19

OBJECTIVES

After reading this chapter, you will be able to:

- 1 Understand permanent and temporary differences.
- 2 Explain the conceptual issues regarding interperiod tax allocation.
- 3 Record and report deferred tax liabilities.
- 4 Record and report deferred tax assets.
- 5 Explain an operating loss carryback and carryforward.
- 6 Account for an operating loss carryback.
- 7 Account for an operating loss carryforward.
- 8 Apply intraperiod tax allocation.
- 9 Classify deferred tax liabilities and assets.

Accounting for Income Taxes

Tax-Advantaged Transactions

The complexity of the Internal Revenue Code is well known. With thousands of new pronouncements being issued annually by the Internal Revenue Service (IRS) and the court system, there are many developing areas of tax law that present significant challenges to company management. When faced with having to make difficult choices as to the tax treatment of transactions that have no clearcut answers, many managers will choose to take aggressive positions to minimize the company's tax liability. These managers know that an aggressive tax position will likely draw challenges from the IRS, with some positions ultimately being accepted and others being rejected. Many companies will record the tax benefits from these transactions in the financial statements on an "as-filed" basis. That is, they record a tax liability consistent with their tax return, even though it is probable that, after an IRS review, some of their tax positions will be reversed and additional taxes will be owed. In such a case, companies will report a tax contingency reserve on their financial statements based on the risk of being challenged by the IRS and a reasonable estimate of the amount of adjustment that will be required. The amount in such reserves can be significant. For example, **Hershey Foods Corp**. reported a reduction of income tax expense in the second quarter of 2004, of \$61.1 million related to the settlement of federal tax audits as well. as a number of state tax audit issues.

Believing that some companies may try to manage earnings through their estimate of tax contingencies, the financial reporting



implications of such tax-advantaged transactions have drawn the attention of the Securities and Exchange Commission (SEC). In several speeches by SEC staff, the SEC has reiterated its view that it would be inappropriate to recognize any benefit (e.g., reduced income tax expense) resulting from a tax-advantaged transaction unless it was probable that the tax position will be accepted. However, because the FASB is currently developing guidance on the treatment of such transactions, the "as-filed" basis will be allowed as long as it is consistently applied. In addition the SEC has repeatedly stressed the need for adequate disclosures of any tax contingencies. Companies, however, are afraid that detailed financial statement disclosures or information contained in the auditor's tax accrual work papers will provide a roadmap for the IRS to follow in identifying transactions to be examined. While such concerns are

FOR FURTHER INVESTIGATION

For a discussion of accounting issues related to income taxes, consult the Business & Company Resource Center (BCRC):

- Learning to Think Like Warren
 Buffett. David Henry, Business Week,
 0007-7135, Feb 14, 2005 i3920 p29.
- Do firms use the deferred tax asset valuation allowance to manage earnings? Christine C. Bauman, Mark P. Bauman, Robert F. Halsey, *Journal of the American Taxation Association*, 0198-9073, Spring 2002, v24, i1, pS27(25).

valid, the SEC view is that companies voluntarily accepted the disclosure requirements when they chose to access public markets, and the presentation of information useful to investors should be the overriding concern.

The objectives of financial reporting and the Internal Revenue Code are different. The objective of generally accepted accounting principles for financial reporting is to provide useful information to decision makers about companies. This information enables external users to make the investment and credit decisions we discussed in Chapter 1. The overall objective of the Internal Revenue Code, on the other hand, is to obtain funds, in an equitable manner, to operate the federal government. Additionally, tax laws frequently have been used to stimulate and regulate the economy. For example, the percentage depletion deduction attempts to stimulate new investment in natural resource assets.

As a result of their differing objectives, financial reporting is governed by generally accepted accounting principles (GAAP) and income tax reporting is governed by the Internal Revenue Code (IRC).¹ If a corporation reports different revenues and/or expenses for financial reporting than it does for income tax reporting, it must determine (1) the current and noncurrent deferred income tax liabilities and/or assets to report on its balance sheet, and (2) the income tax expense to match against its pretax financial income² on its income statement. We discuss the procedures used to determine and report these items in the following sections.

OVERVIEW AND DEFINITIONS

Consider the condensed income statements and income tax returns for the Freese Corporation for 2007 and 2008 that we show in Exhibit 19-1.

EXHIBIT 19-1 Freese Corporation				
Income Statement and Income Tax Return Years Ended December 31, 2007 and 2008				
	Income St	tatement	Income Ta	ax Return
	2007	2008	2007	2008
Revenues Cost of goods sold	\$180,000 (75,000)	\$200,000 (85,000)	\$170,000 (70,000)	\$210,000 (90,000)
Gross profit Other expenses Pretax income from continuing operations Income taxes	\$105,000 (60,000) \$ 45,000 (11,000)	\$115,000 (50,000) \$ 65,000 (16,000)	\$100,000 (60,000) \$ 40,000 (9,200)	\$120,000 (60,000) \$ 60,000 (15,300)
Income from continuing operations Extraordinary item (net of income tax effect)	\$ 34,000	\$ 49,000 (10,000)	\$ 30,800	\$ 44,700 —
Net income	\$ 34,000	\$ 39,000	\$ 30,800	\$ 44,700

Causes of Differences

There are several differences between the Freese Corporation's income statements and income tax returns in Exhibit 19-1: (1) the amounts of revenues recognized in 2007 and 2008 are different, (2) the cost of goods sold subtracted from revenues differ in 2007 and 2008, (3) other expenses differ in 2008, and (4) an extraordinary item is separately reported on the income statement in 2008 but does not appear on the income tax

^{1.} Corporations may be subject to federal, state, and foreign income taxes. In this chapter we limit the discussion to the impact of federal income taxes on financial reporting.

