OBJECTIVES

After careful study of 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 a reporting entity.
8. Summarize the methods for making accounting changes and correcting errors.
SYNOPSIS

Types of Accounting Changes

1. GAAP establishes the generally accepted accounting principles for the following changes:

   (a) **Change in Accounting Principle** - A change from one generally accepted accounting principle to another generally accepted accounting principle that is more preferable.

   (b) **Change in Accounting Estimate** - A change in a prior estimate resulting from additional information, more experience, or a new event.

   (c) **Change in Reporting Entity** - A change in the entity being reported, such as a change in the subsidiaries included in a company’s consolidated financial statements.

   In addition to these changes, GAAP also establishes the accounting principles for the corrections of **errors**.

Methods of Reporting an Accounting Change

2. The two possible methods for a company to disclose an accounting change (or error) in its financial statements include:

   (a) **Retrospective application** of a new accounting principle (restate the financial statements of prior years, sometimes referred to as a retroactive adjustment or a restatement).

   (b) Adjust for the change **prospectively** (prospective adjustment).

   Exhibit 23-1 in the text summarizes the methods to be used and the impact on the financial statements.

Accounting for a Change in Accounting Principle

3. A change in accounting principle may be a voluntary change from one generally accepted principle to another or a mandatory change because FASB has adopted a new principle. A change in accounting principle also includes a change in the procedures used to apply the accounting principles. Common changes in accounting principles include changes in inventory cost flow assumptions or revenue recognition methods. Once a company adopts an accounting principle, the principle should not be changed unless a **preferable** principle is adopted. The justification for the change should be clearly disclosed in the notes to the company’s financial statements.

4. A company accounts for a change in accounting principle by the **retrospective application** of the new accounting principle to all prior periods. The cumulative effect of changing to the new accounting principle (net of income taxes) is shown as an adjustment to the beginning balance of retained earnings (with corresponding adjustments to the carrying values of assets and liabilities that are affected by the change).

5. The company then uses the new accounting principle in its current financial statements. The financial statements of prior periods are restated as if the new accounting principle had been applied in that period.
6. The company's disclosures include the nature and reason for the change, a description of the prior-period financial statement information that was retrospectively adjusted, the effect of the change on income, earnings per share and any other financial statement line item that was retrospectively adjusted, and the cumulative effect of the change on retained earnings at the beginning of the earliest period presented.

7. If it is not practicable to retrospectively apply the new accounting principle to a prior period, a company should apply the new accounting principle as if the change was made prospectively as of the earliest date practicable.

8. 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.

9. The retrospective adjustment method enhances comparability because the financial statements are prepared using consistent accounting principles. Major disadvantages of this method include: confusion caused by changing the prior year's financial statements, inconsistency with the all-inclusive concept of income (because adjustments are made directly to retained earnings and bypass the income statement), adverse impacts on a company's contractual arrangements, and the possibility that a company's management may attempt to manipulate income by excluding items from the current year's income statement.

10. A company accounts for a change in accounting principle at the beginning of the first interim period, regardless of the interim period in which it makes the change.

**Accounting for a Change in an Estimate**

11. A change in accounting estimate normally results when uncertainties are resolved as new events occur, more experience is acquired, or as new information is obtained. Changes in estimates are given prospective accounting treatment. That is, the company adjusts the current (and future) financial statements to reflect the new estimate. Prior years' financial statements are not adjusted for changes in accounting estimates.

12. The prospective treatment reduces comparability because results reported in the years before the change are based on different estimates than the years after the change.

13. If a change in accounting estimate cannot be distinguished from a change in accounting principle (e.g., a change in depreciation method), it is considered a change in estimate affected by a change in accounting principle and is accounted for prospectively.

**Accounting for a Change in a Reporting Entity**

14. The third type of accounting change is a change in accounting entity that occurs when: (a) a company presents consolidated or combined financial statements in place of financial statements for individual companies, (b) there is a change in the specific subsidiaries that make up the group of companies, and (c) the companies included in combined financial statements change.

15. A company accounts for a change in reporting entity by retrospectively adjusting the financial statements so that all financial statements are presented for the same entity. This approach improves consistency.
Accounting for a Correction of an Error

16. Errors include mathematical mistakes, mistakes in the application of accounting principles, oversights, or intentional misstatements of accounting records. FASB Statement No. 154 requires that a company account for the correction of material error made in previous periods as a prior period restatement (adjustment).

