
For Year Ended 12/31/2007

	As Originally Reported under LIFO	*As Adjusted under FIFO*	*Effect of Change*
Net income	$294,000	$308,000	$14,000
Adjustments to reconcile net income to net cash provided by operating activities:			
Increase in inventory	(20,000)	(40,000)	(20,000)
Increase in income taxes payable	27,000	33,000	6,000
Net cash provided by operating activities	$301,000	$301,000	0

Werner Company
Statement of Cash Flows Effects
For Year Ended 12/31/2008

	As Computed under LIFO	*As Reported under FIFO*	*Effect of Change*
Net income	$413,000	$420,000	$7,000
Adjustments to reconcile net income to net cash provided by operating activities:			
Increase in inventory	(40,000)	(50,000)	(10,000)
Increase in income taxes payable	51,000	54,000	3,000
Net cash provided by operating activities	$424,000	$424,000	0

Analysis

The second part of Section 2 shows the effects of the change on the line items of the income statement for 2008 under both the old and the new principle. Note that Werner never reported the LIFO amounts in its 2008 income statement (because it switched to FIFO at the beginning of 2008) but these amounts are a required disclosure that helps users understand the effects of the change in accounting principle. When users were analyzing the company in 2007 and predicting the amount of income it would report in 2008, they would have expected the company to report using LIFO. This disclosure allows them to see the effects of the new principle on those predictions.

The remaining parts of Section 2 in Example 23-5 show the effects of the change in principle on the line items of Werner Company's balance sheet and statement of cash flows. The inventory amount in each balance sheet is taken from Example 23-1. The income taxes payable in each balance sheet as originally reported under LIFO is the amount of the income tax expense in that period's income statement (because we assumed Werner has no temporary or permanent differences and pays its income taxes in the following year.)

The income taxes payable in each balance sheet as adjusted under FIFO is more complex, because the company must repay the taxes it has saved under LIFO. The $147,000 balance on December 31, 2007 is the $132,000 income taxes from the 2007 income statement under FIFO plus the $15,000 ($50,000 change in income before income taxes for

2006 × 0.30) additional taxes that it owes for 2006 but has not yet paid. In 2008, the company pays the $126,000 of income taxes that were due from 2007 under LIFO and adds the $180,000 income taxes from the 2008 income statement under FIFO, which results in a balance of $201,000. The retained earnings balance in each balance sheet is the beginning balance for each year plus the appropriate income amount for that year. Note that the $574,000 adjusted retained earnings on December 31, 2007 includes the increase of $35,000 from the cumulative increase in net income (after taxes) that was measured on January 1, 2007, as we explained in Example 23-4. The adjusted retained earnings balance on December 31, 2008 includes the net income computed under FIFO over the three-year period (2006–2008).

The increase in inventory in each statement of cash flows is calculated as the difference in inventory amounts from year to year in Example 23-1. For instance, the $20,000 increase in inventory as originally reported under LIFO for 2007 is the difference between the $70,000 ending inventory for 2006 and the $90,000 ending inventory for 2007. The increase in the income taxes payable in each statement of cash flows is the change from one balance sheet to the next. For instance, the $27,000 increase in income taxes payable as originally reported under LIFO for 2007 is the difference between the $99,000 ending income taxes payable for 2006 and the $126,000 ending income taxes payable for 2007. ♦

Accounting For a Change in an Estimate

4 Account for a change in estimate.

Generally accepted accounting principles frequently require a company to use estimates for items such as uncollectible accounts receivable, inventory obsolescence, service lives, residual values, recoverable mineral reserves, warranty costs, pension costs, and the periods that it expects to be benefited by a deferred cost. Since estimating future events is an inherently uncertain process, changes in estimates are inevitable as new events occur, as more experience is acquired, or as additional information is obtained.

FASB Statement No. 154 requires that **a company accounts for a change in an accounting estimate in the period of the change if the change affects that period only, or the period of the change and future periods if the change affects both.**[3] In other words, a change in an accounting estimate does *not* result in a retrospective adjustment, but is accounted for *prospectively*.

Example: Change in Estimated Service Life For example, if a company changes the estimated service life of an asset, it calculates a revised periodic depreciation expense based on the current book value, the estimated residual value, and the new estimated service life. Suppose that a company owns an asset with an original cost of $100,000, an estimated life of 20 years, an estimated residual value of zero, and the company is using straight-line depreciation. The company has recorded depreciation of $5,000 each year, so the asset's book value at the end of eight years is $60,000 [$100,000 − (8 × $5,000)]. Now suppose that at the beginning of the ninth year of the asset's life, the company changes the estimate of its life to a total of 23 years, so that 15 years now remain in the asset's life. The company depreciates the remaining book value over the remaining service life so that the depreciation expense of current and later years is $4,000 ($60,000 ÷ 15) per year.

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In addition to including this new amount of depreciation in its financial statements, the company discloses the effect of the change on its income from continuing operations, net income, and the related earnings per share amounts of the current period in the notes to its financial statements. (This disclosure is not required for estimates made each period in the ordinary course of accounting for items such as uncollectible accounts or inventory obsolescence, unless the change is material.) To continue the preceding example, assume that the income tax rate is 30% and the company has 10,000 shares outstanding. The after-tax effect of such a change is an increase in income from continuing operations and

3. *FASB Statement No. 154*, op. cit., par 19.

net income (because of lower depreciation expense) of \$700 [(\$5,000 − \$4,000) × 0.70], and the effect on earnings per share is an increase of \$0.07 per share (\$700 ÷ 10,000). The company discloses these amounts in the notes to its financial statements. We showed another example of a change in estimate in Chapter 11. ♦

SECURE YOUR KNOWLEDGE 23-1

- Consistent use of the same accounting principle enhances the usefulness of a company's financial statements. Generally accepted accounting principles define three types of accounting changes:
  - Change in an Accounting Principle—a change from one generally accepted principle to another generally accepted accounting principle.
  - Change in an Accounting Estimate—a change in an estimate due to new events occurring, more experience being acquired, or additional information being obtained.
  - Change in a Reporting Entity—a change in the entity being reported, which results in financial statements that are those of a different reporting entity.
- A change in accounting principle is accounted for by retrospectively applying the new accounting principle to all prior periods. Retrospective application requires:
  - The computation of the cumulative effect of the change as of the beginning of the first period presented,
  - An adjustment to the carrying value of the assets and liabilities (including income taxes) affected by the change,
  - An adjustment to the opening balance of retained earnings for the aggregate effect of the change on income (net of applicable income taxes),
  - A restatement of the financial statements of each prior period affected by the change, and
  - Appropriate disclosures.
- A change in an accounting estimate is accounted for prospectively in the period of the change, or the period of the change and future periods if the change affects both.

ADDITIONAL ISSUES

We discuss several additional issues related to accounting changes in the following sections.

Impracticability of Retrospective Adjustment

Sometimes, it may not be practicable to determine the effect of applying a change in accounting principle to any prior period. In this case, *FASB Statement No. 154* requires a company to apply the new accounting principle as if the change was made prospectively as of the earliest date practicable. For example, a change *to* LIFO would require the company to compute any appropriate cost indexes (as we discussed in Chapter 8) and to be able to monitor any LIFO liquidations that occurred in the past. This would often be impracticable. In this situation, the company would apply the new accounting principle in the year of the change without adjusting the financial statements of prior years. It would disclose information similar to what we showed in Section 1 of Example 23-5.

In other situations, a company might have sufficient information to retrospectively adjust to the new accounting principle for some, but not all, of the prior periods presented. In such a situation, the company applies the retrospective adjustment as of the earliest date practicable. That is, the company computes the cumulative effect of the change to the new accounting principle on the carrying amount of the assets and liabilities as of the beginning of the earliest period to which the new accounting principle can be applied. An offsetting adjustment (net of taxes) is made to the opening balance of retained earnings for that period. Effectively, we illustrated this situation with the Werner Company because we assumed the beginning of the first period presented was January 1, 2007. However, publicly-held companies must present three years of income statements. Therefore, if Werner Company were a publicly-held company, it would have used January 1, 2006 as the beginning of the first period presented. Note also that if a company provides a summary of its financial results for, say, 10 years, it must retrospectively adjust its disclosures for those periods, if practicable.

A Change in Principle Distinguished from a Change in an Estimate

Sometimes it is difficult for a company to distinguish between a change in an accounting principle and a change in an estimate. For example, a company may change from capitalizing and amortizing a cost to recording it as an expense when incurred because future benefits associated with the cost have become doubtful. The company adopted the new accounting method because of the change in estimated benefits and therefore the change in method is *inseparable* from the change in estimate. The company accounts for such a change as a *change in estimate.* That is, it accounts for the change prospectively.

An additional complexity arises with respect to the depreciation (including amortization and depletion) of the cost of an asset over its useful life. It can be argued that a change in the method of depreciation is in fact a change in estimate. That is, the criteria that a company uses to select a method of depreciation are that it is systematic and rational, and results in an appropriate matching of costs and benefits. Therefore, if the estimate of the pattern of future benefits is changed, for example, from declining benefits to constant benefits, a change in the depreciation method is appropriate. Thus, a change in an accounting method (depreciation) results from a change in an estimate. Therefore, a change in the depreciation method is treated as a change in an estimate under the provisions of *FASB Statement No. 154*.[4] The *Statement* refers to this as *a change in accounting estimate effected by a change in accounting principle*.

Example: Change in Principle and Estimate Assume that at the beginning of year 1, the Dowson Company purchased an asset for $20,000, which had an estimated life of four years and a zero residual value. The company was depreciating the asset using the sum-of-the-years'-digits method and decides to switch to the straight-line method at the beginning of year 3 because of a change in the estimated pattern of benefits the asset produces. Straight-line and sum-of-the-years'-digits methods produce the annual depreciation amounts we show in Example 23-6. In this example, we ignore the effects of income taxes.

EXAMPLE 23-6 Alternative Depreciation Methods: Dowson Company

	Method		
Year	Sum-of–the-Years'-Digits	Straight-Line	Reduced Depreciation Amount Under Straight-Line Method
1	$ 8,000	$ 5,000	$ 3,000
2	6,000	5,000	1,000
3	4,000	5,000	(1,000)
4	2,000	5,000	(3,000)
	$20,000	$20,000	$ 0

4. *Ibid.*, par 20.

The company writes off the unadjusted carrying value of the asset at the beginning of year 3 over the remaining life of the asset. In this case, under the sum-of-the-years'-digits method, the asset has a carrying value at the beginning of year 3 of $6,000 ($20,000 − $8,000 − $6,000). The company writes off this amount by the straight-line method through a depreciation expense of $3,000 per year over the remaining life of two years. Since the company accounts for the change prospectively, the only effect in the year of the change (year 3) is a depreciation expense of $3,000 instead of the $4,000 that the company would have reported under the sum-of-the-years'-digits method. No change is made in the financial statements for years 1 and 2. The company is also required to make the disclosures we discussed in a previous section. ♦

Preferability of the New Accounting Principle

After a company adopts an accounting principle, it should not change the principle unless a new principle is preferable. Therefore, when a company changes an accounting principle, management must justify the change on the grounds that the new principle is preferable to the old. For example, Nike justified its change to FIFO by stating that "this change was predicated on the fact that the LIFO method no longer matches the realities of how we do business." The SEC requires that when a company that files with it makes an accounting change, the auditor must submit a letter indicating whether the change is to an alternative principle that, in the auditor's judgment, is preferable under the circumstances. "Preferable" is defined to mean that the new method represents an improved method of measuring business operations in the particular circumstances. Some accountants object to the SEC's requirement because it relates only to a company making a change in an accounting principle. There is no requirement that the auditor make a statement about the preferability of the accounting principles the company is currently using.

The issuance of an FASB Statement is sufficient support for a change in accounting principle and does not require special justification. That is, the newly mandated principle is automatically considered to be preferable.