^{2.} The terms financial income, financial accounting income, book income, and accounting income are synonymous and may be used interchangeably. Because the FASB uses the term financial income in its discussion of accounting for income taxes, we use that term throughout this chapter.

return for that year. The causes of differences between a corporation's pretax financial income and taxable income (and potentially between its income tax expense and its income tax obligation) can be categorized into five groups:

- Permanent Differences. Some items of revenue and expense that a corporation reports for financial accounting purposes are never reported for income tax purposes under the IRC. Other items classified as allowable deductions for income tax reporting do not qualify as expenses under GAAP. These items cause permanent differences between the corporation's pretax financial income and taxable income.
- Temporary Differences. A corporation reports some items of revenue and expense in
 one period for financial accounting purposes, but in an earlier or later period for
 income tax purposes. These items cause temporary differences between the corporation's pretax financial income and taxable income.
- 3. Operating Loss Carrybacks and Carryforwards. When a corporation reports an operating loss in a given year, the IRC allows the corporation to carry back or carry forward the loss to offset previous or future reported taxable income on its income tax return. The corporation reports its pretax financial income or loss in the current year on its income statement.
- 4. *Tax Credits*. To stimulate certain investments, or to provide tax relief in special circumstances, the IRC provides specific tax credits that a corporation may deduct from its income taxes owed to determine its current income taxes payable. Although use of a tax credit does not cause a difference between the corporation's pretax financial income and taxable income, it may cause a difference between the corporation's income tax expense and income tax obligation.
- 5. *Intraperiod Tax Allocation*. A corporation allocates its income tax for financial accounting purposes to (a) income from continuing operations, (b) results from discontinued operations, (c) extraordinary items, (d) retrospective and prior period adjustments, and (e) other comprehensive income. No similar allocation is made on its income tax return.

Definitions

The FASB studied the impact of using different accounting procedures for financial reporting and income tax reporting. Based on its findings, the Board issued FASB Statement No. 109, which currently defines GAAP for income taxes. The following sections discuss the provisions of the *Statement* as they apply to the differences between income reported for financial reporting purposes and income reported for taxation purposes. The discussion includes a number of definitions³ related to a corporation's income taxes, which we list in Exhibit 19-2.

INTERPERIOD INCOME TAX ALLOCATION: BASIC ISSUES

Interperiod income tax allocation is the allocation of a corporation's income tax obligation as an expense to various accounting periods. Differences between a corporation's pretax financial income and taxable income arise from both temporary and permanent differences. Temporary differences ultimately reverse and require interperiod tax allocation. Permanent differences are *not* subject to interperiod tax allocation. We discuss them first in this section because you must be able to classify differences as permanent or temporary for interperiod tax allocation purposes.

1 Understand permanent and temporary differences.

These definitions are adapted from "Accounting for Income Taxes," FASB Statement of Financial Accounting Standards No. 109 (Stamford, Conn.: FASB, 1992), par. 289.

EXHIBIT 19-2 Key Terms Related to a Corporation's Income Taxes

Deferred tax asset. The deferred tax consequences of future deductible amounts and operating loss carryforwards. A deferred tax asset is measured using the enacted tax rate for the period of recovery or settlement and provisions of the tax law. A deferred tax asset is reduced by a valuation allowance if, based on the available evidence, it is more likely than not that some portion or all of a deferred tax asset will not be realized.

Deferred tax consequences. The future effects on income taxes, as measured by the enacted tax rate and provisions of the tax law, resulting from temporary differences and operating loss carryforwards at the end of the current year.

Deferred tax expense (or benefit). The change during the year in deferred tax liabilities and assets. **Deferred tax liability.** The deferred tax consequences of future taxable amounts. A deferred tax liability is measured using the enacted tax rate for the period of recovery or settlement and provisions of the tax law.

Future deductible amount. Temporary difference that will result in deductible amounts in future years when the related asset or liability is recovered or settled, respectively (also called a *deductible temporary difference*).

Future taxable amount. Temporary difference that will result in taxable amounts in future years when the related asset or liability is recovered or settled, respectively (also called *taxable temporary difference*).

Income tax expense (or benefit). The sum of income tax obligation and deferred tax expense (or benefit).

Income tax obligation (or refund). The amount of income taxes paid or payable (or refundable) for a year, as determined by applying the enacted tax law to the taxable income or operating loss for that year. Sometimes called *current tax expense* (or *benefit*).

Operating loss carryback. An excess of tax-deductible expenses over taxable revenues in a year that may be carried back to reduce taxable income in a prior year.

Operating loss carryforward. An excess of tax-deductible expenses over taxable revenues in a year that may be carried forward to reduce taxable income in a future year.

Permanent difference. A difference between pretax financial income and taxable income in an accounting period, which will never reverse in a later accounting period.

Taxable income. The excess of taxable revenues over tax deductible expenses and exemptions for the year.

Temporary difference. A difference between the tax basis of an asset or liability and its reported amount in the financial statements that will result in taxable or deductible amounts in future years when the reported amount of the asset is recovered or the liability is settled.

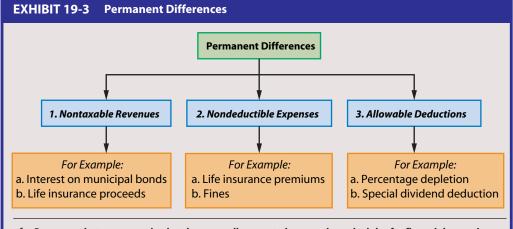
Valuation allowance. The portion of a deferred tax asset for which it is more likely than not that a tax benefit will not be realized.

Permanent Differences

A **permanent difference** is a difference between a corporation's pretax financial income and taxable income in an accounting period that will *never* reverse in a later accounting period. These differences arise because the U.S. Congress sets economic policy or partially offsets a provision of the tax code that may impose too heavy a tax burden on a particular segment of the economy. There are three types of permanent differences between a corporation's pretax financial income and taxable income. We show a diagram of these permanent differences in the upper part of Exhibit 19-3. We explain the examples in the lower part.



Permanent differences affect *either* a corporation's reported pretax financial income *or* its taxable income, *but not both*. In other words, permanent differences do *not* have deferred tax consequences. They do not require interperiod income tax allocation because GAAP and the IRC differ on what revenues and expenses a corporation recognizes. A corporation that has nontaxable revenue or additional deductions for income tax reporting purposes will report a lower taxable income (compared to its pretax financial income) than it would have if these items did not occur. A corporation with expenses that are not tax deductible will report a higher taxable income.