17. The correction of an error (net of the related income tax effects) is reflected as an adjustment to the beginning balance of a company's retained earnings for each period presented (with corresponding adjustments to the carrying values of assets and liabilities that are affected by the error). This method is similar to the retrospective application of a new accounting principle discussed earlier.

18. Errors may affect only a company's income statement or only its balance sheet, or both financial statements. Errors affecting only the classification of either income statement or balance sheet items can be corrected without a journal entry because the particular financial statement item only needs to be reclassified.

19. Errors affecting both the income statement and the balance sheet can be classified as counterbalancing or noncounterbalancing. Counterbalancing errors are automatically corrected in the next accounting period as a natural part of the accounting process. The following table summarizes the effects of common counterbalancing errors.

<table>
<thead>
<tr>
<th>Type of Adjustment Error</th>
<th>Net Income Current Year</th>
<th>Net Income Next Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending inventory overstated</td>
<td>over</td>
<td>under</td>
</tr>
<tr>
<td>Ending inventory understated</td>
<td>under</td>
<td>over</td>
</tr>
<tr>
<td>Failure to accrue expense at year-end</td>
<td>over</td>
<td>under</td>
</tr>
<tr>
<td>Overstatement of accrued expense at year-end</td>
<td>under</td>
<td>over</td>
</tr>
<tr>
<td>Failure to accrue earned revenue at year-end</td>
<td>under</td>
<td>over</td>
</tr>
<tr>
<td>Overstatement of accrued revenue at year-end</td>
<td>over</td>
<td>under</td>
</tr>
<tr>
<td>Failure to expense prepaid expense at year-end</td>
<td>over</td>
<td>under</td>
</tr>
<tr>
<td>Understatement of year-end prepaid expense</td>
<td>under</td>
<td>over</td>
</tr>
<tr>
<td>Understatement of year-end liability for</td>
<td>over</td>
<td>under</td>
</tr>
<tr>
<td>revenue received in advance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overstatement of year-end liability for</td>
<td>under</td>
<td>over</td>
</tr>
<tr>
<td>revenue received in advance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. A correcting journal entry is necessary for any counterbalancing error that is detected before it has counterbalanced. If the error is discovered after it has counterbalanced, no correcting journal entry is necessary, but the financial statements should be restated so that they are not misleading.

21. Noncounterbalancing errors are those that will not be automatically offset in the next accounting period. A correcting journal entry is necessary for a noncounterbalancing error and any applicable financial statements must be restated.
SELF-EVALUATION EXERCISES

True-False Questions

Determine whether each of the following statements is true or false.

1. When subsidiaries included in the consolidated financial statements change, this is treated as a change in accounting principle.

   Answer: False
   A change in accounting principle occurs when a company adopts a generally accepted accounting principle different from the one used in previous periods. When the subsidiaries included in the consolidated reporting change, this is treated as a change in reporting entity.

2. A company generally accounts for a change in accounting principle by the cumulative effect method.

   Answer: False
   A change in accounting principle is accounted for by the retrospective application of the new accounting principle. The cumulative effect of changing to the new accounting principle (net of income taxes) is shown as an adjustment to the beginning balance of retained earnings (with corresponding adjustments to the carrying values of assets and liabilities that are affected by the change).

3. If a change in accounting principle is made in the third interim period, the carrying values of the assets and liabilities reported in prior interim periods of the current fiscal year are restated to reflect the effect of the change, and retained earnings at the beginning of the year are adjusted to report the cumulative effect of the change.

   Answer: True
   A change in accounting principle made in an interim period is reported by retrospective application of the new accounting principle as of the first interim period, regardless of the interim period in which the change occurs.

4. The initial adoption by a company of an accounting principle for an event or transaction occurring for the first time is not considered a change in accounting principle.

   Answer: True
   The initial adoption of an accounting principle for an event or transaction occurring for the first time does not require retrospective application. Instead, the accounting principle is simply applied in the current and future periods.

5. The mandatory adoption of a new accounting principle as a result of an FASB Statement always requires retrospective application.