Direct and Indirect Effects

In the Werner Company example, we assumed that the change in the accounting principle used for inventory was the only item affecting the previous year's income. In more complex situations, a change in accounting principle might have an "interactive" effect on other items that affect prior years' income. For instance, a company might have bonus arrangements with management, profit sharing plans for employees, or royalty payments, all of which are based on the company's income. In these cases, a change in an accounting principle has both a "direct" and an "indirect" effect on the company's income of prior years. The direct effect is the amount by which its prior years' income is increased or decreased specifically as a result of the change in accounting principle. The indirect effect is the amount by which the company's income of prior years is affected by how the change in principle affects other elements of income. For instance, suppose the Werner Company also has a bonus arrangement with management based on net income. If the company had used FIFO instead of LIFO in prior years, the direct effect is an increase in income because of a lower cost of goods sold. However, this increase in income would have been partially offset by the indirect effect on the bonus arrangement. That is, because income was increased as a result of the lower cost of goods sold, the bonus expense also would have been higher, and this, in turn, would have offset some of the increase in income.

In situations in which a change in accounting principle has both a direct and indirect effect on prior years' income, *FASB Statement No. 154* states that **a company recognizes only the *direct effect* (net of applicable income taxes) in determining the amount of the retrospective adjustment**. Therefore, the indirect effects that would have been recognized if the newly adopted principle had been used in prior periods are *not* included in the retrospective application. For example, a bonus of a prior period that a company has paid to its employees would probably not be changed because of a change to an accounting principle that will be applied to the current and future periods. However, if indirect effects are actually incurred and recognized, they are reported in the year in which the accounting change is made.

Example: Indirect Effects The Werner Company's total pre-tax difference from the change to FIFO was \$70,000 (\$50,000 + \$20,000) at January 1, 2008. Suppose the company pays a bonus of 10% of its income before income taxes and bonus to employees. If the company did *not* change the amount of the bonuses it paid in the past, then the amounts and disclosures we illustrated earlier would not change (except for the direct effect of the bonus on reported income in 2008). If the company *did* pay an additional bonus based on the change in income, then it would recognize an expense of \$7,000 (\$70,000 × 10%) in 2008, the year it adopted the new principle. ♦

Adoption of a New Accounting Principle for Future Events

If a company adopts a new accounting principle for use in the future but does not change the method currently used, it does not make a retrospective adjustment. For example, a company might use a new depreciation method for newly acquired assets, but continue to use the old method for currently owned assets. In this situation, the company should describe the nature of the change and its effect on net income of the period of the change, together with the earnings per share amounts, in the notes to its financial statements.

Initial Public Sale of Common Stock

If a company makes accounting changes when it makes an initial public distribution (the first sale of common stock made available to the general public), it retrospectively adjusts the financial statements for all prior periods presented. This procedure is available only once for changes made at the time a company first uses its financial statements to (1) obtain additional equity capital from investors, (2) effect a business combination, or (3) register securities. This approach is logical because the company's financial statements have never before been available to the public and therefore there is no need to explain the changes made to the statements.

Transition Methods Required by the FASB

As we discussed in a previous section, *FASB Statement No. 154* specifies the general rules to be applied for a change in an accounting principle. However, when issuing *Statements*, the FASB specifies transition rules, if appropriate. **Transition rules** define the accounting method a company uses when it changes an accounting principle to conform to a new principle required by the issuance of a *Statement*. In these situations, the accounting principle being used is no longer acceptable and a new principle is required. The transition rule usually requires a retrospective application of the new accounting principle. However, the change is sometimes accounted for prospectively, when obtaining the information for a retrospective application is costly or not practicable. You should carefully examine each *Statement* so that you follow the specific transition rules.

Accounting Changes in Interim Financial Statements

The principles to be followed when accounting changes are reported in interim financial statements are also established by *FASB Statement No. 154*. If a company makes a change in accounting principle in an interim period, it also reports the change by retrospective application. However, the impracticability exception we discussed earlier does not apply to earlier interim periods in the year in which the change is made. Therefore, the new principle is applied retrospectively to, at least, the beginning of the year in which the change is made. In summary, the effect is that **a company accounts for the change in principle at the beginning of the first interim period, regardless of the interim period in which the change occurs**.

Litigation Settlement

Another issue is whether a company should account for the results of a litigation settlement as a a retrospective adjustment or a prospective adjustment. It could be argued that such a settlement is a retrospective adjustment because it relates either to the period in which the event causing the litigation occurred or to the period in which the litigation was filed. Alternatively, it could be argued that the litigation settlement is an event of the period of settlement and should be included in the company's current period's income. This issue was resolved by **FASB Statement No. 16**, which specifies that a litigation settlement is not a retrospective adjustment.[5]

Conceptual Evaluation of Accounting For a Change in Accounting Principle and a Change in Estimate

5 Explain the conceptual issues regarding a change in accounting principle and a change in estimate.

As we discussed in a previous section, there are two possible alternatives that a company uses to account for a change in an accounting principle or in an accounting estimate. These alternatives are retrospective application and prospective adjustment. We discuss the advantages and disadvantages of these alternatives, as well as selected additional issues, in the following sections.

Retrospective Application (Adjustment)

Conceptual

R A

The major argument in favor of retrospective application is that all the financial statements that a company presents at a given date are prepared on the basis of consistent accounting principles. Thus, when a user of the financial statements evaluates the company's current financial results, it is possible to make a comparison with the previous year's financial statements without adjusting for a change in accounting principle. Retrospective application is the usual method required for a change in accounting principle mandated by the FASB because it does not penalize (or increase) a company's current year's earnings for an event that is beyond the control of the company's management.

On the other hand, the retrospective application method has several disadvantages. First, a company's financial statements issued in previous years are changed under this method. This creates the possibility that users may be confused by the change in the reported results, and that confidence in the information may be reduced because "the numbers changed." Second, the method is not consistent with the all-inclusive income concept, which is the basis of the generally accepted accounting principles as we discussed in Chapter 5. Third, there may be an impact on a company's contractual arrangements (such as bonus agreements, borrowing indentures, royalties, or profit sharing) when its previously reported income is changed. Fourth, the method lends itself to income manipulation by a company's management because items are excluded from its current year's income statement. When a company makes a retrospective application, it can decrease retained earnings without including the change as a reduction in its current year's income. Thus, the sum of the net incomes that it reports over the years would be more than the increase in its retained earnings (excluding consideration of dividends). Conversely, a retrospective application that increases the balance in a company's retained earnings does so without being added to its current year's net income.

5. "Prior Period Adjustments," *FASB Statement of Financial Accounting Standards No. 16* (Stamford, Conn.: FASB, 1977).

Prospective Adjustment

Accounting estimates used for periodic reporting inevitably change over time. A company also adopts new accounting principles from time to time. It may be argued that it is better for a company to account for such changes by considering their effects on the future and to make no attempt to change what has already been reported.

Since a company makes an estimate with the best information available at that time, and changes this estimate only to reflect new information, accounting for a change in an estimate with a prospective adjustment is especially appropriate. In addition, the alternative of reporting the effect of a change of estimate retrospectively might cause considerable confusion among users of financial statements because of the frequency of such changes.

In the case of a change in an accounting principle, the same arguments can be made about the desirability of a company not changing what it has already reported (that is, confusion and the all-inclusive income concept). Moreover, it may be argued that a change in an accounting principle, although it occurs in the current period, has little or no relation to the current period's economic events, or to the company's income generated from providing goods and services to its customers. Therefore, the change should be accounted for prospectively. Conversely, it can be argued that a change in an accounting principle is an event of the current period and a company should not account for it prospectively, but should report the cumulative effect in the income statement of the period of the change. Prior to 2006, this method was used for some changes in accounting principle.

Accounting For a Change in a Reporting Entity

6 Identify a change in reporting entity.

The third type of change defined by *FASB Statement No. 154* is a change in a reporting entity. As we noted earlier, **a company accounts for a change in reporting entity as a retrospective adjustment so that all the financial statements it presents are for the same entity.**[6] This procedure improves consistency.

A change in an accounting entity occurs mainly when (1) a company presents consolidated or combined statements in place of the statements of individual companies, (2) there is a change in the specific subsidiaries that make up the group of companies for which a company presents consolidated financial statements, or (3) the companies included in combined financial statements change.

When a change in an accounting entity occurs, the company includes in the notes to its financial statements of the period in which it makes the change a description of the change as well as the reason for it, and the effect of the change on income before extraordinary items, net income, other comprehensive income, and related earnings per share amounts for all periods presented. However, financial statements of later periods need not repeat the disclosures. We do not discuss the accounting for a change in an entity here, but it is included in advanced accounting books.

Secure Your Knowledge 23-2

- In situations for which it is impracticable to retrospectively adjust the financial statements for a change in accounting principle, a company may apply the new accounting principle as if the change was made prospectively as of the earliest date practicable.
- If a change in accounting estimate cannot be distinguished from a change in accounting principle (e.g., a change in depreciation, depletion, or amortization method), it is considered a change in estimate effected by a change in accounting principle and is accounted for prospectively.

6. *FASB Statement No. 154*, op. cit., par. 23.

- Any change in accounting principle must be justified on the grounds that the new principle is preferable to the old.
- When a change in accounting principle has both direct and indirect effects on the company's income, only the direct effect of the change in accounting principle is included in the retrospective adjustment. Any indirect effects are included in the year in which the accounting change is made.
- Any transition rule specified in a new accounting pronouncement is followed.
- A company accounts for a change in accounting principle at the beginning of the first interim period, regardless of the interim period in which the change occurs.
- A change in reporting entity is accounted for by retrospectively adjusting the financial statements of all prior periods presented.

ACCOUNTING FOR A CORRECTION OF AN ERROR

7 Account for a correction of an error.

A company may make a material error in the financial statements of a prior period that it does not discover until the current period. Examples of errors that a company might make include:

1. The use of an accounting principle that is not generally accepted;
2. The use of an estimate that was not made in good faith;
3. Mathematical miscalculations, such as the incorrect computation of its inventory; or logical errors, such as the omission of the residual value in the calculation of straight-line depreciation;
4. The omission of a deferral or accrual, such as the failure to accrue warranty costs.

The company must correct the error in the current period. The correction of an error made in a prior period is *not* an accounting change under the requirements of *FASB Statement No. 154*. **A company accounts for the correction of a material error of a past period that it discovers in the current period as a prior period restatement (adjustment)**.

A prior period restatement (adjustment) requires the following:

1. The company computes the cumulative effect of the error correction on prior financial statements. That is, it computes the amounts that would have been in the financial statements if it had not made the error.
2. The company adjusts the carrying values of those assets and liabilities (including income taxes) that are affected by the error. The company makes an offsetting adjustment to the beginning balance of retained earnings to report the cumulative effect of the error correction (net of taxes) for each period presented.

3. The company adjusts the financial statements of each prior period to reflect the specific effects of correcting the error. That is, each item in each financial statement that is affected by the error is restated to the appropriate amount.
4. The company's disclosures include (a) that its previously issued financial statements have been restated, along with a description of the nature of the error, (b) the effect of the correction on each financial statement line item, and any per-share amounts affected for each prior period presented, and (c) the cumulative effect of the change on retained earnings (or other appropriate component of equity) at the beginning of the earliest period presented.

Therefore, the effect of a prior period restatement is very similar to a retrospective application of a new accounting principle, except for the reason that the company made the adjustments.

We do not illustrate the disclosures, but they would be similar to those we showed in Example 23-5. Real Report 23-1 provides an illustration of the disclosure of a correction of an error made in a prior period by **Darden Restaurants, Inc**. We discuss the journal entries required to correct errors in the next sections.

Real Report 23-1 Disclosure of the Correction of an Error Made in a Prior Period

DARDEN RESTAURANTS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (in part)

NOTE 2 - RESTATEMENT OF FINANCIAL STATEMENTS (in part; amounts in thousands)

Following a December 2004 review of our lease accounting and leasehold depreciation policies, we determined that it was appropriate to adjust certain of our prior financial statements. As a result, we have restated our consolidated financial statements for the fiscal years 1996 through 2004. Historically, when accounting for leases with renewal options, we recorded rent expense on a straight-line basis over the initial non-cancelable lease term, with the term commencing when actual rent payments began. We depreciate our buildings, leasehold improvements and other long-lived assets on those properties over a period that includes both the initial non cancelable lease term and all option periods provided for in the lease (or the useful life of the assets, if shorter). We previously believed that these long-standing accounting treatments were appropriate under generally accepted accounting principles. We now have restated our financial statements to recognize rent expense on a straight-line basis over the expected lease term, including cancelable option periods where failure to exercise such options would result in an economic penalty. The lease term commences on the date when we become legally obligated for the rent payments.