- Revenues that are recognized under generally accepted accounting principles for financial reporting purposes but are never taxable. For example:
 - a. Interest on municipal bonds. For income tax purposes the interest received by a corporation on an investment in municipal bonds generally is never taxable. The provision enables municipalities to offer bonds that pay a relatively lower rate of interest than corporate bonds of a similar quality. This reduces the cost of borrowing for these municipalities.
 - b. Life insurance proceeds payable to a corporation upon the death of an insured employee. For income tax purposes the proceeds received are not taxable to the corporation. Instead, they are treated as partial compensation for the loss of the employee.
- 2. Expenses that are recognized under generally accepted accounting principles for financial reporting purposes but are never deductible for income tax purposes. For example:
 - a. Life insurance premiums on officers. For income tax purposes the periodic premiums for life insurance policies on officers are not deductible as expenses. This procedure is consistent with the treatment of the insurance proceeds discussed in 1(b).
 - b. Fines. For income tax purposes, fines or other expenses related to the violation of a law are not deductible.
- 3. Deductions that are allowed for income tax purposes but do not qualify as expenses under generally accepted accounting principles. For example:
 - a. Percentage depletion in excess of cost depletion. Certain corporations that own wasting assets are allowed to deduct a percentage depletion in excess of the cost depletion on a wasting asset from their revenues for income tax purposes. This provision of the tax code was designed to encourage exploration for natural resources.
 - b. Special dividend deduction. For income tax purposes corporations are allowed a special deduction (usually 70% or 80%) for certain dividends from investments in equity securities.

Temporary Differences

A temporary difference is a difference between the tax basis (i.e., book value) of a corporation's asset or liability for income tax purposes and the reported amount (i.e., book value) of the asset or liability in its financial statements that will result in taxable or deductible amounts in future years when the corporation recovers the reported amount of the asset (or settles the liability).⁴ In other words, a temporary difference causes a difference between a corporation's pretax financial income and taxable



^{4.} Temporary differences also include items that a corporation cannot identify with a particular asset or liability for financial reporting but which (a) result from events that it has recognized in the financial statements, and (b) will result in taxable or deductible amounts in future years based on provisions in the tax law.

income that "originates" in one or more years and "reverses" in later years. A corporation's temporary differences sometimes are called *timing* differences because of the different time periods in which they affect pretax financial income and taxable income. A corporation's temporary differences generally relate to its individual assets and liabilities and may be classified into four groups⁵, which we show in Exhibit 19-4.

EXHIBIT 19-4 Temporary Differences

Future Taxable Income Will Be More Than Future Pretax Financial Income

- 1. Revenues or gains are included in pretax financial income prior to the time they are included in taxable income. For example, gross profit on installment sales normally is recognized at the point of sale for financial reporting purposes. However, for income tax purposes, in certain situations it is recognized as cash is collected. Or, gross profit on long-term construction contracts may be recognized for financial reporting purposes under the percentage-of-completion method. But for income tax purposes it may be recognized by certain corporations under the completed-contract method. Also, investment income may be recognized under the equity method for financial reporting purposes. But for income tax purposes it is recognized in later periods as dividends are received.
- 2. Expenses or losses are deducted to compute taxable income prior to the time they are subtracted to compute pretax financial income. For example, a depreciable asset purchased after 1986 may be depreciated by the Modified Accelerated Cost Recovery System (MACRS) over the prescribed tax life (discussed in Chapter 11) for income tax purposes.^a For financial reporting purposes, however, it may be depreciated by a financial accounting method (often straight-line) over a different period. Also, interest and taxes on certain self-construction projects may be deducted as incurred in arriving at taxable income. However, these costs may be capitalized in certain instances as a part of the cost of the self-constructed assets for financial reporting.

Future Taxable Income Will Be Less Than Future Pretax Financial Income

- 3. Revenues or gains are included in taxable income prior to the time they are included in pretax financial income. For example, items such as rent, interest, and royalties received in advance are taxable when received. However, they are not reported for financial reporting purposes until the service actually has been provided. Additionally, gains on "sales and leasebacks" are taxed at the date of sale, but are reported over the life of the lease contract for financial reporting purposes.
- 4. Expenses or losses are subtracted to compute pretax financial income prior to the time they are deducted to compute taxable income. For example, product warranty costs, bad debts, compensation expense for share option plans, and losses on inventories in a later year may be estimated and recorded as expenses in the current year for financial reporting purposes. However, they may be deducted as actually incurred to determine taxable income. Or, indirect costs of producing inventory may be recorded as expenses in the current year for financial reporting purposes. However, these costs may be capitalized in the cost of inventory and therefore deducted as part of cost of goods sold in a later year to determine taxable income. Also, a contingent liability may be expensed for financial reporting purposes if a loss is probable and is measurable, but deducted in arriving at taxable income when it is actually paid.
- ^a A depreciable asset purchased before 1981 may be depreciated by an accelerated method for income tax purposes and the straight-line method for financial accounting purposes. Or, a depreciable asset purchased between 1981 and 1986 may be depreciated by the Accelerated Cost Recovery System (ACRS).

Temporary differences between pretax financial income and taxable income raise several conceptual issues about measuring and reporting the income tax liability (asset) and the income tax expense (benefit) in the affected accounting periods.

^{5.} FASB Statement No. 109 identifies four other temporary differences: (1) a reduction in the tax basis of depreciable assets because of an investment tax credit accounted for by the deferred method, (2) a reduction in the tax basis of depreciable assets because of other tax credits, (3) an increase in the tax basis of assets because of indexing whenever the local currency is the functional currency, and (4) business combinations accounted for by the purchase method. We do not discuss these temporary differences in this chapter.