   Answer: False
   While a mandatory change as a result of an FASB Statement is a change in accounting principle, the transition guidance specified by the FASB should be followed. This guidance may require a retrospective application or it may allow for some other transition alternative.
6. Counterbalancing errors never require correction by a journal entry because they correct themselves within two years.  
Answer: False  
For counterbalancing errors, the need for a correcting journal entry depends on when the error is discovered. If the company discovers the error during the second year, it must make a correcting journal entry. If the company discovers the error after the second year, no correcting journal entry is necessary, but any incorrect financial statements that are presented for comparative purposes must be restated.

7. A change from the percentage-of-completion to the completed-contract method of accounting for long-term contracts is a change in accounting principle that a company should reflect currently in its income statement for the period of change.  
Answer: False  
A change from the percentage-of-completion to the completed-contract method of accounting is a change in accounting principle that is reported by retrospective application of the new accounting principle.

8. A change in reporting entity requires prospective treatment in the financial statements.  
Answer: False  
A company accounts for a change in reporting entity as a retrospective adjustment so that all of the financial statements presented are for the same entity.

9. A company treats a change from an unacceptable accounting principle to a generally accepted accounting principle as a change in accounting principle.  
Answer: False  
A change from an unacceptable accounting principle to a generally accepted accounting principle is a correction of an error.

10. A change from the LIFO to the FIFO method of inventory valuation requires retrospective application of the new accounting principle to all prior periods presented in the financial statements.  
Answer: True  
A change in inventory valuation (from LIFO to FIFO, from FIFO to LIFO, from average cost to LIFO, etc.) is considered a change in accounting principle.

11. A change from double-declining balance method of depreciation to the straight line method of depreciation is considered a change in accounting principle that is accounted for by retrospective application of the new accounting principle.  
Answer: False  
A change in depreciation method is considered a change in accounting estimate affected by a change in accounting principle and is accounted for prospectively (similar to a change in accounting estimate).

12. A change in the estimated service life for plant assets requires prospective treatment in the accounting records of the current and future years.  
Answer: True  
A change in an accounting estimate is accounted for prospectively (in the period of the change and any future periods that are affected).

13. If a company overstates ending inventory in the current period, it will understate income in the following period.  
Answer: True  
An overstatement of ending inventory is a counterbalancing error that will automatically correct itself in the next accounting period.
14. If a company expenses immediately a cost that should be capitalized and depreciated, the error is noncounterbalancing.

Answer: True
A noncounterbalancing error is an error that will not be offset in the next accounting period. Noncounterbalancing errors require a correcting journal entry.

15. A change in an estimate that was not made in good faith is treated prospectively.

Answer: False
A change in estimate that is not made in good faith is considered an error, which requires a prior-period adjustment.

16. The prior-period adjustment method is consistent with the all-inclusive income concept.

Answer: False
Similar to the retrospective application of a new accounting principle, the prior-period adjustment method allows the financial effects of a transaction to bypass the income statement of the current period, which is inconsistent with the all-inclusive income concept.

17. Whenever it is impossible to determine whether a change is a change in accounting principle or a change in estimate, the change is treated as a change in estimate.

Answer: True
A change in estimate that is indistinguishable from the change in accounting principle is considered a change in accounting estimate affected by a change in accounting principle, which is treated as a change in estimate (accounted for prospectively).

Multiple Choice Questions
Select the one best answer for each of the following questions.

1. Which of the following is not a possible method of disclosing an accounting change or error?
   a. retrospective application
   b. cumulative effect adjustment
   c. prospective application
   d. prior-period adjustment

Answer: (b) cumulative effect adjustment
Cumulative effect adjustment is not an acceptable method of disclosing an accounting change or error under current GAAP.

Current accounting rules require a change in accounting principle to be disclosed by retrospective application of the new accounting principle (answer (a)), a change in estimate to be disclosed by prospective application (answer (c)), and an error to be disclosed by a prior-period adjustment (answer (d)).
2. The Always Change Diaper Service Company decided to change from the straight-line to the double-declining-balance (DDB) depreciation method. The asset was purchased on January 1, 2010, for $40,000 and had an estimated useful life of five years and no residual value. The company decided to change the method of depreciation at the beginning of 2012. The company's net income for 2012 would have been $100,000 if the straight-line method of depreciation was used. What is the amount of depreciation expense recognized in 2012?
   a. $5,760
   b. $8,000
   c. $9,600
   d. $16,000

Answer: (d) $16,000. A change in depreciation method is treated as a change in estimate and accounted for prospectively. The asset has a book value of $24,000 at the beginning of 2012 and a remaining life of three years. Double-declining-balance depreciation is calculated as .6667 (twice the straight-line rate of .3333) × $24,000 = $16,000 (rounded).