The cumulative effect of the Restatement through fiscal 2004 is an increase in the deferred rent liability of $114,008 and a decrease in deferred income tax liability of $43,526. As a result, retained earnings at the end of fiscal 2004 decreased by $70,268. Rent expense for fiscal years ended 2004, 2003, and 2002 increased by $7,222, $10,145, and $7,874, respectively. The Restatement decreased reported diluted net earnings per share by $0.02, $0.04, and $0.03 for the fiscal years ended 2004, 2003 and 2002, respectively. The cumulative effect of the Restatement for all years prior to fiscal year 2002 was $54,364, which was recorded as an adjustment to opening stockholders' equity at May 27, 2001. The Restatement did not have any impact on our previously reported cash flows, sales or same-restaurant sales or on our compliance with any covenant under our credit facility or other debt instruments.

The following is a summary of the impact of the Restatement on (i) our consolidated balance sheets at May 30, 2004 and May 25, 2003 and (ii) our consolidated statements of earnings for the fiscal years ended May 30, 2004 and May 25, 2003. We have not presented a summary of the impact of the Restatement on our consolidated statements of cash flows for any of the above-referenced fiscal years because the net impact for each such fiscal year is zero.

Fiscal Year 2004	**As Previously Reported**	**Adjustments**	**As Restated**
Consolidated Balance Sheet			
Deferred income taxes	$ 176,216	$ (43,526)	$ 132,690
Deferred rent	—	122,879	122,879
Other liabilities	21,532	(8,871)	12,661
Total liabilities	1,534,578	70,482	1,605,060
Retained earnings	1,197,921	(70,268)	1,127,653
Accumulated other comprehensive income (loss)	(9,959)	(214)	(10,173)
Total stockholders' equity	1,245,770	(70,482)	1,175,288
Consolidated Statement of Earnings			
Restaurant expenses	$ 767,584	$ 7,222	$ 774,806
Total cost of sales	3,895,717	7,222	3,902,939
Total costs and expenses	4,663,357	7,222	4,670,579
Earnings before income taxes	339,998	(7,222)	332,776
Income taxes	108,536	(2,933)	105,603

Continued

Net earnings	231,462	(4,289)	227,173
Basic net earnings per share	1.42	(0.03)	1.39
Diluted net earnings per share	1.36	(0.02)	1.34

Fiscal Year 2003	**As Previously Reported**	**Adjustments**	**As Restated**
Consolidated Balance Sheet			
Deferred income taxes	$ 150,537	$(40,593)	$ 109,944
Deferred rent	—	115,296	115,296
Other liabilities	19,910	(8,567)	11,343
Total liabilities	1,468,442	66,136	1,534,578
Retained earnings	979,443	(65,979)	913,464
Accumulated other comprehensive income (loss)	(10,489)	(157)	(10,646)
Total stockholders' equity	1,196,191	(66,136)	1,130,055
Consolidated Statement of Earnings			
Restaurant expenses	$ 703,554	10,145	713,699
Total cost of sales	3,637,762	10,145	3,647,907
Total costs and expenses	4,307,223	10,145	4,317,368
Earnings before income taxes	347,748	(10,145)	337,603
Income taxes	115,488	(3,864)	111,624
Net earnings	232,260	(6,281)	225,979
Basic net earnings per share	1.36	(0.03)	1.33
Diluted net earnings per share	1.31	(0.04)	1.27

Questions:

1. **What was the nature of the error that required Darden Restaurants to restate its financial statements?**
2. **What was the effect of the error on Darden Restaurants' 2004 income statement?**

Error Analysis

Because errors, by their very nature, happen in unpredictable and often illogical ways, it is difficult to generalize about the kinds of errors that a company might make and the journal entries that may be required to correct them. Many errors are discovered automatically through proper use of the double-entry system. Others are found by the company's internal or external auditors before being included in its financial statements. In this section we are concerned about errors that escape detection until after they are included in a company's published financial statements. We categorize them according to the effect they have on the financial statements.

Errors Affecting Only the Balance Sheet

Some errors affect only balance sheet accounts. For example, a company may include a long-term note receivable as a current note receivable. Reclassification of the note only affects its balance sheet. Therefore, if the error occurred in a prior period, the company does not make a correcting journal entry. However, if it presents comparative financial statements in the current year, it corrects the financial statements of the prior period by reclassifying the item.

Errors Affecting Only the Income Statement

Errors that affect only income statement accounts usually result from the misclassification of items. For example, a company may include interest revenue with sales revenue.

Errors of this kind require reclassification but do not affect net income. Therefore, if the error occurred in a prior period, the company does not make a correcting journal entry. However, if it presents comparative financial statements in the current year, it corrects the financial statements of the prior period by reclassifying the item.

Errors Affecting Both the Income Statement and Balance Sheet

An error may affect both an income statement account and a balance sheet account, such as the failure to accrue a liability at the end of the period. For example, if a company fails to accrue interest, it understates interest expense on its current income statement and omits interest payable from its ending balance sheet.

Errors that affect both the income statement and the balance sheet can be classified as counterbalancing or noncounterbalancing. **Counterbalancing** errors are those that are automatically corrected in the next accounting period, even if they are not discovered. Consider the effect of unrecorded interest in the previous paragraph, and assume that the amount of the interest is $2,000 and the income tax rate 30%. The effects of the error on the company's financial statements of the period in which it made the error are as follows:

1. Interest expense is understated by $2,000.
2. Income before income taxes is overstated by $2,000.
3. Income tax expense is overstated by $600.
4. Net income is overstated by $1,400.
5. Retained earnings is overstated by $1,400.
6. Interest payable is understated by $2,000.
7. Income taxes payable is overstated by $600.

In the next period, when the company pays the interest and records the entire payment as an expense, the following additional errors occur:

1. Interest expense is overstated by $2,000.
2. Income before income taxes is understated by $2,000.
3. Income tax expense is understated by $600.
4. Net income is understated by $1,400.

Since the amount of the interest expense overstatement in the second period is equal to the understatement of the previous period, the net income understatement in the second period offsets the overstatement in the first period. Therefore, no balance sheet accounts are in error at the end of the second period. That is, the total liabilities are no longer understated, and the retained earnings balance is now correct. The errors have automatically counterbalanced. Note also that even though the errors counterbalance, the need for a correcting journal entry and for correction of the financial statements depends on *when* the error is discovered. If the company discovers the error *during* the second year, it must make a journal entry so that the interest expense and net income for the second year are reported correctly. If the company discovers the error *after* the second year, no correcting journal entry is needed. However, the financial statements for the two years are in error, so the company must correct (restate) the financial statements unless sufficient time has passed so that they are *not* being presented for comparative purposes.

Noncounterbalancing errors are those that are not offset in the next accounting period. For example, suppose that a company erroneously records the purchase of an asset costing $10,000 as supplies expense in the year of purchase. However, it should have capitalized and depreciated the asset by the straight-line method over 10 years with no residual value for both financial reporting and income tax purposes. Furthermore, the company records a full year's depreciation in the year of acquisition, the income tax rate is 30% and the MACRS depreciation is assumed to be $1,400. The effects of the error on the company's financial statements of the period in which it made the error are as follows:

1. Supplies expense is overstated by $10,000.
2. The asset is understated by $10,000.

3. Depreciation expense is understated by \$1,000 (\$10,000 ÷ 10).
4. Accumulated depreciation is understated by \$1,000.
5. Income before income taxes is understated by \$9,000 (\$10,000 − \$1,000).
6. Income tax expense is understated by \$2,700 (\$9,000 × 0.30).
7. Net income is understated by \$6,300 (\$9,000 − \$2,700).
8. Retained earnings is understated by \$6,300.
9. Deferred tax liability is understated by \$120 [(\$1,400 − \$1,000) × 30%]
10. Income taxes payable are understated by \$2,580 (\$2,700 − \$120).

The understatement of the asset and the depreciation expense continues until the end of the asset's life. At this point the balance sheet accounts (asset, accumulated depreciation, income taxes payable, and retained earnings) are correct for the first time since the error was made. Consequently, if the company discovers the error before the end of the life of the asset, it must make a correcting journal entry.

LINK TO ETHICAL DILEMMA

As the controller for Coruscant Industries, you've just completed an extremely exhausting year with the issuance of Coruscant's annual report. After being surprised by the disappointing net income a year earlier, the Board of Directors charged you with improving the company's fortunes. Reviewing the previous year's financial results, you determined that the primary reason for Coruscant's disappointing results was higher than expected cost of goods sold. Seeking to improve the efficiency of operations and lower cost of goods sold, you had aggressively implemented several cost-containment measures to address this problem, which resulted in numerous complaints from the manufacturing supervisors. Despite these criticisms, the current annual report, which just met the analysts' projections of net income, should serve as validation that you successfully responded to the Board of Directors' challenges. As a reward for your efforts, you've decided to take a few days off to work on your golf game.

As you are preparing to leave the office, you receive an e-mail from a first-year staff accountant whom you had asked to double-check the accuracy of the current year inventory count. In the e-mail, the accountant informs you that while the current year inventory records appear in order, she had discovered an error in the beginning inventory records. It appeared that you had inadvertently transposed two numbers in the previous year's inventory balance, resulting in a material understatement of the previous year's ending inventory. The e-mail continues that since the current year inventory records are accurate, the error had "self-corrected" and there is no need to adjust the current year financial statements. Do you agree with the accountant's assessment? What ethical considerations does this situation present?

Error Correction

The approach to correcting an error is difficult to generalize because of the variety of errors that may occur. Each error must be examined carefully to determine how the transaction *was* recorded and how it *should have been* recorded. The correction can then be made by (1) recording a single comprehensive journal entry (which is the preferred method in practice), or (2) reversing the original incorrect journal entry and then recording the original transaction or event as it should have been recorded initially.

Example: Error Correction Approaches Assume Larson Company recorded a building improvement costing $20,000 as Repair Expense when it should have capitalized the item. A single comprehensive journal entry to correct the error when it is discovered *in the next period* is:

Building	20,000	
Retained Earnings		20,000

Note that in this entry, we are ignoring income taxes and depreciation, which we will discuss later. Note also that the correction is not made by a credit to Repair Expense because the company discovered the error in the period following the one in which it was made. At this point the company's revenue and expense accounts for the previous period have been closed to retained earnings, so the correction of the previous year's income is made directly to the Retained Earnings account. The correction might also be made to an account, Correction of Prior Years' Income Due to Error in Recording Building Improvement, which is closed to Retained Earnings). If the company presents comparative financial statements, it corrects them as we discussed earlier.

If the second approach is used, two separate journal entries are required. First, the company reverses the original entry (but it again credits the Retained Earnings account because the Repair Expense account has been closed), and then the company makes the journal entry that it should have made, as follows:

Cash	20,000	
Retained Earnings		20,000
Building	20,000	
Cash		20,000

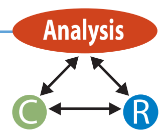
In this simple situation, the second approach may seem unnecessary, but it can prove useful in more complex circumstances.

In the previous example, Larson Company must also correct the recorded amount of depreciation. Since it discovered the error in the next period, it corrects Retained Earnings (for the previous period's depreciation expense understatement and income overstatement) and Accumulated Depreciation by the following journal entry (assuming a 10-year life, no residual value, straight-line depreciation, and that a full year's depreciation is recorded in the year of acquisition):

Retained Earnings	2,000	
Accumulated Depreciation		2,000

The company records depreciation expense for the second year in the normal way (because we assumed that it discovered the error during the second year). ♦

Steps in Error Correction



A logical sequence of steps for the analysis and correction of an error is indicated by the preceding discussion:

Step 1. Analyze the original erroneous journal entry and determine all the debits and credits that were recorded.
Step 2. Determine the correct journal entry and the appropriate debits and credits.
Step 3. Evaluate whether the error has caused additional errors in other accounts.
Step 4. Prepare the correcting entry (or entries), remember to record any corrections of the revenues and expenses for prior years as adjustments to retained earnings.

We show additional examples of some types of errors that can be expected to occur more frequently in the following sections for the Huggins Company, which uses a periodic inventory method. For simplicity, these corrections ignore the potential impact on taxable income, income tax expense, and deferred income taxes, although, in reality, correcting entries for these items may be required. Assume all errors are material.