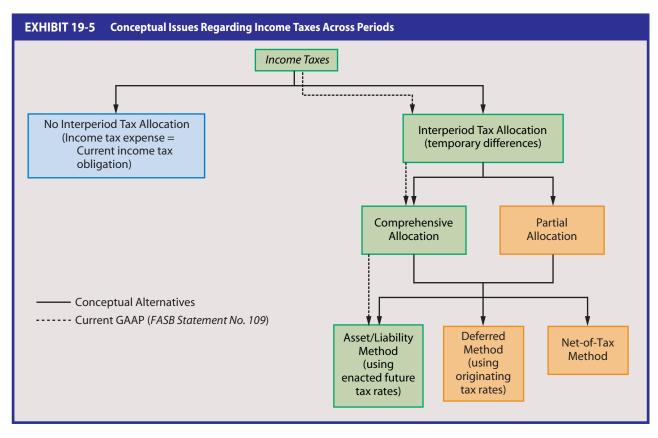
INTERPERIOD INCOME TAX ALLOCATION: CONCEPTUAL ISSUES

The accounting principles for income taxes initially were defined in *APB Opinion No.* 11, issued in 1967. This *Opinion* required a corporation to use comprehensive income tax allocation applied under the deferred method. Under this approach a corporation's annual income tax expense was based on all transactions and events included in pretax income on its income statement (i.e., comprehensive allocation), and the deferred tax amount reported on its ending balance sheet was based on the existing income tax rates when the temporary differences originated (i.e., deferred method). *APB Opinion No.* 11 was very controversial because of disagreements about its conclusions. Also, the *FASB Statements of Concepts* issued after the *Opinion* contradicted these conclusions.

FASB Statement No. 96 was issued in 1987. It required a corporation to use comprehensive income tax allocation applied under the asset/liability method. Under this approach a corporation's deferred tax asset or liability reported on its ending balance sheet was based on the enacted future income tax rates when the temporary differences were scheduled to reverse. The conclusions of the FASB in this Statement also were controversial because of scheduling complexities (sometimes involving schedules for 20 to 30 years in the future) and restrictions imposed for recognizing deferred tax assets. It was superseded in 1992 by FASB Statement No. 109. In its deliberations, the FASB reexamined several conceptual questions (identified in Exhibit 19-5):

- 1. Should corporations be required to make interperiod income tax allocations for temporary differences, or should there be no interperiod tax allocation?
- 2. If interperiod tax allocation is required, should it be based on a comprehensive approach for all temporary differences or on a partial approach for only the temporary differences that it expects to reverse in the future?
- 3. Should interperiod tax allocation be applied using the asset/liability method (based on enacted future tax rates), the deferred method (based on originating tax rates), or the net-of-tax method (where deferred taxes are allocated as adjustments of the accounts to which they relate)?

2 Explain the conceptual issues regarding interperiod tax allocation.





In *FASB Statement No.* 109, the Board identified two objectives of accounting for income taxes. First, a corporation should recognize the amount of its income tax obligation or refund for the current year. Second, a corporation should recognize deferred tax liabilities and assets for the future tax consequences of all events that it has reported in its financial statements or income tax returns. Based on these objectives, the FASB concluded that GAAP requires:

- 1. Interperiod income tax allocation of temporary differences
- The comprehensive allocation approach
- 3. The asset/liability method of income tax allocation

To support its conclusions, the FASB argued that interperiod tax allocation is appropriate because income taxes are an expense of doing business for a corporation and should be accrued and deferred just like other expenses. It argued that comprehensive allocation is applicable because income tax expense should be based on *all* temporary differences, regardless of how significant and how often they reoccur. Finally, it argued that deferred tax items should be based on the enacted tax rates that will be in existence when the temporary differences reverse because that is when the cash flows will occur. Thus, nonallocation, partial allocation, and the deferred and net-of-tax methods listed in Exhibit 19-5 were rejected and are *not* GAAP.



To implement the objectives, the FASB listed four principles that a corporation is to apply to account for its income taxes. A corporation must:

- Recognize a current tax liability or asset for the estimated income tax obligation or refund on its income tax return for the current year.⁶
- 2. Recognize a deferred tax liability or asset for the estimated future tax effects of each temporary difference.
- 3. Measure its deferred tax liabilities and assets based on the provisions of the enacted tax law; the effects of future changes in tax laws or rates are not anticipated.
- 4. Reduce the amount of deferred tax assets, if necessary, by the amount of any tax benefits that, based on available evidence, are not expected to be realized.⁷

Thus, according to FASB Statement No. 109, a corporation uses interperiod income tax allocation to determine its deferred tax assets and liabilities for all temporary differences. These deferred items are measured based on the currently enacted income tax rates and on laws that will be in existence when the temporary differences result in future taxable amounts or deductible amounts. The corporation adjusts its deferred tax assets and liabilities when changes in the income tax rates are enacted.

In regard to interperiod income tax allocation, the FASB discussed deferred tax liabilities, deferred tax assets, and the measurement of these items by a corporation in the context of the FASB Conceptual Framework.

Deferred Tax Liability

In Chapter 4, we discussed the three characteristics of a liability established in FASB Statement of Concepts No. 6. Briefly, they are: (1) it is a responsibility of the corporation to another entity that will be settled in the future, (2) the responsibility obligates the corporation, so that it cannot avoid the future sacrifice, and (3) the transaction or other event obligating the corporation has already occurred. The deferred tax consequences of temporary differences that will result in taxable amounts for a corporation in future years meet these characteristics.



The first characteristic is met by a deferred tax liability because (a) the deferred tax consequences stem from the tax law and are a responsibility to the government, (b) settlement will involve a future payment of taxes, and (c) settlement will result from events specified by

- 6. Since a corporation may make estimated tax payments during the year, the current tax liability or asset that it reports on its ending balance sheet may be different than its total tax obligation or refund.
- 7. FASB Statement No. 109, op. cit., par. 6 and 8. FASB Statement No. 109 also addressed the accounting for operating loss carrybacks and carryforwards. For simplicity, we discuss these items in a later section.

the tax law. The second characteristic is met because income taxes will be payable when the temporary differences result in taxable amounts in future years. The third characteristic is met because the past events that result in the deferred tax liability have already occurred.