Answer (b) is incorrect because this is the amount of straight-line depreciation that would be taken in 2012. Answer (a) is incorrect because this is the amount of depreciation that would have been recorded in 2012 assuming the double-declining balance method had been applied retrospectively (beginning in 2010). Answer (c) is incorrect because this is the cumulative depreciation difference between the straight-line and double-declining balance methods of depreciation for 2010 and 2011.

3. An accounting change from straight-line to accelerated depreciation is an example of:
   a. a change in accounting principle
   b. a change in accounting estimate
   c. a change in accounting estimate affected by a change in accounting principle
   d. a change in a reporting entity
   e. an error correction.

Answer: (c) a change in accounting estimate affected by a change in accounting principle. The change in depreciation method is indistinguishable from the change in estimate; thus, the change in depreciation method results from a change in estimate. Such a change would be accounted for prospectively.

Answers (a) and (b) are incorrect because the change in depreciation method (the accounting principle) is indistinguishable from the change in accounting estimate. Answer (d) is incorrect because changing depreciation methods does not result in an error.

4. A change in the estimated life of a depreciable asset based on newly available information is an example of:
   a. a change in accounting principle
   b. a change in accounting estimate
   c. a change in a reporting entity
   d. an error correction.

Answer: (b) a change in estimate. Changes in the estimated life of a depreciable asset are common estimates that are required by GAAP. As new events occur, as more experience is acquired, or as additional information is obtained, these estimates will change.

Answer (a) is incorrect because a change in accounting principle occurs when a company adopts a generally accepted accounting principle different from the one previously used. Answer (c) is incorrect because a change in reporting entity occurs when there is a change in the entity being reported that results in financial statements that are those of a different reporting entity. Answer (d) is incorrect because an error results from the use of an unacceptable accounting principle, the use of an estimate that was not in good faith, mathematical miscalculations, or the omission of an accrual or deferral.
5. Most changes in an accounting principle are accounted for:
   a. by retrospective application.
   b. by the cumulative effect method.
   c. prospectively.
   d. by a prior-period restatement.
   e. any of these, as long as the same method is used for all similar changes.

   **Answer**: (a) by retrospective application. Current accounting rules require a change in accounting principle to be disclosed by retrospective application of the new accounting principle. Answer (b) is incorrect because the cumulative effect method is no longer used. Answer (c) is incorrect because a change in estimate is accounted for prospectively. Answer (d) is incorrect because an error is accounted for by a prior-period adjustment. Answer (e) is wrong because GAAP outlines the accounting treatment for various accounting changes.

6. Retrospective application of the new accounting principle is required for all of the following accounting changes except:
   a. a change from the LIFO inventory costing method to another method.
   b. a change to the LIFO inventory costing method.
   c. a change in the method of accounting for long-term construction-type contracts.
   d. a change to or from the "full cost" method of accounting used in extractive industries.
   e. a change from the double-declining balance to the straight-line method of depreciation.

   **Answer**: (e) a change from the double-declining balance to the straight-line method of depreciation.

   A change from the double-declining balance to the straight-line method of depreciation is accounted for prospectively. Answers (a), (b), (c), and (d) are all examples of changes in accounting principles that are accounted for by retrospective application of the new accounting principle.

7. Which of the following is not an example of an error?
   a. a change from an unacceptable accounting principle to one that is generally accepted
   b. a change in an estimate when the original estimate was not made in good faith
   c. mathematical miscalculations
   d. a change in an estimate based on newly available information

   **Answer**: (d) a change in an estimate based on newly available information

   Generally accepted accounting principles require a company to use estimates. Because estimating future events is uncertain, changes in estimate are inevitable and are not considered errors.