Example: Omission of Unearned Revenue

In December 2007 the Huggins Company received $10,000 as a prepayment for renting a building to another company for all of 2008. The company recorded this transaction by a debit to Cash and a credit to Rent Revenue. The revenue should be reported in 2008, but the company erroneously included the revenue in its 2007 income. If the company discovers this error in 2008, it has overstated income for 2007 by including $10,000 rent revenue. Therefore, it has to decrease Retained Earnings by $10,000. Also, it has to record the rent revenue in 2008. Therefore, the company makes the following correcting entry:

Retained Earnings	10,000	
Rent Revenue		10,000

If the company does not discover the error until 2009, it does not make a correcting entry because the error has counterbalanced. However, if the company presents 2007 and 2008 financial statements for comparative purposes, the company corrects (restates) them as we discussed earlier. ♦

Example: Failure to Accrue Revenue

On December 31, 2007 the Huggins Company failed to accrue interest revenue of $500 that it had earned but not received on an outstanding note receivable. If the company discovered the error in 2008, it has understated income for 2007 by omitting interest revenue of $500. Therefore, it has to increase Retained Earnings by that amount. If we assume that the company credits any cash received in 2008 to Interest Revenue, it has overstated the revenue account by $500 in 2008, and so it makes the following correcting entry:

Interest Revenue	500	
Retained Earnings		500

If the company discovered the error in 2009, it does not make a correcting entry because the error has counterbalanced. However, if the company presents 2007 and 2008 financial statements for comparative purposes, it corrects them. ♦

Example: Omission of Prepaid Expense

In December 2007 the Huggins Company paid $1,000 for insurance coverage for the year 2008. It recorded the original entry as a debit to Insurance Expense and a credit to Cash, and did not record a year-end adjustment. If the company discovers this error at the end of 2008, it has understated its income for 2007 by the $1,000 overstatement of insurance expense. Therefore, it has to increase Retained Earnings by this amount. Since the company did not record prepaid insurance in 2007, it has understated Insurance Expense by $1,000 for 2008 and it makes the following correcting entry:

Insurance Expense	1,000	
Retained Earnings		1,000

Alternatively, if the payment of $1,000 in 2007 was for a two-year insurance policy, the correcting entry at the end of 2008 is:

Insurance Expense	500	
Prepaid Insurance	500	
Retained Earnings		1,000

If the company does not discover this error until 2009 and the payment in 2007 was for one year's insurance, it does not make a correcting entry because the error has counterbalanced. If the company discovered the error in 2009 and the payment was for two years' insurance, the correcting entry is:

Insurance Expense	500	
Retained Earnings		500

In this situation, $500 of the error has counterbalanced, leaving only $500 to be corrected. Once again, the company corrects the 2007 and 2008 financial statements if it presents them for comparative purposes. ♦

Example: Error in Ending Inventory

At December 31, 2007 the Huggins Company recorded its ending inventory at $50,000 based on a physical count. During 2008 it discovered that the correct inventory value should have been $55,000 because it made an error in the inventory count. Since it understated the ending inventory for 2007 by $5,000, it overstated cost of goods sold for 2007, and understated income. Therefore, it has to increase Retained Earnings by this amount. Since the company has understated its beginning inventory in 2008, it has to increase it by $5,000, and so it makes the following correcting entry:

Inventory	5,000	
Retained Earnings		5,000

If the company does not discover this error until 2009, it does not make a correcting entry because the error has counterbalanced, but it corrects the 2007 and 2008 financial statements because the error in the inventory affects cost of goods sold in both years. Many companies use a perpetual inventory system. Under this system they still take a physical inventory and may make similar errors. ♦

Example: Error in Purchases of Inventory

During December 2007 the Huggins Company made a purchase of inventory on credit that it had not paid at year's end. It recorded this transaction incorrectly at $17,000 although the invoice price of the inventory was $27,000. Since the company understated the purchases and accounts payable by $10,000, it understated cost of goods sold in 2007 (assuming it recorded the ending inventory correctly) and overstated income by $10,000. Therefore, it has to decrease Retained Earnings by this amount. The company understated Accounts Payable in 2008 by $10,000, and so it makes the following correcting entry:

Retained Earnings	10,000	
Accounts Payable		10,000

Because of the creditor's demand for payment, it is difficult to conceive of such an error remaining undetected until 2009, but if that did happen, the correcting entry is as shown. Since the ending inventory was correct, the error was not counterbalanced and the company has overstated its income for 2007 and retained earnings until it makes the correction. We illustrated more examples of the effects of errors in inventory and purchases in Chapter 9. ♦

Example: Failure to Accrue Estimated Bad Debts

The Huggins Company failed to accrue an allowance for doubtful accounts of $7,000 in its 2007 financial statements. The result of this error was the understatement of bad debt expense by $7,000. Therefore, the company has to decrease Retained Earnings by this amount. The discovery of the error in 2008 indicates that the company has overstated Accounts Receivable (net) by $7,000, and so it makes the following correcting entry:

Retained Earnings	7,000	
Allowance for Doubtful Accounts		7,000

Alternatively, if the company discovers the error after it makes the estimate of doubtful accounts and records it by the aging method at the end of 2008, it has overstated the bad debt expense because part of the charge relates to the 2007 error. Therefore, it makes the following correcting entry:

Retained Earnings	7,000	
Bad Debt Expense		7,000

It is obviously not possible to give examples of every possible error. In each situation the facts must be carefully examined, with particular consideration given to the time periods involved and the possibility of additional errors resulting from the initial error. For example, the effects of errors on the company's prior and current income tax expense and deferred income taxes must be assessed. Adjustments may have to be made to retained earnings if there were changes in income tax expense for prior periods. Also, if taxable income is incorrect for prior periods, amended tax returns may be necessary. ♦

Example 23-7 shows a schedule that summarizes the effects of the multiple errors of the Huggins Company on its income before income taxes for the years affected. The schedule includes each of the errors. Note that the omission of the prepaid expense assumes a two-year insurance policy (not a one-year insurance policy). The net effect of the errors is to reduce its pretax income for 2007 by $20,500, increase pretax income for 2008 by $4,000, and reduce assets by $6,500 and increase liabilities by $10,000 on its 2008 balance sheet. If the income tax rate is 30% and the correction of each of these errors affects taxable income, the 2007 errors enable the company to obtain a tax refund of $6,150 (30% × $20,500), and it also makes the following journal entry:

Income Tax Refund Receivable	6,150	
Retained Earnings		6,150

EXAMPLE 23-7 Summary of Corrections of Errors Discovered in 2008

	Effect of Correction on Income		Increases on Balance Sheet
Error	**2007**	**2008**	**December 31, 2008**
Omission of unearned revenue	$(10,000)	$10,000	
Failure to accrue interest revenue	500	(500)	
Omission of prepaid expense (two-year insurance policy)	1,000	(500)	Prepaid insurance $500
Error in ending inventory	5,000	(5,000)	
Error in purchases	(10,000)		Accounts payable $10,000
Failure to accrue estimated bad debts	(7,000)		Allowance for doubtful accounts $7,000
Total pretax effect	$(20,500)	$ 4,000	
Less: Income tax effect	6,150		
After-tax effect	$(14,350)		

The 2008 corrections do not need a separate correction for income taxes in this example because we assume that the company has not closed its books for 2008.

SECURE YOUR KNOWLEDGE 23-3

- An error results from mathematical mistakes or mistakes in the application of generally accepted accounting principles.
- A material error of a past period that is discovered in the current period is accounted for as a prior period restatement (adjustment) which requires:
  - The computation of the cumulative effect of the error on prior period financial statements;
  - An adjustment of the carrying values of the assets and liabilities (including income taxes) affected by the error;
  - An adjustment to the opening balance of retained earnings for the aggregate effect of the error (net of applicable income taxes);
  - A restatement of the financial statements of each prior period affected by the error; and
  - Appropriate disclosures.
- Errors can be classified as:
  - Errors only affecting the balance sheet—reclassification of the balance sheet amounts affected is required.
  - Errors affecting only the income statement—reclassification of the income statement amounts affected is required.
  - Errors affecting both the income statement and the balance sheet—a correcting journal entry and correction of the financial statements may be required.
- If an error is a counterbalancing error (e.g., the error automatically corrects in the next accounting period), a correcting journal entry is needed if the error is discovered during the second year. If the error is discovered after the second year, no correcting journal entry is needed but the financial statements should be restated so that they are not misleading.
- If an error is a noncounterbalancing error (e.g., the error will not automatically correct in the next accounting period), a correcting journal entry is needed and any applicable financial statements must be restated.
- Every error should be carefully examined to determine how the transaction *was* recorded versus how it *should have been* recorded and then the appropriate journal entry to correct the error can be made.

LINK TO INTERNATIONAL DIFFERENCES

International accounting standards are similar to U.S. standards, but several differences exist. First, while both international and U.S. standards require errors to be corrected by restating previously issued financial statements, international standards allow an exception to this requirement. If restatement is impracticable for all prior periods, the error can be corrected by restating the financial statements for the earliest period practicable (which may be the current period). This exception could result in the correction of an error in a period other than that in which it initially occurred. Second, international standards do not address when the indirect effects of a change in accounting principle should be reported nor the disclosures required. Finally, the disclosure requirements of international standards for accounting changes and error corrections are considered less extensive than those required under U.S. standards.

Summary of Effects on Financial Statements

8 Summarize the methods for making accounting changes and correcting errors.

Exhibit 23-1 shows a summary of the effects of the retrospective adjustment, prior period restatement, and prospective adjustment methods on a company's financial statements.

EXHIBIT 23-1 Summary of Effects on Financial Statements of Methods Used for Accounting Changes and Errors

Retrospective Adjustment and Prior Period Restatement

Previous Years	Current Year
Income Statement Change revenue and expense amounts to reflect new accounting principle, corrected information, or new accounting entity.	***Income Statement*** Compute revenue or expense amounts using new accounting principle, corrected information, or new accounting entity.
Balance Sheet Change asset, liability, and stockholders' equity account balances to reflect amounts that would have been reported if the principle had always been used, the error had not been made, or the new entity had always existed.	***Balance Sheet*** No additional changes. Asset, liability, and stockholders' equity account balances are amounts that would have been computed if the new principle had always been used, the error had not been made, or the new entity had always existed.

Prospective Adjustment

Previous Years	Current Year
Income Statement No change	***Income Statement*** Compute revenue and expense amounts using the new estimate or the newly adopted accounting principle for new events.
Balance Sheet No change	***Balance Sheet*** Asset, liability, and stockholders' equity account balances include amounts based on the use of the old estimate or principle in past years and the new estimate or newly adopted principle for new events in the current (and future) year(s).

Summary

At the beginning of the chapter, we identified several objectives you would accomplish after reading the chapter. The objectives are listed below, each followed by a brief summary of the key points in the chapter discussion.

1. **Identify the types of accounting changes**. The three types of accounting changes are a change in accounting principle, a change in accounting estimate, and a change in a reporting entity.
2. **Explain the methods of disclosing an accounting change**. There are two possible methods for a company to disclose an accounting change: the retrospective application of the new accounting principle, or adjust for the change prospectively.
3. **Account for a change in accounting principle using the retrospective adjustment method**. A company accounts for a change in accounting principle by the retrospective application of the new accounting principle to all prior periods as follows: (a) the company computes the cumulative effect of the change to the new accounting principle as of the beginning

of the first period presented, (b) it adjusts the carrying values of those assets and liabilities (including income taxes) that are affected by the change and makes an offsetting adjustment to the beginning balance of retained earnings to report the cumulative effect of the change (net of taxes) for each period presented, (c) it adjusts the financial statements of each prior period to reflect the specific effects of applying the new accounting principle, and (d) it makes related relevant disclosures in the notes to its financial statements.

4. **Account for a change in estimate**. A company accounts for a change in estimate in the period of the change if the change affects that period only, or the period of the change and future periods if the change affects both.
5. **Explain the conceptual issues regarding a change in accounting principle and a change in estimate**. The conceptual issues include the consistency of the information presented, the changing of previously reported information, the all-inclusive income concept, income manipulation, and any impact on contractual arrangements.
6. **Identify a change in a reporting entity**. A change in a reporting entity occurs mainly when a company presents consolidated or combined statements in place of statements of individual companies, there is a change in the specific subsidiaries that make up the group of companies for which the company presents consolidated statements, or the companies included in combined financial statements change.
7. **Account for a correction of an error**. A company accounts for a material error of a past period that it discovers in the current period as a prior period restatement (adjustment) as follows: (a) the company computes the cumulative effect of the error on periods prior to those presented, (b) it adjusts the carrying values of those assets and liabilities (including income taxes) that are affected by the error and makes an offsetting adjustment to the beginning balance of retained earnings to report the cumulative effect of the error correction (net of taxes) for each period presented, (c) it adjusts the financial statements of each prior period to reflect the specific effects of correcting the error, and (d) it makes related relevant disclosures in the notes to its financial statements.
8. **Summarize the methods for making accounting changes and correcting errors**. A summary of the methods for making accounting changes and correcting errors is included in Exhibit 23-1.