Deferred Tax Asset

Briefly, the three characteristics of an asset are: (1) it will contribute to the corporation's future net cash inflows, (2) the corporation must be able to obtain the benefit and control other entities' access to it, and (3) the transaction or other event resulting in the corporation's right to or control of the benefit has already occurred.⁸ The deferred tax consequences of temporary differences of a corporation that will result in deductible amounts in future years meet these characteristics.

The first characteristic is met because the deductible amounts in future years will result in reduced taxable income, and contribute to the corporation's future net cash inflows through reduced taxes paid. The second characteristic is met because the corporation will have an exclusive right to the reduced taxes paid. Finally, the third characteristic is met because the past events that result in the deferred tax asset have already occurred.



Measurement

After a corporation has identified a future taxable or deductible amount, it "measures" the temporary difference to record the amount of the deferred tax liability or deferred tax asset to report in its financial statements. The FASB addressed two issues regarding the measurement of deferred tax liabilities and assets: (1) the applicable income tax rates, and (2) whether a valuation allowance should be created for deferred tax assets.

Income Tax Rate

The U.S. federal corporate income tax is assessed based on a "several step" rate schedule. However, if a corporation's taxable income exceeds a specified amount, its entire taxable income essentially is taxed at a "single flat rate." For deferred taxes, the question arose as to what rate to use in measuring deferred tax liabilities and assets. For simplicity, the FASB decided to require a corporation to use the enacted income tax rate expected to apply to its *last* dollar of taxable income (i.e., its *marginal tax rate*) in the periods when it expects the deferred tax liability or asset to be settled or realized. In other words, most corporations are required to use the single flat rate in their deferred tax calculations.⁹

Valuation Allowance

The second issue—the possible use of a valuation allowance for deferred tax assets—was more controversial. A corporation will realize the tax benefits from a deferred tax asset only if it will have enough future taxable income from which to subtract the future deductible amount. If there is sufficient uncertainty about a corporation's future taxable income, the FASB decided that it must establish a valuation allowance to reduce its deferred tax asset(s) to the realizable amount. (This approach is similar to reporting accounts receivable at a gross amount and then reducing the amount by an allowance for doubtful accounts.)



But how much uncertainty is "sufficient" and how does a corporation make a judgment about the realizable amount? In regard to sufficiency, the FASB applied a "more likely than not" (a likelihood of more than 50%) criterion to measure uncertainty. In other words, a corporation needs a valuation allowance if, based on available evidence, it is *more likely than not* that the deferred asset will *not* be realized.

To make a judgment about the realizable amount, a corporation should consider all available evidence, both positive and negative, in determining whether it needs a valuation



^{8. &}quot;Elements of Financial Statements of Business Enterprises," FASB Statement of Financial Accounting Concepts No. 6 (Stamford, Conn.: FASB, 1985), par. 26 and 36.

^{9.} Corporations for which graduated rates are a significant factor must use an "average graduated tax rate" approach for measuring their deferred tax liabilities and assets. We do not discuss this approach in this book.

allowance. Positive evidence that a corporation will realize the tax benefits from a deferred tax asset includes, for instance, future reversals of existing taxable temporary differences and prudent and feasible tax-planning strategies. ¹⁰ These may be sufficient for a corporation to conclude that it does not need a valuation allowance.

The Board stated that it would be difficult for a corporation to conclude that a valuation allowance is *not* needed when there is negative evidence, such as cumulative losses in recent years. It also provided other examples of negative evidence, such as (1) a history of unused operating loss carryforwards, (2) losses expected in the near future years, and (3) unsettled circumstances that are potentially unfavorable. The Board noted, however, that other positive evidence (e.g., a strong earnings history and expected future profitability) may overcome negative evidence, making a valuation allowance unnecessary. A corporation must use good judgment in weighing the verifiable positive and negative evidence to determine if it needs a valuation allowance for some or all of a deferred tax asset.

If a corporation does establish a valuation allowance, a future change in circumstances may cause a change in judgment about the realizability of the related deferred tax asset. There also may be a change in tax laws or rates that would affect the amount of previously recorded deferred tax assets and liabilities. Therefore, the corporation must evaluate its valuation allowance on each balance sheet date. In each of the preceding cases, the corporation includes the effect of the change as an adjustment to the income tax expense related to its income from continuing operations in the year of the change.¹¹



SECURE YOUR KNOWLEDGE 19-1

- Because the objectives of financial reporting differ from the objectives of the Internal Revenue Code, a company's pretax financial income and income tax expense (computed under GAAP) will differ from its taxable income and income tax obligation.
- Differences between a company's pretax financial income and its taxable income arise from both permanent and temporary differences.
- Permanent differences arise from revenues or expenses that are recognized for financial reporting purposes but never affect taxable income, or deductions that reduce taxable income but do not qualify as expenses for financial reporting. Permanent differences do not have deferred tax consequences.
- Temporary (timing) differences arise when a company reports a revenue or expense in
 one period for financial accounting purposes but in an earlier or later period for income
 tax purposes. This causes a difference between a company's tax basis of its assets or liabilities and the book value of the asset or liability in the financial statements, which creates a:
 - future taxable amount, which increases taxable income in the future; or
 - future deductible amount, which decreases taxable income in the future.
- In accounting for income taxes, a company should:
 - Recognize the amount of its income tax obligation or refund for the current year; and
 - Recognize deferred tax liabilities or assets for the future tax consequences of events that have been reported in the financial statements or income tax returns.
- A deferred tax liability is the increase in future taxes payable due to currently existing temporary differences (future taxable amounts). A deferred tax asset is the reduction in future taxes payable due to currently existing temporary differences (future deductible amounts).
- Deferred tax liabilities and assets are measured using the enacted tax rate that will be in existence when the temporary differences result in future taxable or deductible amounts.
 (continued)

^{10.} A tax planning strategy is an action a corporation ordinarily would not take except to ensure that it can realize a deductible temporary difference (e.g., acceleration of taxable income).