   Answers (a), (b), and (c) are all examples of errors.
8. The Dallas Company discovered the following errors affecting its financial statements issued on December 31, 2011:

   (1) depreciation expense of $4,000 was understated for 2011
   (2) merchandise costing $8,000 was in transit (FOB shipping point) at December 31, 2011; the purchase was not recorded and the inventory was not included in the physical inventory amount
   (3) prepaid expenses of $1,000 were omitted at December 31, 2011, and the cash payment during the period was recorded as an expense; and
   (4) the company failed to accrue $2,000 interest expense on December 31, 2011.

Assuming that no correcting entries were made, income before income taxes for 2011 was:

   a. $1,000 overstated.
   b. $4,000 overstated.
   c. $3,000 understated.
   d. $5,000 overstated.
   e. none of these.

   **Answer: (d) $5,000 overstated.**

Multiple errors were made and their effect must be aggregated. The understatement of depreciation expense caused income before taxes to be overstated by $4,000. Because the merchandise was shipped FOB shipping point prior to the end of the year, it should have been included as a purchase and as part of inventory. The failure to do so resulted in purchases being understated by $8,000 and ending inventory being understated by $8,000. These errors offset resulting in no effect on cost of goods sold or net income. The failure to record the prepaid expense correctly resulted in an overstatement of expense of $1,000, which translates to an understatement of income before taxes of $1,000. The failure to accrue interest expense caused expenses to be understated by $2,000, which translates to an overstatement of income before taxes of $2,000. The net effect of these four errors is an overstatement of income before taxes of $5,000.

Answer (a) is incorrect. Error #3 caused expenses to be overstated by 1,000. Answer (b) is incorrect because this is the effect of the first error only. Answer (c) is incorrect because this is the net effect of Error #1 and Error #3 on income before taxes.

9. In 2010, Jones Company failed to include the depreciation expense for equipment acquired during the last quarter of the fiscal year. Jones discovered the error in 2012 just after publication of its 2011 financial statements. This error is:

   a. a counterbalancing error that corrected itself at the end of 2011.
   b. a noncounterbalancing error that will never be corrected and therefore requires a correcting journal entry in 2012.
   c. a noncounterbalancing error that will be corrected when the asset is sold or at the end of its useful life and therefore requires a correcting journal entry in 2012.
   d. a counterbalancing error that requires a correcting journal entry in 2012.

   **Answer: (c) a noncounterbalancing error that will be corrected when the asset is sold or at the end of its useful life and therefore requires a correcting journal entry in 2012.**

The failure to properly deprecate the asset is an example of a noncounterbalancing error. When the asset is sold, the equipment will have a higher book value (due to the failure to record the depreciation) and the resulting gain or loss on disposal will effectively offset the depreciation error. However, because the error was discovered in 2012, prior to the end of the equipment’s useful life, a correcting journal entry is necessary.

Answers (a) and (d) are incorrect because the failure to properly deprecate an asset is a noncounterbalancing error. Answer (b) is incorrect because the noncounterbalancing error will be corrected when the company disposes of the asset or at the end of the equipment’s useful life.
10. Which of the following statements regarding International Accounting Standards for accounting for changes and errors is not true?
   a. Material changes in estimate are accounted for by prospective adjustment.
   b. The disclosure requirements of international standards are more extensive than the disclosure requirements of U.S. GAAP.
   c. International standards allow for an error to be corrected in the current period if it is impracticable to restate prior periods.
   d. Accounting for a change in accounting principle is consistent with U.S. GAAP.

   Answer: (b) The disclosure requirements of international standards are more extensive than the disclosure requirements of U.S. GAAP.

U.S. GAAP is generally viewed by most as having more extensive disclosure requirements than those required by international standards.

FASB Statement No. 154 was part of the FASB’s short-term convergence project that helped converge U.S. GAAP with that of the International Accounting Standards Board. Therefore, answers (a), (c), and (d) are incorrect because U.S. GAAP is generally consistent with international standards.

Problem-Solving Strategies

Change in Accounting Principle

A change in accounting principle is accounted for by the retrospective application of a new accounting principle. For example, the Eagle Company began operations on January 1, 2011, and used the LIFO method in costing its raw material inventory. At the beginning of 2012, management decided to change to the FIFO method. The company has a tax rate of 30% and 10,000 common shares outstanding. The following information has been developed.