ANSWERS TO REAL REPORT QUESTIONS

Real Report 23-1 Answers

1. Darden Restaurants was not recognizing the expense related to its leases over the appropriate time period. Specifically, Darden recorded rent expense over the initial non-cancelable lease term. This initial lease term used in this calculation did not include any "rent holidays"—a period at the inception of the lease in which Darden had use of the leased asset but was not required to make payments—nor did it include any time periods associated with renewal options. Additionally, Darden depreciated its buildings (on leased land) and leasehold improvements (or other long-lived assets) over both the initial lease term plus any periods associated with renewal options. The correct procedure according to generally accepted accounting principles is to record rent expense over the initial lease term (which would include any "rent holidays") plus any periods where failure to renew the lease would result in an economic penalty, and to depreciate the assets over the shorter of the lease term plus any renewal periods or the expected life of the asset. The effect of these errors is described in the following answer.
2. The effect of these errors was to understate the total cost of the lease, which resulted in higher reported earnings. Because Darden did not include rent holidays in the initial non-cancelable lease term, rent expense was not recorded until actual payments were made. This delayed recognition of rent expense resulted in increased income. Furthermore, because a longer depreciation period was used, depreciation expense was understated, also leading to increased income. Darden corrected this error by restating its financial statements to reflect the proper recognition of expense over the initial non-cancelable lease term (which included any rent holidays) plus any renewal periods where failure to renew would result in an economic penalty. Furthermore, Darden corrected the period over which its buildings (on leased land) and leasehold improvements (or other long-lived assets) were depreciated. This restatement resulted in an increase in total liabilities in 2004 of $70,482 thousand. Furthermore, restaurant expenses for 2004 increased by $7,222 thousand and income taxes for 2004 decreased by $2,933 thousand. Together, this caused a decrease in 2004 earnings of $4,289 thousand.

QUESTIONS

Q23-1 Describe the three types of accounting changes.

Q23-2 Describe the two possible methods that a company could use to report the effect of accounting changes. Give one reason in favor of, and one against, each alternative.

Q23-3 Describe two situations in which a company could justify a change in an accounting principle.

Q23-4 What distinguishes a change in an accounting principle from a change in an estimate? How should a company account for each?

Q23-5 Give three examples of a change in an estimate. How does a company account for such changes?

Q23-6 In which situations may it be impracticable for a company to apply the retrospective adjustment method? What is the correct accounting in such cases?

Q23-7 How is a change in depreciation method accounted for? Why?

Q23-8 How does a company account for any indirect effects of a change in accounting principle?

Q23-9 How does a company account for the adoption of a new accounting principle for future events?

Q23-10 How does a company report a change in an accounting principle in its interim financial statements?

Q23-11 Describe a change in a reporting entity. How does a company account for such changes?

Q23-12 How does a company report an error of a prior period that it discovers in the current period?

Q23-13 Describe two errors that affect only a company's balance sheet.

Q23-14 Describe two errors that affect only a company's income statement.

Q23-15 Describe two errors that are counterbalanced in the following period.

Q23-16 Describe two errors that are not counterbalanced in the following period.

Q23-17 Why does a company correct errors even after they have counterbalanced?

MULTIPLE CHOICE (AICPA Adapted)

Select the best answer for each of the following.

M23-1 During 2007 White Company determined that machinery previously depreciated over a seven-year life had a total estimated useful life of only five years. An accounting change was made in 2007 to reflect the change in estimate. If the change had been made in 2006, accumulated depreciation at December 31, 2006 would have been $1,600,000 instead of $1,200,000. As a result of this change the 2007 depreciation expense was $100,000 greater. The income tax rate was 30% in both years. What should be reported in White's retained earnings statement for the year ended December 31, 2007 as the cumulative effect on prior years of changing the estimated useful life of the machinery?

a. $0
b. $280,000
c. $300,000
d. $400,000

Items 2 and 3 are based on the following information:

The Shannon Corporation began operations on January 1, 2007. Financial statements for the years ended December 31, 2007 and 2008 contained the following errors:

	December 31	
	2007	2008
Ending inventory	$16,000 understated	$15,000 overstated
Depreciation expense	$6,000 understated	—
Insurance expense	$10,000 overstated	$10,000 understated
Prepaid insurance	$10,000 understated	—

In addition, on December 31, 2008 fully depreciated machinery was sold for $10,800 cash, but the sale was not recorded until 2009. There were no other errors during 2007 or 2008 and no corrections have been made for any of the errors.

M23-2 Ignoring income taxes, what is the total effect of the errors on 2008 net income?

a. Net income understated by $1,800
b. Net income overstated by $5,800
c. Net income overstated by $11,000
d. Net income overstated by $30,200

M23-3 Ignoring income taxes, what is the total effect of the errors on the amount of working capital at December 31, 2008?

a. Working capital overstated by $4,200
b. Working capital understated by $5,800
c. Working capital understated by $6,000
d. Working capital understated by $9,800

M23-4 A change in the expected service life of an asset arising because additional information has been obtained is

a. An accounting change that should be reported by restating the financial statements of all prior periods represented
b. An accounting change that should be reported in the period of change and future periods if the change affects both
c. A correction of an error
d. Not an accounting change

M23-5 The cumulative effect of an accounting change on the amount of retained earnings at the beginning of the period in which the change is made should generally be included in the retained earnings statement for the period of the change for a

	Change in Accounting Principle	Change in Accounting Estimate
a.	Yes	Yes
b.	No	Yes
c.	Yes	No
d.	No	No

M23-6 On January 1, 2007 Belmont Company changed its inventory cost flow method to the FIFO cost method from the LIFO cost method. Belmont can justify the change, which was made for both financial statement and income tax reporting purposes. Belmont's inventories aggregated $4,000,000 on the LIFO basis at December 31, 2006. Supplementary records maintained by Belmont showed that the inventories would have totaled $4,800,000 at December 31, 2006 on the FIFO basis. Ignoring income taxes, the adjustment for the effect of changing to the FIFO method from the LIFO method should be reported by Belmont in the 2007

a. Income statement as an $800,000 debit
b. Retained earnings statement as an $800,000 debit adjustment to the beginning balance
c. Income statement as an $800,000 credit
d. Retained earnings statement as an $800,000 credit adjustment to the beginning balance

M23-7 When a cumulative effect-type change in accounting principle is made during the year, the cumulative effect on retained earnings is determined

a. During the year using the weighted average method
b. As of the date of the change
c. As of the beginning of the year in which the change is made
d. As of the end of the year in which the change is made

M23-8 Generally, how should a change in accounting principle that is affected by a change in accounting estimate be reported?

	Change in Accounting Estimate	Change in Accounting Principle
a.	No	No
b.	Yes	Yes
c.	No	Yes
d.	Yes	No

M23-9 On January 2, 2005 Garr Company acquired machinery at a cost of $320,000. This machinery was being depreciated by the double-declining-balance method over an estimated useful life of eight years, with no residual value. At the beginning of 2007 it was decided to change to the straight-line method of depreciation. Ignoring income tax considerations, the retrospective effect of this accounting change is

a. $0
b. $60,000
c. $65,000
d. $140,000

M23-10 A company has included in its consolidated financial statements this year a subsidiary acquired several years ago that was appropriately excluded from consolidation last year. This results in

a. An accounting change that should be reported prospectively
b. An accounting change that should be reported by retrospectively restating the financial statements of all prior periods presented
c. Neither an accounting change nor a correction of an error
d. A correction of an error

EXERCISES

E23-1 ***Identification and Effects of Changes and Errors*** The following are several independent events:

1. Change from the LIFO to the FIFO inventory cost flow assumption.
2. Reduction in remaining service life of machinery from 10 to 8 years.
3. A change from an accelerated method to the straight-line method of depreciating assets.
4. Write-down of inventories because of obsolescence.
5. Receipt of damages won in a court suit instigated five years ago.
6. Recording as an asset costs that were erroneously expensed in a previous period.
7. Write-down of property, plant, and equipment because of closure of inefficient plants.
8. A change from successful efforts to full cost accounting for oil exploration costs.

Required
Indicate how a company reports the preceding items (specify whether increases or decreases can generally be expected) in its financial statements of the current year.

E23-2 ***Identification and Effects of Changes and Errors*** The following are several independent events:

1. Change from the FIFO to the LIFO inventory cost flow assumption.
2. Write-off of patent due to the introduction of a competing product.
3. Payment to the Internal Revenue Service in settlement of a dispute over previous year's taxes.
4. Increase in allowance for uncollectible accounts from 2% to 4% of credit sales.
5. Change from straight-line to double-declining-balance method.
6. Write-down of an asset to reflect probable future losses.
7. A change from full cost to successful efforts accounting for oil exploration costs.

Required
Indicate how a company reports the preceding items (specify whether increases or decreases can generally be expected) in its financial statements of the current year.

E23-3 ***Identification and Accounting for Changes and Errors*** The following are several independent events:

1. A partnership is preparing to become a corporation and sell stock to the public. At this time, it is decided to switch from accelerated to straight-line depreciation.
2. A company has been debiting half its advertising costs to an intangible asset account and amortizing these costs over three years.
3. A company has been using accelerated depreciation. It now estimates that the pattern of benefits to be received in the future will be equal each period, so it decides to change to the straight-line depreciation method.
4. A company has been using straight-line depreciation in its property, plant, and equipment. It is now buying a new type of machine and elects to use accelerated depreciation on the new machines.
5. A company has been expensing all its manufacturing cost variances. It decides to allocate them between cost of goods sold and inventory in the future.

Required
Identify the correct accounting treatment for the changes (if any) related to the preceding events.

E23-4 ***Change in Inventory Cost Flow Assumption*** At the beginning of 2008 the Brett Company decided to change from the FIFO to the average cost inventory cost flow assumption for financial reporting purposes. The following data are available in regard to its pretax operating income and cost of goods sold:

Year	Reported Income Before Income Taxes	Excess of Average Cost of Goods Sold Over FIFO Cost of Goods Sold	Adjusted Income Before Income Taxes
Prior to 2007	$1,600,000	$130,000	$1,470,000
2007	600,000	50,000	550,000
2008	700,000		

The income tax rate is 30%, and the company received permission from the IRS to also make the change for income tax purposes. The company has a simple capital structure, with 100,000 shares of common stock outstanding. The company computed its reported income before income taxes in 2008 using the newly adopted inventory cost flow method. Brett's 2007 and 2008 revenues were $1,500,000 and $1,750,000, respectively. Its retained earnings balances at the beginning of 2007 and 2008 (unadjusted) were $1,120,000 and $1,540,000, respectively. The company paid no dividends in any year.

Required

1. Prepare the journal entry at the beginning of 2008 to reflect the change.
2. At the end of 2008 prepare comparative income statements for 2008 and 2007. Notes to the financial statements are not necessary.
3. At the end of 2008 prepare comparative retained earnings statements for 2008 and 2007.

E23-5 **AICPA Adapted** ***Change in Inventory Cost Flow Assumption*** The Berg Company began operations on January 1, 2007 and uses the FIFO method in costing its raw material inventory. During 2008 management is contemplating a change to the LIFO method and is interested in determining what effect such a change will have on net income. Accordingly, the following information has been developed:

	2007	2008
FIFO—Ending inventory	$240,000	$270,000
LIFO—Ending inventory	200,000	210,000
Income before income taxes (computed under the FIFO method)	120,000	170,000

Required
What is the effect on income before income taxes in 2008 of a change to the LIFO method?

E23-6 ***Change in Inventory Method*** The Fava Company began operations in 2006 and used the LIFO inventory method for both financial reporting and income taxes. At the beginning of 2007 the anticipated cost trends in the industry had changed, so that it adopted the FIFO method for both financial reporting and income taxes. The company reported revenues of $300,000 and $270,000 in 2007 and 2006, respectively. The company reported expenses (excluding income tax expense) of $125,000 and $120,000 in 2007 and 2006, which included cost of goods sold of $55,000 and $45,000, respectively. An analysis indicates that the FIFO cost of goods sold would have been lower by $8,000 in 2006. The tax rate is 30%. The company has a simple capital structure, with 15,000 shares of common stock outstanding during 2006 and 2007. It paid no dividends in either year.