^{11.} FASB Statement No. 109, op. cit., par. 18-27.

A deferred tax asset should be reduced by a valuation allowance if it is more likely than
not that the deferred tax asset will not be realized (e.g., the future deductible amount
will not be used because of insufficient future taxable income).

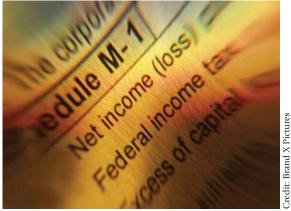
INTERPERIOD INCOME TAX ALLOCATION: RECORDING AND REPORTING OF CURRENT AND DEFERRED TAXES

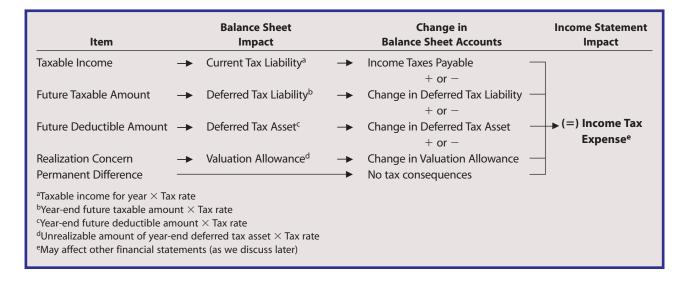
To measure and record the amount of its current and deferred income taxes, a corporation completes the following steps:

- Step 1. Measure the income tax obligation for the year by applying the applicable tax rate to the current taxable income.
- *Step 2.* Identify the temporary differences and classify each as either a future taxable amount or a future deductible amount.
- Step 3. Measure the year-end deferred tax liability for each future taxable amount using the applicable tax rate.
- *Step 4.* Measure the year-end deferred tax asset for each future deductible amount using the applicable tax rate.
- Step 5. Reduce deferred tax assets by a valuation allowance if, based on available evidence, it is *more likely than not* that some or all of the year-end deferred tax assets will not be realized.
- Step 6. Record the income tax expense (including the deferred tax expense or benefit), income tax obligation, change in deferred tax liabilities and/or deferred tax assets, and change in valuation allowance (if any).

A corporation reports its federal taxable income on *Form* 1120, "U.S. Corporation Income Tax Return." Included in this form is Schedule M-1 (or Schedule M-3 for large corporations), which identifies the differences between the corporation's pretax financial income and its taxable income. Because of its length, we do not include Form 1120 here. However, information about the taxable income and temporary differences we discussed in the previous steps is obtained from this form.

We show the previous steps in the following diagram, after which we explain the related journal entries.





3 Record and report deferred tax liabilities.

Basic Entries

A corporation's deferred tax expense or benefit is the change in its deferred tax liabilities or assets during the year. The amount of this change is combined with the amount of its income tax obligation (or refund) to determine the amount of its income tax expense (or benefit) for the year. Thus, if a corporation has one deferred tax liability at the beginning of the year, earns pretax income for the year, and has an increase in the liability (the deferred tax expense), it makes the following journal entry (amounts assumed):

Income Tax Expense	11,600
Income Taxes Payable	10,000
Deferred Tax Liability	1,600

For a similar situation involving one deferred tax asset (and *no* valuation allowance) instead of a deferred tax liability, the corporation makes the following journal entry (amounts assumed):

Income Tax Expense	12,800
Deferred Tax Asset	1,300
Income Taxes Payable	14,100

The corporation allocates the amount of income tax expense to the various components of its comprehensive income, as we discuss in a later section. It determines the amount of the income tax obligation by multiplying the taxable income for the year by the current tax rate(s). For simplicity, we assume here (and in the later examples and homework) that the corporation does *not* make estimated income tax payments during the year. Therefore, it records the entire obligation for the year as income taxes payable.

The corporation calculates the amount of the adjustment to the deferred tax liability (asset) in the journal entry by determining the amount of the year-end deferred tax liability (asset) and comparing this ending amount to the beginning amount of the deferred tax liability (asset). The corporation reports the amount of the year-end deferred tax liability (asset) on its ending balance sheet, classified as "current" or "noncurrent," as we discuss in a later section.

If, in the last example, the corporation previously had no valuation allowance but determined that one was necessary, it would make the following additional journal entry (amounts assumed):

Income Tax Expense	400
Allowance to Reduced Deferred	
Tax Asset to Realizable Value	400

The corporation combines the \$400 debit to income tax expense with the \$12,800 amount of Income Tax Expense from the journal entry in the last example to determine its \$13,200 total Income Tax Expense. If the amount of the Allowance is equal to the adjustment to the Deferred Tax Asset, then the Income Tax Expense is equal to the Income Taxes Payable. The corporation subtracts the Allowance account from the Deferred Tax Asset account on its ending balance sheet to report the expected net realizable value of the deferred tax asset.



When a corporation has more than one future taxable amount or future deductible amount, permanent differences, and changes in enacted future tax rates, completion of the steps listed earlier becomes more complex. We provide several examples in the following sections.

Example: Deferred Tax Liability—Single Future Taxable Amount

Assume that in 2007, Track Company purchased an asset at a cost of \$6,000. For financial reporting purposes, the asset has a four-year life, no residual value, and is depreciated by the units-of-output method over 6,000 units (2007: 1,600 units; 2008: 2,800 units;

2009: 1,100 units; 2010: 500 units). For income tax purposes the asset is depreciated under MACRS using the 200% declining balance method over a three-year life (no residual value), as we discussed in Chapter 11. Prior to 2007, Track Company had no deferred tax liability or asset. The difference between the company's depreciation for financial reporting purposes and income tax purposes is the only temporary difference between its pretax financial income and taxable income. ¹² In 2007 the company has taxable income of \$7,500 (after deducting the MACRS depreciation). The income tax rate for 2007 is 30% and no change in the tax rate has been enacted for future years.