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIFO - Ending Inventory</td>
<td>$500,000</td>
<td>520,000</td>
</tr>
<tr>
<td>FIFO - Ending Inventory</td>
<td>550,000</td>
<td>590,000</td>
</tr>
<tr>
<td>Revenues</td>
<td>1,500,000</td>
<td>1,750,000</td>
</tr>
<tr>
<td>Income Before Income Taxes (computed under the LIFO method)</td>
<td>600,000</td>
<td>650,000</td>
</tr>
</tbody>
</table>

Compute the adjusting journal entry necessary to reflect the change in accounting principle and prepare comparative income statements and retained earnings statements.

**Strategy:** The first step should be to determine the cumulative effect of the change in accounting principle for all years prior to the current year. In this case, the cumulative effect of the change is to increase inventory by $50,000 in 2011 ($550,000 – $500,000).

**Strategy:** Remember that because operations began on January 1, 2011, beginning inventory using either FIFO or LIFO would be zero.

The journal entry to record the change in accounting principle would be:

\[
\begin{align*}
\text{Inventory} & \quad 50,000 \\
\text{Income Tax Payable} & \quad 15,000 \\
\text{Retained Earnings} & \quad 35,000
\end{align*}
\]
Strategy: Whether you choose to prepare a statement of cash flows using the visual inspection or the increase in inventory, determined above, also affects cost of goods sold. Remember the formula to determine cost of goods sold: beginning inventory + purchases - ending inventory = cost of goods sold. A higher ending inventory would result in lower cost of goods sold, higher income, and ultimately, higher retained earnings.

Strategy: Note that the retained earnings is always shown net of taxes. The tax effect is normally reflected in an income tax payable or income tax receivable account.

The comparative financial statements are shown below:

### Comparative Income Statements

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$1,750,000</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>(1,080,000)</td>
<td>(850,000)</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>$670,000</td>
<td>$650,000</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>(201,000)</td>
<td>(195,000)</td>
</tr>
<tr>
<td>Net income</td>
<td>$469,000</td>
<td>$455,000</td>
</tr>
</tbody>
</table>

Earnings per share (10,000 shares) $4.69, $4.55

Strategy: Make sure that you adjust the appropriate income statement amounts in a manner consistent with the financial statement effects reflected in the journal entry. Specifically, because the switch to FIFO from LIFO resulted in a higher inventory amount and lower cost of goods sold, income before income taxes for 2011 should have increased by $50,000 over what was reported under LIFO.

Strategy: Note that the amounts for cost of goods sold are calculated as the difference revenues (given in the problem) and income before income taxes (after adjustment for the effect of the change in accounting principle). Also, taxes are computed as 30% (given in the problem) of the income before income taxes (after adjustment for the change in accounting principle).

Strategy: For 2012, the cumulative difference between LIFO and FIFO was $70,000 ($590,000 – $520,000).

However, because $50,000 of this difference was recognized in 2011, only $20,000 will be recognized in 2012. Thus, 2012 income before taxes will be $20,000 higher than the amount reported under LIFO.

### Comparative Retained Earnings Statements

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning unadjusted retained earnings</td>
<td>$420,000</td>
<td>$0</td>
</tr>
<tr>
<td>Plus: Cumulative Effect Adjustment (net of income taxes of $15,000)</td>
<td>35,000</td>
<td>0</td>
</tr>
<tr>
<td>Adjusted beginning retained earnings</td>
<td>$455,000</td>
<td>$0</td>
</tr>
<tr>
<td>Add: Net income</td>
<td>469,000</td>
<td>455,000</td>
</tr>
<tr>
<td>Ending retained earnings</td>
<td>$924,000</td>
<td>$455,000</td>
</tr>
</tbody>
</table>
Strategy: Before completing the retained earnings statement, compute the balance in beginning retained earnings under the “old” accounting method, before the accounting change. Because Eagle Company started in 2011, beginning retained earnings was zero. Beginning retained earnings for 2012 was beginning retained earnings plus net income under LIFO − $420,000 (600,000 less 180,000 of taxes).

Strategy: Be sure to check that the adjustment to retained earnings in 2012 ($35,000) is equal to the credit to retained earnings in the journal entry for 2012. Also, be sure to check that the ending retained earnings balance for 2011 ($455,000) equals the adjusted beginning balance for 2012.

Change in Estimate

A change in estimate is accounted for prospectively.