Required

1. Prepare the journal entry to reflect the change.
2. At the end of 2007 prepare the comparative income statements for 2007 and 2006. Notes to the financial statements are not necessary.
3. At the end of 2007 prepare the comparative retained earnings statements for 2007 and 2006.

E23-7 ***Change in Accounting for Construction Contracts*** The Delta Company uses the completed-contract method of accounting for long-term construction contracts. The company started business in 2005 and prepared the following income statements:

	2005	2006
Construction revenue	$100,000	$300,000
Construction expense	(40,000)	(130,000)
Other expenses	(50,000)	(70,000)
Income before income taxes	$ 10,000	$ 100,000
Income tax expense (30%)	(3,000)	(30,000)
Net income	$ 7,000	$ 70,000
Earnings per share	$ 0.07	$ 0.70

The company changes to the percentage-of-completion method at the beginning of 2007. It determines the construction revenue and expense amounts under the percentage-of-completion method to be as follows:

	2005	2006	2007
Construction revenue	$200,000	$420,000	$900,000
Construction expense	80,000	182,000	420,000

The other expenses remain unchanged for 2005 and 2006, and are $80,000 in 2007. The company has not paid dividends on its 100,000 common shares outstanding. With the 2007 financial statements the company issues comparative statements for the previous two years. Under the completed-contract method, construction revenue and construction expense would be $600,000 and $280,000, respectively, in 2007. The company uses the percentage-of-completion method for income tax purposes.

Required

Prepare the income statements and the statements of retained earnings for 2007. Notes to the financial statements are not necessary.

E23-8 ***Changes and Corrections of Depreciation*** On January 1, 2002, the Klinefelter Company purchased a building for $520,000. The building had an estimated life of 20 years and an estimated residual value of $20,000. The company has been depreciating the building using straight-line depreciation. At the beginning of 2008, the following *independent* situations occur:

1. The company estimates that the building has a remaining life of 10 years (for a total of 16 years).
2. The company changes to the sum-of-the-years'-digits method.
3. The company discovers that it had ignored the estimated residual value in the computation of the annual depreciation each year.

Required

For each of the independent situations, prepare all of the journal entries related to the building for 2008. Ignore income taxes.

E23-9 ***Journal Entries to Correct Errors*** The following are several independent errors made by a company that uses the periodic inventory system:

1. Goods in transit, purchased on credit and shipped FOB destination, $10,000, were included in purchases but not in the ending inventory.
2. A purchase of a machine for $2,000 was expensed. The machine has a four-year life, no residual value, and straight-line depreciation is used.
3. Wages payable of $2,000 were not accrued.
4. Payment of next year's rent, $4,000, was recorded as rent expense.

5. Allowance for doubtful accounts of $5,000 was not recorded. The company normally uses the aging method.
6. Equipment with a book value of $70,000 and a fair value of $100,000 was sold at the beginning of the year. A two-year non-interest-bearing note for $129,960 was received and recorded at its face value. No interest revenue was recorded and 14% is a fair rate of interest.

Required
Prepare the correcting journal entry or entries for each of the preceding errors, assuming the company discovers the error in the year after it was made. (Ignore income taxes.)

E23-10 ***Journal Entries to Correct Errors*** Use the information in E23-9.

Required
Prepare the correcting journal entries if the company discovers each error two years after it is made and it has closed the books for the second year. (Ignore income taxes.)

E23-11 ***Effects of Errors*** The following are several independent errors made by a company:
1. Failure to record a purchase of inventory on credit.
2. Expensing the purchase of a machine.
3. Failure to accrue wages.
4. Failure to record an allowance for uncollectibles.
5. Including collections in advance as revenue.
6. Including payments in advance as expenses.
7. Failure to accrue warranty costs.
8. Discount on a note payable issued for purchase of a machine is ignored.
9. Failure to record depreciation expense on assets purchased during the year.

Required
Indicate the effect of each of the preceding errors on the company's (1) assets, (2) liabilities, (3) owners' equity, and (4) net income in the year in which the error occurs. State whether the error causes an overstatement (+), an understatement (−) (2), or no effect (NE).

E23-12 ***Correcting Journal Entries for Errors*** The following are several independent errors:
1. In January 2007 repair costs of $9,000 were debited to the Machinery account. At the beginning of 2007 the book value of the machinery was $100,000. No residual value is expected, the remaining estimated life is 10 years, and straight-line depreciation is used.
2. All purchases of materials for construction contracts still in progress have been immediately expensed. It is discovered that the use of these materials was $10,000 during 2006 and $12,000 during 2007.
3. Depreciation on manufacturing equipment has been excluded from manufacturing costs and treated as a period expense. During 2007, $40,000 of depreciation was accounted for in that manner. Production was 15,000 units during 2007, of which 3,000 remained in inventory at the end of the year. Assume there was no inventory at the beginning of 2007.

Required
Prepare journal entries for the preceding errors discovered during 2008. (Ignore income taxes.)

E23-13 ***Omission of Accruals and Prepayments*** The Dudley Company failed to recognize the following accruals. It also recorded the prepaid expenses and unearned revenues as expenses and revenues, respectively, in the year of payment or collection.

	2006	2007	2008
Prepaid expenses	$500	$ 900	$1,100
Accrued expenses	800	700	950
Revenue received in advance	300	400	1,300
Revenue earned but not received	600	1,000	1,200

The reported pretax income was $20,000 in 2006, $25,000 in 2007, and $23,000 in 2008.

Required
1. Compute the correct pretax income for 2006, 2007, and 2008.
2. Prepare the journal entries necessary in 2008 if the errors are discovered at the end of that year. Ignore income taxes.
3. Prepare the journal entries necessary in 2009 if the errors are discovered at the end of that year. Ignore income taxes.

PROBLEMS

P23-1 **AICPA Adapted** ***Identification and Effects of Changes and Errors*** On January 2, 2007, Quo, Inc. hired Reed as its controller. During the year, Reed, working closely with Quo's president and outside accountants, made changes in accounting policies, corrected several errors dating from 2006 and before, and instituted new accounting policies. Quo's 2007 financial statements will be presented in comparative form with its 2006 financial statements. Items 1 through 10 represent Quo's transactions.

1. Quo manufactures heavy equipment to customer specifications on a contract basis. On the basis that it is preferable, it switched accounting for these long-term contracts from the completed-contact method to the percentage-of-completion method.
2. As a result of a production breakthrough, Quo determined that manufacturing equipment previously depreciated over 15 years should be depreciated over 20 years.
3. The equipment that Quo manufactures is sold with a five-year warranty. Because of a production breakthrough, Quo reduced its computation of warranty costs from 3% of sales to 1% of sales.
4. Quo changed from LIFO to FIFO to account for its finished goods inventory.
5. Quo sells extended service contracts on its products. Because related services are performed over several years, in 2007 Quo changed from the cash method to the accrual method of recognizing income from these service contracts.
6. During 2007 Quo determined that an insurance premium paid and entirely expensed in 2006 was for the period January 1, 2006 through January 1, 2008.
7. Quo changed its method of depreciating office equipment from an accelerated method to the straight-line method to more closely reflect the pattern of benefits.
8. Quo instituted a pension plan for all employees in 2007 and adopted Statement of Financial Accounting Standards No. 87, *Employers' Accounting for Pensions*. Quo had not previously had a pension plan.
9. During 2007, Quo increased its investment in Worth, Inc. from a 10% interest, purchased in 2006, to 60%. As a result of its increased investment, Quo changed its method of accounting for investment in subsidiary from the fair value method to the consolidation method.

Required

1. Indicate whether Quo should classify each transaction as: (a) a change in accounting principle, (b) a change in accounting estimate, (c) a correction of an error in previously presented financial statements, or (d) neither an accounting change nor an accounting error.
2. Indicate the accounting treatment for each transaction as: (a) a retrospective adjusment approach, (b) a prior period restatement approach, or (c) a prospective approach.

P23-2 ***Changes in Inventory Cost Flow Assumption*** At the beginning of 2008 the Flynne Company decided to change from the LIFO to the FIFO inventory cost flow assumption. The following data are available:

Year	Reported Income Before Income Taxes	Excess of LIFO Cost of Goods Sold Over FIFO Cost of Goods Sold	Adjusted Income Before Income Taxes
Prior to 2007	$240,000	$42,000	$282,000
2007	80,000	18,000	98,000
2008	70,000	16,000	

The tax rate is 30%. The company has a simple capital structure and 10,000 shares of common stock outstanding. Assume that the balance in retained earnings is the sum of the company's reported income amounts (net of tax) and that the reported income before income taxes in 2008 uses the newly adopted method. Flynne's revenues for 2007 and 2008 were $225,000 and $230,000, respectively. Flynne's operating expenses (other than cost of goods sold) for 2007 and 2008 were $32,000 and $40,000, respectively.

Required

1. Prepare the journal entry at the beginning of 2008 to reflect the change.
2. At the end of 2008, prepare comparative income statements for 2008 and 2007.
3. At the end of 2008, prepare comparative retained earnings statements for 2008 and 2007.
4. Prepare a note to the comparative financial statements that discusses the nature and reason for the change from LIFO to FIFO and discloses the effects of the change on the company's income statements for 2007 and 2008. (Ignore the effects on the balance sheet and statement of cash flows because there is insufficient information to calculate these changes.)
5. Explain how your answer to Requirement 2 would change if the employees received a bonus of 10% of income before deducting the bonus and income taxes, and the company paid additional bonuses for prior years in 2008.

P23-3 ***Change from FIFO to Average Cost*** Koopman Company began operations on January 1, 2006 and uses the FIFO inventory method for financial reporting and the average-cost inventory method for income taxes. At the beginning of 2008 the company decided to switch to the average-cost inventory method for financial reporting. The company had previously reported the following financial statements for 2007:

Income Statement

	2007
Revenues	$100,000
Cost of goods sold	(60,000)
Gross profit	$ 40,000
Operating expenses	(25,000)
Income before income taxes	$ 15,000
Income tax expense	(4,500)
Net income	$ 10,500
Earnings per share	$ 1.05

Retained Earnings Statement

	2007
Beginning retained earnings	$15,000
Add: Net income	10,500
	$25,500
Less: Dividends	(6,000)
Ending retained earnings	$19,500

Balance Sheet (12/31/07)

Cash	$ 9,000	Accounts payable	$ 3,000
Inventory	38,000	Income taxes payable	1,800
Other assets	64,100	Deferred tax liability	4,800
		Common stock, no par	82,000
		Retained earnings	19,500
	$ 111,100		$111,100

An analysis of the accounting records discloses the following cost of goods sold under the FIFO and average-cost inventory methods:

	FIFO Cost of Goods Sold	Average Cost of Goods Sold
2006	$50,000	$57,000
2007	60,000	69,000
2008	70,000	80,000

There are no indirect effects of the change in inventory method. Revenues for 2008 total $130,000; operating expenses for 2008 total $30,000. The company is subject to a 30% income tax rate in all years; it pays the income taxes payable of a current year in the first quarter of the next year. The company had 10,000 shares of common stock outstanding during all years; it paid dividends of $1 per share in 2008. At the end of 2008 the company had cash of $10,000, inventory of $24,000, other assets of $70,800, and accounts payable of ?. The company desires to show financial statements for the current year and previous year in its 2008 annual report.

Required

1. Prepare the journal entry to reflect the change in methods at the beginning of 2008. Show supporting calculations.
2. Prepare the 2008 annual report. Notes to the financial statements are not necessary. Show supporting calculations.