Spirit, Inc. acquired equipment on January 1, 2002, for $100,000. Spirit estimates that the equipment will have a useful life of 20 years and a $10,000 residual value. Spirit uses straight-line depreciation. On January 1, 2011, Spirit determines that the equipment will only be useful for ten more years and the salvage value is estimated to be zero. Compute the depreciation for 2011.

Strategy: You should first determine the carrying value (cost less accumulated depreciation) of the asset on the date the estimate was revised (January 1, 2011).

Accumulated depreciation is computed based on yearly depreciation of $4,500 [(100,000 − $10,000)/20 years] for five years or $22,500 ($4,500 × 5 years). The carrying value of the equipment at January 1, 2011, is $77,500 (100,000 cost less $22,500 of accumulated depreciation).

Strategy: Once you've computed the carrying value on the date the estimates are revised, perform the depreciation calculations using the carrying value as the “cost” of the asset on that date.

Depreciation expense for 2011 is $7,750 [(77,500 carrying value − 0 residual value)/10 years remaining].

Errors

An error is accounted for as a prior-period restatement (adjustment).

Nova, Inc. failed to accrue wages of $5,000 in 2011. Prepare the correcting journal entries, if necessary, assuming the error was discovered in 2012. Ignore taxes.

Strategy: Write the original erroneous journal entry (what the company did) and the correct journal entry (what the company should have done). Compare the two entries to determine which financial statement elements were affected.
Nova did not make a journal entry for 2011. However, correct journal entry should have been:

- Wage Expense $5,000
- Wage Payable $5,000

Comparing the journal entries, wage expense is understated by $5,000 and wages payable is understated by $5,000.

**Strategy:** It is often helpful to make a chart of the financial statement elements affected. Be sure that the accounting equation stays balanced. Also, note that any effect on net income needs to be closed to equity.

Transferring the financial statement effects to the following chart, you see that this error affects expenses, net income, and liabilities.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
<th>Equity</th>
<th>Revenue</th>
<th>Expense</th>
<th>Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5,000 Under</td>
<td>$5,000 Over</td>
<td></td>
<td></td>
<td>$5,000 Under</td>
<td>$5,000 Over</td>
</tr>
</tbody>
</table>

The journal entry to correct this error would be:

- Retained Earnings $5,000
- Wages Payable $5,000

**Strategy:** The correcting journal entry will involve a debit or credit to retained earnings for the effect of the error on the previous period's income that has closed to equity. Because the income statement accounts are temporary accounts and start each period with zero, never make the correcting journal entry to an income statement account. The other half of the journal entry can be determined by analyzing the journal entries you made in the first step.
TEST YOUR KNOWLEDGE

1. At the beginning of 2012, Tiger Company decided to change from the average cost inventory cost flow assumption to the FIFO cost flow assumption for financial reporting purposes. The following data are available in regard to Tiger Company’s pretax operating income and cost of goods sold.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to 2011</td>
<td>$2,000,000</td>
<td>150,000</td>
<td>$2,150,000</td>
</tr>
<tr>
<td>2011</td>
<td>1,000,000</td>
<td>50,000</td>
<td>1,050,000</td>
</tr>
<tr>
<td>2012</td>
<td>1,100,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The income tax rate is 30%. The company has a simple capital structure with 100,000 shares of common stock outstanding. The company computed its 2012 income before taxes using the newly adopted inventory cost flow method. Tiger Company’s 2011 and 2012 revenues were $2,500,000 and 2,800,000, respectively. Its retained earnings balances at the beginning of 2011 and 2012 (unadjusted) were $1,400,000 and $2,100,000, respectively. The company paid no dividends in any year.

Prepare (a) the journal entry necessary at the beginning of 2012 to reflect the change in accounting principle and (b) the income statements and retained earnings statements for 2011 and 2012.

2. For each of the following errors, indicate the effect (over, under, or no effect) on the current year’s and next year’s net income.

<table>
<thead>
<tr>
<th>Description of Error</th>
<th>Net Income 2011</th>
<th>Net Income 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 12/31/11 inventory overstated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) 12/31/11 inventory understated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Prepaid insurance 12/31/12 overstated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Depreciation expense (straight-line) for 2011 understated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Understatement of 12/31/11 unearned revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) Failure to accrue 12/31/11 revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g) Understatement of 12/31/11 prepaid expense</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. The Al Right Company made the following errors that were discovered by the auditors in connection with preparation of the December 31, 2012, income statement. It reported net income of $70,000 for 2011 and $100,000 for 2012. Ignore income taxes.