P23-4 ***Change from LIFO to Average Cost*** Schmidt Company began operations on January 1, 2006 and used the LIFO inventory method for both financial reporting and income taxes. However, at the beginning of 2008 the company decided to switch to the average-cost inventory method for financial and income tax reporting. The company had previously reported the following financial statements for 2007:

Income Statement

	2007
Revenues	$128,000
Cost of goods sold	(78,000)
Gross profit	$ 50,000
Operating expenses	(25,000)
Income before income taxes	$ 25,000
Income tax expense	(7,500)
Net income	$ 17,500
Earnings per share	$ 1.75

Retained Earnings Statement

	2007
Beginning retained earnings	$27,000
Add: Net income	17,500
	$44,500
Less: Dividends	(6,000)
Ending retained earnings	$38,500

Balance Sheet (12/31/07)

Cash	$ 8,000	Accounts payable	$ 4,000
Inventory	42,000	Income taxes payable	7,500
Other assets	60,000	Common stock, no par	60,000
		Retained earnings	38,500
	$110,000		$110,000

An analysis of the accounting records discloses the following cost of goods sold under the LIFO and average-cost inventory methods:

	LIFO Cost of Goods Sold	Average Cost of Goods Sold
2006	$62,000	$56,000
2007	78,000	69,000
2008	90,000	80,000

There are no indirect effects of the change in inventory method. Revenues for 2008 total $130,000; operating expenses for 2008 total $30,000. The company is subject to a 30% income tax rate in all years; it pays all income taxes payable in the next quarter. The company had 10,000 shares of common stock outstanding during all years; it paid dividends of $1 per share in 2008. At the end of 2008 the company had cash of $12,000, inventory of $34,000, other assets of $76,000, income taxes payable of $6,000, and accounts payable of ?. The company desires to show financial statements for the current year and previous year in its 2008 annual report.

Required

1. Prepare the journal entry to reflect the change in method at the beginning of 2008. Show supporting calculations.
2. Prepare the 2008 annual report. Notes to the financial statements are not necessary. Show supporting calculations.

P23-5 ***Change in Accounting for Construction Contracts*** Since the Goode Construction Company was formed in 2006, it has used the completed-contract method for financial reporting, but at the beginning of 2008 it changes to the percentage-of-completion method. The company previously had reported the following pretax income:

	2006	2007
Sales of completed contracts	$300,000	$800,000
Less: Cost of completed contracts	(200,000)	(550,000)
Gross profit	$100,000	$250,000

Analysis of the accounting records discloses that the company earned the following gross profit on each of its projects based on the percentage-of-completion method:

	2006	2007	2008
Project A	$100,000	—	—
Project B	120,000	$125,000	—
Project C	—	75,000	$400,000

In 2008 the company would have reported sales and cost of completed contracts of $820,000 and $350,000, respectively, under the completed-contract method. The tax rate is 30%. The company has a simple capital structure, with 100,000 shares of common stock outstanding. It paid no dividends. Ignore other expenses (i.e., gross profit is income before income taxes). The company uses the percentage-of-completion method for income taxes.

Required

1. Prepare the journal entry to reflect the change in method at the beginning of 2008.
2. If the company also presents the 2006 and 2007 financial statements for comparative purposes, prepare the income statement disclosures (starting with income before income taxes) and retained earnings disclosures that are required in 2008.
3. What items (if any) would be restated on the financial statements?

P23-6 ***Changes and Corrections of Depreciation*** At the beginning of 2008, the controller of Holden Company asked you to prepare correcting entries for the following three situations:

1. Machine X was purchased for $100,000 on January 1, 2003. Straight-line depreciation has been recorded for five years, and the Accumulated Depreciation account has a balance of $45,000. The estimated residual value remains at $10,000, but the service life is now estimated to be one year longer than originally estimated.
2. Machine Y was purchased for $40,000 on January 1, 2006. It had an estimated residual value of $4,000 and an estimated service life of eight years. It has been depreciated under the sum-of-the-years'-digits method for two years. Now, the company has decided to change to the straight-line method.
3. Machine Z was purchased for $80,000 on January 1, 2007. Double-declining-balance depreciation has been recorded for one year. The estimated residual value is $8,000 and the estimated service life is five years. The computation of the depreciation erroneously included the estimated residual value.

Required
Prepare any necessary correcting journal entries for each situation. Also prepare the journal entry for each situation to record the depreciation for 2008. (Ignore income taxes.)

P23-7 **AICPA Adapted** ***Change in Accounting for Inventory*** The Kraft Manufacturing Company manufactures two products: Mult and Tran. At December 31, 2007 Kraft used the FIFO inventory method. Effective January 1, 2008, Kraft changed to the LIFO inventory method. The cumulative effect of this change is not determinable and, as a result, the ending inventory of 2007, for which the FIFO method was used, is also the beginning inventory for 2008 for the LIFO method. Any layers added during 2008 should be costed by reference to the first acquisitions of 2008, and any layers liquidated during 2008 should be considered a permanent liquidation.

The following information was available from Kraft's inventory records for the two most recent years:

	Mult		Tran	
	Units	**Unit Cost**	**Units**	**Unit Cost**
2007 purchases:				
January 7	5,000	$4.00	22,000	$2.00
April 17	12,000	4.50		
November 9	17,000	5.00	18,500	2.50
December 14	10,000	6.00		
2008 purchases:				
February 12	3,000	7.00	23,000	3.00
May 21	8,000	7.50		
October 15	20,000	8.00		
December 24			15,500	3.50
Units on hand:				
December 31, 2007	15,000		14,500	
December 31, 2008	16,000		13,000	

Required
Compute the effect on income before income taxes for the year ended December 31, 2008, resulting from the change from the FIFO to the LIFO inventory method.

P23-8 ***First Issuance of Financial Statements*** The Jackson Company has decided to issue common stock to the public in 2008. This will be the first public sale and therefore the company will issue its first publicly available financial statements since it was formed in 2005. The financial statements that it has prepared for its own use follow:

Income Statements

	For Years Ended December 31,		
	2005	**2006**	**2007**
Sales	$100,000	$130,000	$180,000
Cost of goods sold	(35,000)	(45,000)	(65,000)
Gross profit	$ 65,000	$ 85,000	$ 115,000
Other expenses	(62,500)	(75,000)	(83,200)
Income before income taxes	$ 2,500	$ 10,000	$ 31,800
Income tax expense	(750)	(3,000)	(9,540)
Net income	$ 1,750	$ 7,000	$ 22,260

Balance Sheets

	December 31		
	2005	**2006**	**2007**
Cash	$ 5,500	$ 12,500	$ 9,960
Accounts receivable	30,000	50,000	63,000
Inventory	40,000	60,000	65,000
Equipment	100,000	100,000	140,000
Less: Accumulated depreciation	(20,000)	(52,000)	(79,200)
	$155,500	$170,500	$198,760
Current liabilities	$ 19,250	$ 27,250	$ 33,250
Notes payable	50,000	50,000	50,000
Common stock	84,500	84,500	84,500
Retained earnings	1,750	8,750	31,010
	$155,500	$170,500	$198,760

These financial statements are audited for the first time at the beginning of 2008, and the following facts are discovered:

1. The company has not made any allowance for noncollection of accounts receivable. An allowance of 1% of total sales is considered appropriate. Uncollectible accounts of $630 should have been written off in 2007.
2. The notes payable are to officers of the company and have an interest rate of 12%. They were issued on January 1, 2005. No interest has been accrued or paid. (Assume simple interest and no compounding.)
3. The company has been using MACRS over a five-year life for both financial reporting and income tax purposes. It has been decided that the straight-line method should have been used for financial reporting, based on an economic life of 10 years and a zero residual value, with a full year's depreciation being recorded in the year of acquisition. No disposals of property, plant, and equipment have occurred.
4. After adjustments, with the exception of depreciation, expenses deducted for financial accounting purposes are the same as those deducted for income tax purposes.
5. The company is subject to a 30% income tax rate and pays its taxes at the end of each year.

Required

1. Prepare the financial statements for 2005, 2006, and 2007 that the company would issue at the beginning of 2008.
2. Describe what method the company would use to account for each item if the financial statements for all three years had been publicly issued previously.

P23-9 ***Error Correction*** At the end of 2008 while auditing the books of the Sandlin Company, *before* the books have been closed, you find the following items:

a. A building with a 30-year life (no residual value, straight-line depreciation) was purchased on January 1, 2008 by issuing a $90,000 non-interest-bearing, four-year note. The entry made to record the purchase was a debit to Building and a credit to Notes Payable for $90,000; 12% is a fair rate of interest on the note.
b. The inventory at the end of 2008 was found to be overstated by $15,000. At the same time it was discovered that the inventory at the end of 2007 had been overstated by $35,000. The company uses the perpetual inventory system.
c. For the last three years, the company has failed to accrue salaries and wages. The correct amounts at the end of each year were: 2006—$12,000; 2007—$18,000; 2008—$10,000.

Required

1. Prepare journal entries to correct the errors (ignore income taxes).
2. Assume, instead, that the company discovered the errors *after* it had closed the books. Prepare journal entries to correct the errors (ignore income taxes).

P23-10 ***Error Correction*** At the beginning of 2008 Tanham Company discovered the following errors made in the preceding two years:

	2006	2007
Overstatement of ending inventory	$5,000	$2,000
Omission of wages payable	700	800
Omission of allowance for doubtful accounts	1,300	1,700
Prepayment of insurance recorded as expense	500	200

Reported net income was $27,000 in 2006 and $35,000 in 2007. The allowance for doubtful accounts had a zero balance at the beginning of 2006. No accounts were written off during 2006 or 2007. Ignore income taxes.

Required

1. What is the correct net income for 2006 and 2007?
2. Prepare the adjusting journal entry in 2008 to correct the errors.

P23-11 ***Error Correction*** A review of the books of the Anderson Corporation indicates that the errors and omissions pertaining to the balance sheet accounts shown as follows had not been corrected during the applicable years.

The net income per the books is: 2005—$10,000; 2006—$12,000; 2007—$15,000; and 2008—$20,000. No dividends were declared during these years and no adjustments were made to retained earnings. The Retained Earnings balance on December 31, 2008, is $50,000.

			Omissions			
December 31	Ending Inventory Overvalued	Ending Inventory Undervalued	Prepaid Expense	Unearned Revenues	Accrued Expense	Accrued Revenues
2005	$ —	$4,000	$600	$ —	$300	$ —
2006	3,000	—	—	500	—	700
2007	2,000	—	400	—	100	—
2008	—	1,000	900	200	350	800

Required

Prepare a worksheet to determine the correct net income for the years 2005, 2006, 2007, and 2008, and the adjusted balance sheet accounts as of December 31, 2008. (Ignore possible income tax effects.)

P23-12 ***Error Correction*** The bookkeeper of the Cask Company, who has maintained its accounting records since the company's formation in January 2005, has prepared the unaudited financial statements. In your examination of these statements at the end of 2007, you discover the following items:

1. Sales taxes collected from customers have been included in the sales account. The Sales Tax Expense account is debited when the sales taxes are remitted to the state in the month following the sale. All sales are subject to a 6% sales tax. Total sales (excluding sales tax) for the three years 2005 through 2007 were \$200,000, \$300,000, and \$500,000, respectively. The Sales Tax Expense account balance for the three years was \$10,000, \$15,000, and \$26,000, respectively.
2. An account payable of \$15,000 for merchandise purchased in December 2005 was recorded in January 2006. The merchandise was not included in inventory at December 31, 2005.
3. Merchandise with a cost of \$4,000 was included twice in the December 31, 2006 inventory.
4. The company has used the direct write-off method of accounting for bad debts. Accounts written off in the three years 2005 through 2007 were \$2,000, \$4,500, and \$6,500, respectively. The appropriate balances of Allowance for Doubtful Accounts at the end of 2005 through 2007 are \$5,000, \$6,000, and \$8,200, respectively.
5. On January 1, 2006, 12%, 10-year bonds with a face value of \$600,000 were issued at 102. The premium was credited to Additional Paid-in Capital. The bonds pay interest on June 30 and December 31, and use of the straight-line amortization method is appropriate.
6. Travel advances to the sales personnel of \$18,000 were included as selling expenses for 2006. The travel occurred in 2007.
7. Salaries payable at the end of each year have not been accrued. Appropriate amounts at the end of 2005 through 2007 are \$10,000, \$11,000, and \$7,000, respectively.
8. Installation, freight, and testing costs of \$25,000 on a machine purchased in January 2005 were expensed at that time. The machine has a life of five years and a residual value of \$10,000.