(1) On January 1, 2011, the company recorded the $30,000 acquisition cost of equipment with a ten-year life as maintenance expense. Straight-line depreciation is usually used and no residual value is expected at the end of the useful life.

(2) On January 1, 2011, Al Right Company collected $10,000 for two years’ rental income in advance and failed to set up an unearned revenue account at year-end. It credited all the rent to Rent Revenue when received.

(3) A three-year insurance policy costing $12,000 was charged to expense when paid in advance on January 1, 2011.

(4) Ending inventory was overstated by $7,000 on December 31, 2011, and understated by $3,000 on December 31, 2012, due to computational errors.

(5) Accrued wages expense was omitted in the amount of $7,000 on December 31, 2011, and $8,000 on December 31, 2012.

Complete the schedule below to show the computation of the correct income for 2011 and 2012:

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income as reported</td>
<td>$100,000</td>
<td>$70,000</td>
</tr>
</tbody>
</table>

Net income as corrected
Answers to Test Your Knowledge

1. (a) The total decrease in cost of goods sold prior to 2012 of $200,000 ($150,000 + $50,000) increases the reported income before income taxes and the value of the inventory. Retained earnings at the beginning of 2012 are increased by $140,000, net of taxes ($200,000, net of taxes of 30%). The journal entry is:

<table>
<thead>
<tr>
<th>Account</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>Income Tax Payable</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>140,000</td>
<td></td>
</tr>
</tbody>
</table>

(b) Comparative Income Statements

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$2,800,000</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>1,700,000</td>
<td>1,450,000</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>$1,100,000</td>
<td>$1,050,000</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>(330,000)</td>
<td>(315,000)</td>
</tr>
<tr>
<td>Net income</td>
<td>$ 770,000</td>
<td>$ 735,000</td>
</tr>
<tr>
<td>Earnings per share</td>
<td>$7.70</td>
<td>$7.35</td>
</tr>
</tbody>
</table>

Comparative Retained Earnings Statements

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning unadjusted retained earnings</td>
<td>$2,100,000</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>Less: Cumulative Adjustment, net of tax ($60,000 in 2012, 45,000 in 2011)</td>
<td>140,000</td>
<td>105,000</td>
</tr>
<tr>
<td>Adjusted beginning retained earnings</td>
<td>$2,240,000</td>
<td>$1,505,000</td>
</tr>
<tr>
<td>Add: Net income</td>
<td>770,000</td>
<td>735,000</td>
</tr>
<tr>
<td>Ending retained earnings</td>
<td>$3,010,000</td>
<td>$2,240,000</td>
</tr>
</tbody>
</table>

2. (a) over under
(b) under over
(c) no effect over
(d) over no effect
(e) over under
(f) under over
(g) under over
### 3. Accounting for Changes and Errors

<table>
<thead>
<tr>
<th>Description</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income as reported</td>
<td>$100,000</td>
<td>$70,000</td>
</tr>
<tr>
<td>Purchase of equipment erroneously recorded</td>
<td></td>
<td></td>
</tr>
<tr>
<td>as expense on January 1, 2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation on purchase of equipment</td>
<td>(3,000)</td>
<td>(3,000)</td>
</tr>
<tr>
<td>Omission of unearned rent December 31, 2011</td>
<td>5,000</td>
<td>(5,000)</td>
</tr>
<tr>
<td>Omission of prepaid insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 31, 2011</td>
<td>(4,000)</td>
<td>8,000</td>
</tr>
<tr>
<td>Overstatement of December 31, 2011, inventory</td>
<td>7,000</td>
<td>(7,000)</td>
</tr>
<tr>
<td>Understatement of December 31, 2012, inventory</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Failure to accrue wages expense on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 31, 2011</td>
<td>7,000</td>
<td>(7,000)</td>
</tr>
<tr>
<td>Failure to accrue wages expense on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 31, 2012</td>
<td>(8,000)</td>
<td></td>
</tr>
<tr>
<td>Net income as corrected</td>
<td>$107,000</td>
<td>$86,000</td>
</tr>
</tbody>
</table>