Required

Analyze the effects of the errors on income for 2005, 2006, and 2007, and the 2007 ending balance sheet (ignore income taxes), according to the following format:

Explanation	Income 2005		Income 2006		Income 2007		Balance Sheet December 31, 2007		
							Amount		
	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Account

P23-13 **AICPA Adapted** ***Comprehensive*** The financial statements of the Gray Company showed income before income taxes of \$4,030,000 for the year ended December 31, 2008, and \$3,330,000 for the year ended December 31, 2007. Additional information is as follows:

1. Capital expenditures were \$2,800,000 in 2008 and \$4,000,000 in 2007. Included in the 2008 capital expenditures is equipment purchased for \$1,000,000 on January 1, 2008, with no salvage value. Gray used straight-line depreciation based on a 10-year estimated life in its financial statements. As a result of additional information now available, it is estimated that this equipment should have only an eight-year life.
2. Gray made an error in its financial statements that should be regarded as material. A payment of \$180,000 was made in January 2008 and charged to expense in 2008 for insurance premiums applicable to policies commencing and expiring in 2007. No liability had been recorded for this item at December 31, 2007.
3. The allowance for doubtful accounts reflected in Gray's financial statements was \$7,000 at December 31, 2008, and \$97,000 at December 31, 2007. During 2008, \$90,000 of uncollectible receivables were written off against the allowance for doubtful accounts. In 2007, the provision for doubtful accounts was based on a percentage of net sales. The 2008 provision has not yet been recorded. Net sales were \$58,500,000 for the year ended December 31, 2008, and \$49,230,000 for the year ended December 31, 2007. Based on the latest available facts, the 2008 provision for doubtful accounts is estimated to be 0.2% of net sales.
4. A review of the estimated warranty liability at December 31, 2008, which is included in "other liabilities" in Gray's financial statements, has disclosed that this estimated liability should be increased \$170,000.
5. Gray has two large blast furnaces that it uses in its manufacturing process. These furnaces must be periodically relined. Furnace A was relined in January 2002 at a cost of \$230,000 and in January 2007 at a cost of \$280,000. Furnace B was relined for the first time in January 2008 at a cost of \$300,000. In Gray's financial statements, these costs were expensed as incurred.

Since a relining will last for five years, a more appropriate matching of revenues and costs would result if the cost of the relining were capitalized and depreciated over the productive life of the relining. Gray has decided to make a change in accounting principle from expensing relining costs as incurred to capitalizing them and depreciating them over their productive life on a straight-line basis with a full year's depreciation in the year of relining. This change meets the requirements for a change in accounting principle under *FASB Statement No. 154*, "Accounting Changes and Error Corrections."

Required

1. For the years ended December 31, 2008 and 2007, prepare a worksheet reconciling income before income taxes as given previously with income before income taxes, as adjusted for the preceding additional information. Show supporting computations in good form. Ignore income taxes and deferred tax considerations in your answer. The worksheet should have the following format:

	Year Ended December 31	
	2008	**2007**
Income before income taxes, before adjustments	$4,030,000	$3,330,000
Adjustments		
Net adjustments		
Income before income taxes, after adjustments	$	$

2. As of January 1, 2008, compute the retrospective adjustment of retained earnings for the cumulative effect of the change in accounting principle from expensing to capitalizing relining costs. Ignore income taxes and deferred tax considerations in your answer.

P23-14 AICPA Adapted ***Comprehensive*** The Ingalls Corporation is in the process of negotiating a loan for expansion purposes. The books and records have never been audited, and the bank has requested that an audit be performed. Ingalls has prepared the following comparative financial statements for the years ended December 31, 2008 and 2007:

Balance Sheet

	As of December 31,	
	2008	**2007**
Assets		
Current assets		
Cash	$163,000	$ 82,000
Accounts receivable	392,000	296,000
Allowance for uncollectible accounts	(37,000)	(18,000)
Available-for-sale securities	78,000	78,000
Merchandise inventory	207,000	202,000
Total current assets	803,000	640,000
Fixed assets		
Property, plant, and equipment	167,000	169,500
Accumulated depreciation	(121,600)	(106,400)
Total fixed assets	45,400	63,100
Total assets	$848,400	$703,100
Liabilities and Stockholders' Equity		
Liabilities		
Accounts payable	$121,400	$196,100
Stockholders' equity		
Common stock, par value $10, authorized 50,000 shares, issued and outstanding 20,000 shares	260,000	260,000
Retained earnings	467,000	247,000
Total stockholders' equity	727,000	507,000
Total liabilities and stockholders' equity	$848,400	$703,100

Statement of Income

	For the Years Ended December 31,	
	2008	**2007**
Sales	$1,000,000	$900,000
Cost of sales	(430,000)	(395,000)
Gross profit	570,000	505,000
Operating expenses	210,000	205,000
Administrative expenses	140,000	105,000
	(350,000)	(310,000)
Net income	$ 220,000	$195,000

During the course of the audit, the following additional facts were determined:

1. An analysis of collections and losses on accounts receivable during the past two years indicates a drop in anticipated losses because of bad debts. After consultation with management, it was agreed that the loss experience rate on sales should be reduced from the recorded 2% to 1%, beginning with the year ended December 31, 2008.
2. An analysis of the available-for-sale securities revealed that this portfolio consisted entirely of short-term investments in marketable equity securities that were acquired in 2007. The total market valuation for these investments as of the end of each year was as follows: December 31, 2007—$81,000; December 31, 2008—$62,000.
3. The merchandise inventory at December 31, 2007 was overstated by $4,000 and the merchandise inventory at December 31, 2008 was overstated by $6,100.
4. On January 2, 2007, equipment costing $12,000 (estimated useful life of 10 years and residual value of $1,000) was incorrectly charged to Operating Expenses. Ingalls records depreciation via the straight-line method. In 2008, fully depreciated equipment (with no residual value) that originally cost $17,500 was sold as scrap for $2,500. Noble credited the proceeds of $2,500 to Property and Equipment.
5. An analysis of 2007 operating expenses revealed that Ingalls charged to expense a three-year insurance premium of $2,700 on January 15, 2007.

Required

1. Prepare the journal entries to correct the books at December 31, 2008. The books for 2008 have not been closed. Ignore income taxes.
2. Prepare a schedule showing the computation of corrected net income for the years ended December 31, 2008 and 2007, assuming that any adjustments are to be reported on comparative statements for the two years. The first items on your schedule should be the net income for each year. Ignore income taxes. (Do not prepare financial statements.)

CASES

COMMUNICATION

C23-1 Accounting Changes

There are three types of accounting changes: changes in accounting principles, changes in accounting estimates, and changes in reporting entities.

Required

Explain the differences and similarities between each of these types of changes, and explain the correct accounting for each. Include a discussion of the advantages and disadvantages of the required accounting method.

C23-2 Accounting Changes

AICPA Adapted The various types of accounting changes may significantly affect the presentation of a company's financial statements, and also affect the trends shown in its comparative financial statements and historical summaries.

Required

1. Explain a change in accounting principle and how a company reports it in the period of the change.
2. Explain a change in accounting estimate and how a company reports it in the period of the change.
3. Explain a change in reporting entity and how a company reports it. Give an appropriate example of a change in reporting entity.

C23-3 Accounting Changes

AICPA Adapted Berkeley Company, a manufacturer of many different products, changed its inventory method from FIFO to LIFO. The LIFO method was determined to be preferable.

In addition, Berkeley changed the residual values used in computing depreciation for its office equipment. It made this change on January 1, 2007 because it obtained additional information.

On December 31, 2007, Berkeley changed the specific subsidiaries comprising the group of companies for which consolidated financial statements are presented.

Required

1. What kind of accounting change is each of the preceding three situations? For each situation, indicate whether or not the company should show:
   a. The retrospective application of a new accounting principle.
   b. The effects on the financial statements of the current and future periods.
   c. Restatement of the financial statements of all prior periods.
2. Why does the company have to disclose a change in accounting principle?

CREATIVE AND CRITICAL THINKING

C23-4 Transition Methods for a Change in Accounting Principle

When the FASB issues a new *Statement*, it may require companies to apply the new principle prospectively, or to account for the change by the retrospective adjustment method.

Required

Why do you think that the FASB requires one of two different transition methods when a company adopts a newly required accounting principle? Do you agree with the use of two alternative methods?

C23-5 Accounting Changes

AICPA Adapted Sometimes a business entity may change its method of accounting for certain items. It may classify the change as a change in accounting principle, a change in accounting estimate, or a change in reporting entity.

The following are three independent, unrelated sets of facts relating to accounting changes.

Situation I A company determined that the depreciable lives of its fixed assets are presently too long to fairly match the cost of the fixed assets with the revenue produced. The company decided at the beginning of the current year to reduce the depreciable lives of all of its existing fixed assets by five years.

Situation II On December 31, 2009, Hyde Company owned 51% of Patten Company, at which time Hyde reported its investment using the cost method, owing to political uncertainties in the country in which Patten was located. On January 2, 2007, the management of Hyde Company was satisfied that the political uncertainties were resolved and the assets of the company were in no danger of nationalization. Accordingly, Hyde will prepare consolidated financial statements for Hyde and Patten for the year ended December 31, 2007.

Situation III A company decides in January 2007 to adopt the straight-line method of depreciation for plant equipment. The straight-line method will be used for new acquisitions, as well as for previously acquired plant equipment for which depreciation had been provided on an accelerated basis.

Required

For each of the preceding situations, provide the following information. Complete your discussion of each situation before going on to the next situation.

1. Type of accounting change.
2. Manner of reporting the change under current generally accepted accounting principles, including a discussion, where applicable, of how amounts are computed.
3. Effect of the change on the statement of financial position and earnings statement.
4. Note disclosures that would be necessary.

C23-6 Accounting Changes

AICPA Adapted It is important in accounting theory to be able to distinguish the types of accounting changes.

Required

1. If a public company desires to change from the sum-of-the-years'-digits depreciation method to the straight-line method for its fixed assets, what type of accounting change would this be? Discuss the permissibility of this change.
2. If a public company obtained additional information about the service lives of some of its fixed assets that showed that the service lives previously used should be shortened, what type of accounting change would this be? Include in your discussion how the change is reported in the year of the change, and what disclosures are made in the financial statements or notes.
3. If a company discovers halfway through a building's life that it ignored the residual value of the building in computing the straight-line depreciation, what type of accounting change would this be? Include in your discussion how the change is reported in the year of the change, and what disclosures are made in the financial statements or notes.
4. Changing specific subsidiaries comprising the group of companies for which consolidated financial statements are presented is an example of what type of accounting change? What effect does it have on the consolidated income statements?

C23-7 Ethics, Enron, Arthur Andersen, and Accounting Changes

In 2001, Enron Corporation filed financial statements in which it did not consolidate various Special Purpose Entities, thereby keeping large amounts of debt off its balance sheet. The company has since declared bankruptcy and admitted that it violated GAAP. Enron's auditor, Arthur Andersen LLP, issued an unqualified audit opinion stating that Enron had followed GAAP. Instead Enron should have changed its accounting principles to conform to GAAP, and Andersen should not have issued an unqualified opinion.

The U.S. Department of Justice began an investigation of Enron and Arthur Andersen. Some employees of Arthur Andersen shredded certain documents related to the audit. As a result the firm was found guilty of obstruction of justice and therefore was no longer able to perform audits. Only a few of the Arthur Andersen partners and employees were involved in the audit and even fewer in the shredding. However, thousands of Arthur Andersen employees lost their jobs.

Required

From an ethical perspective, discuss whether the actions of the Department of Justice were fair with regard to the employees of Arthur Andersen.

C23-8 Ethics and Accounting Changes and Errors

You are auditing the financial records of a company and reviewing the property, plant, and equipment records. Included in the assets are two buildings and numerous machines in each building. One of the buildings is used to manufacture components of toys; the other is used for assembly and packing, using the manufactured components as well as others purchased from suppliers. You see that the company has changed from the straight-line to the double-declining-balance depreciation method at the beginning of the year. You also discover that a $90,000 repair was added to the cost of the building in the previous year. You decide to ask the CFO about these calculations and she replies, "We decided to change the depreciation method because toys have such short lives and get obsolete so fast. You know how kids always want the latest fad. And that is partly why we are also going to recognize an asset impairment of $150,000 this year. And, as for that $90,000, those repairs should make the building last longer. But, anyway, the amount wasn't material to our depreciation calculations." As you walk back to your office, you recall from earlier in the audit that the company uses LIFO for its inventory and that income before income taxes has been around $1 million for each of the last several years.

Required

From financial reporting and ethical perspectives, discuss the issues raised by this situation.