Based on the preceding information:

- The depreciation expense for 2007 is \$1,600 $[1,600 \times (\$6,000 \div 6,000)]$ for financial reporting purposes and \$2,000 $[\$6,000 \times 33.33\%$ (from Exhibit 11-3)] for income tax purposes.
- At the end of 2007 the asset has a book value of \$4,400 for financial reporting purposes and a book value of \$4,000 for income tax purposes, as we show in the top part of Example 19-1.

The \$400 difference in book values is the result of a temporary difference in depreciation that originated in 2007 (and that caused taxable income to be lower than pretax financial income in that year). This difference will reverse in future years because tax depreciation will be *lower* than financial depreciation by \$400 (to depreciate each book value to zero). Thus, the \$400 is the ending *future taxable amount* for 2007 because future taxable income will be *higher* than future pretax financial income.

EXAMPLE 19-1 Asset Book Value and D	eferred Tax Liability	
	Financial Reporting (12/31/07)	Income Tax Reporting (12/31/07)
Cost of asset	\$6,000	\$6,000
Accumulation depreciation	(1,600)	(2,000)
Book value of asset	\$4,400	\$4,000
Ending future taxable amount	\$4	400
Enacted future tax rate	0	.30
Ending deferred tax liability	\$1	120
Beginning deferred tax liability		(0)
Change (increase) in deferred tax liability	<u>\$1</u>	(Deferred tax expense)

Track Company applies the following steps that we listed earlier on page 953 to determine its current and deferred income taxes:

- Step 1: It calculates (measures) its \$2,250 (\$7,500 taxable income \times 0.30 current tax rate) current income tax obligation for 2007.
- Step 2: It identifies the depreciation difference as the only future taxable amount for 2007, as we show in Example 19-1.

^{12.} In reality, a corporation would have several depreciable assets of different ages and with varying lives, perhaps resulting in both originating (and deductible) and reversing (and taxable) depreciation differences in a given year. For simplicity, when dealing with depreciable assets in the text and homework, we generally focus on a single depreciable asset, with depreciation that results in a reversing (and taxable) difference in the future.

- Step 3: It calculates (measures) the \$120 total deferred tax liability at the end of 2007 by multiplying the \$400 total future taxable amount times the 30% enacted future tax rate, as we show in the middle of Exhibit 19-1.
- Step 4: It skips this step because it has no future deductible amount.
- Step 5: It skips this step because it has no deferred tax asset.
- Step 6: It records its income taxes for 2007. It credits income taxes payable for its \$2,250 current income tax obligation. Since the company has no deferred tax liability at the beginning of 2007, it credits the deferred tax liability for \$120, the amount we show at the bottom of Example 19-1. [If a deferred liability had existed at the beginning of 2007, the change needed to bring the balance up (or down) to the ending deferred tax liability would be recorded in the journal entry.] It determines the debit for its \$2,370 income tax expense by adding the \$120 deferred tax liability to the \$2,250 income taxes payable. Track Company makes the following journal entry at the end of 2007:

Income Tax Expense (\$2,250 + \$120)	2,370
Income Taxes Payable	2,250
Deferred Tax Liability	120

Track Company reports the \$2,370 income tax expense on its 2007 income statement, subject to intraperiod tax allocation (which we discuss in a later section of the chapter). The company reports the income taxes payable as a current liability on its 2007 ending balance sheet. As we discuss in a later section, the company reports the deferred tax liability on its ending balance sheet.

Example: Deferred Tax Liability—Single Future Taxable Amount and Multiple Rates

Now assume the same information as in the previous example, except that the income tax rate for 2007 is 40%, but Congress has enacted tax rates of 35% for 2008, 33% for 2009, and 30% for 2010 and beyond. In the previous example, the calculation of the deferred tax liability is straightforward. This is because a 30% tax rate is applicable to all the future years in which the depreciation temporary difference reverses and results in higher taxable income. However, when different enacted tax rates apply to taxable income in different future years, the calculation of the amount of the ending deferred tax liability is more complicated. The calculation requires a corporation to:

- Prepare a schedule to determine the reversing difference (i.e., taxable amount) for each future year,
- Multiply each yearly taxable amount by the applicable tax rate to determine the additional income tax obligation (deferred taxes) for that year, and
- Sum the yearly deferred taxes to determine the total deferred tax liability.

In this example, before the Track Company can prepare a deferred tax liability schedule, it must first prepare a schedule to compute the 2008 through 2010 depreciation expense for financial reporting and income tax purposes. We show this schedule in the upper portion of Example 19-2. Based on the differences in depreciation for financial reporting and income tax purposes, the company prepares a schedule to calculate its deferred tax liability. We show this schedule in the lower portion of Example 19-2.

In Example 19-2, for each year Track Company deducts the income tax depreciation from the financial reporting depreciation to determine the taxable amount. Given the enacted tax rates for the respective years, the income taxes payable on the taxable amounts are \$47 in 2008, \$70 in 2009, and \$17 in 2010. Thus, the total deferred tax liability is \$134 at the end of 2007. Since the taxable income for 2007 is \$7,500, the income

EXAMPLE 19-2 Depreciation and Deferred Tax Schedules					
Deprecio	ation Expense				
Year	Financial Depreciation	Income Tax Depreciation			
2008 2009 2010	\$2,800ª 1,100 500	\$2,667 ^b 889 ^c 444 ^d			
Deferred	l Tax Liability				
		2008	2009	2010	
Income	al depreciation tax depreciation amount ^e	\$2,800 (2,667) \$ 133	\$1,100 (889) \$ 211	\$500 (444) \$ 56	= \$400
	tax rate d tax liability ^f	0.35 \$ 47	+ $\frac{0.33}{$70}$	+ $\frac{0.30}{$17}$	= \$134
b. \$6,00 c. \$6,00 d. \$6,00 e. Lowe	produced × \$1/unit. 0 × 44.45% from Exhi 0 × 14.81% from Exhi 0 × 7.41% from Exhib r income tax deprecia unts rounded to neare	bit 11-3. it 11-3; \$1 roundir tion results in higl			

tax obligation is \$3,000 (\$7,500 \times 0.40) based on the 40% tax rate for 2007. Track Company makes the following journal entry at the end of 2007:

Income Tax Expense (\$3,000 + \$134)	3,134
Income Taxes Payable	3,000
Deferred Tax Liability	134

The company reports the expense and liabilities in its financial statements as we discussed in the first example. •

Example: Deferred Tax Asset—Single Future Deductible Amount

Assume that Klemper Company has been operating profitably for several years selling a product on which it provides a three-year warranty. It expects to be profitable in the future. For financial reporting purposes, the company estimates its future warranty costs and records a warranty expense and liability at year-end. For income tax purposes the company deducts its warranty costs when paid. This difference in reporting warranty costs is the only temporary difference between the company's pretax financial income and taxable income. It is a *future deductible amount* (resulting in a deferred tax asset) because in future years the warranty costs that the company deducts for income tax purposes will exceed the warranty expense it deducts for financial reporting purposes. This will cause its future taxable income to be *lower* than its future pretax financial income. At the beginning of 2007, the company had a deferred tax asset of \$330 related to the warranty liability on its balance sheet. At the end of 2007 the company estimates that its ending warranty liability is \$1,400, as we show in Example 19-3. In 2007 the company has taxable income of \$5,000. The income tax rate for 2007 is 30% and no change in the tax rate has been enacted for future years.

4 Record and report deferred tax assets.

	Financial Reporting (12/31/07)		Income Tax Reporting (12/31/07)
Book value of warranty liability	\$1,400		\$0
Ending future deductible amount Enacted future tax rate		\$1,400 0.30	
Ending deferred tax asset Beginning deferred tax asset		\$ 420 (330)	
Change (increase) in deferred tax asset		\$ 90	(Deferred tax benefit)

Klemper Company applies the following steps that we listed earlier on page 953 to determine its current and deferred income taxes:

- Step 1: It calculates (measures) its \$1,500 (\$5,000 \times 0.30) current income tax obligation for 2007.
- Step 2: It identifies the warranty liability difference as the only future deductible amount for 2007, as we show in Example 19-3.
- Step 3: It skips this step because it has no future taxable amount.
- Step 4: It calculates (measures) the \$420 total deferred tax asset at the end of 2007 by multiplying the \$1,400 total future deductible amount times the 30% enacted future tax rate, as we show in the middle of Example 19-3.
- Step 5: It skips this step because it does not need a valuation allowance since it has a successful earnings history and expects to be profitable in the future.
- Step 6: It records its income taxes for 2007. It credits income taxes payable for its \$1,500 current income tax obligation. It calculates the \$90 change (increase) in the deferred tax asset by deducting the \$330 beginning deferred tax asset from the required \$420 ending deferred tax asset, as we show in the bottom part of Example 19-3. This \$90 is the amount of the debit to the deferred tax asset. It is subtracted from the \$1,500 income taxes payable to determine the \$1,410 debit to income tax expense for 2007. The Klemper Company makes the following journal entry at the end of 2007:

Income Tax Expense (\$1,500 - \$90)	1,410	
Deferred Tax Asset	90	
Income Taxes Payable		1,500

Klemper Company reports the deferred tax asset on its balance sheet, as we discuss in a later section. ◆

Example: Deferred Tax Asset and Valuation Allowance

Now assume the same information as in the previous example, except that during the past few years the Klemper Company's sales and profits have been declining. At the end of 2007, because of uncertain future economic conditions, the company decides that it is "more likely than not" that \$600 of the ending \$1,400 future deductible amount will not be realized. Therefore, in addition to the income tax entry made in the previous example, Track Company also records a valuation allowance of \$180 ($$600 \times 0.30$) at the end of 2007 as follows:

Income Tax Expense
Allowance to Reduce Deferred
Tax Asset to Realizable Value

The company subtracts the \$180 ending balance in the allowance account from the \$420 deferred tax asset ending balance to report the realizable value of \$240 on its ending balance sheet as follows:

Deferred tax asset \$420 Less: Allowance to reduce deferred tax asset to realizable value (180) \$240

In 2008 and future years, the company must review the available evidence to determine whether it needs to make an adjustment (increase or decrease) in the valuation allowance.



LINK TO ETHICAL DILEMMA

Classical Notes Inc. manufactures and sells various types of classical sheet music. Over the last several years, there has been a decrease in the interest in classical music and, as a result, Classical Notes has reported annual losses over this period. However, recent scientific evidence that classical music stimulates brain development has sparked renewed interest in classical music, resulting in the company reporting its first operating profit (\$80,000) in five years. At the end of the current fiscal year, Classical Notes has recognized \$4,000,000 of deferred tax assets, net of a \$1,000,000 valuation allowance, which primarily consists of operating loss carryforwards that will expire evenly over the next 10 years.

As the recently hired accountant for Classical Notes, you are in charge of preparing the income tax accrual for the current year. You are particularly concerned with the amount of the valuation allowance (which was decreased from \$1.2 million to \$1 million in the current year) and have requested a meeting with the CEO concerning this matter. During the meeting, you inform the CEO that you think the valuation allowance is too small and should be increased by at least \$500,000. You have based your conclusions on the fact that the company has reported historical operating losses in four of the last five years. Furthermore, the current operating profit was due largely to a one-time surge in the demand for classical music and all economic analyses expect this demand to level off within the next year. Therefore, you do not think the company will have sufficient future taxable income to use the operating loss carryforwards. The CEO is extremely upset at your recommendation. She informs you that the company's fortunes have finally turned around and the demand for classical music will continue to grow despite what the experts say. Furthermore, if the valuation allowance is increased, this would cause the company to report a net loss for the year and send the wrong signal to the market. After a heated exchange, the CEO tells you that the amount of the valuation allowance is a judgment call, and as the experienced leader of the company, it is her judgment that the valuation allowance is appropriate. She then instructs you to drop the matter and leave the major decisions to her. What is your response?

Example: Permanent and Temporary Differences

Assume that the Sand Company has been in operation for several years and has earned income in each of those years. For *financial reporting purposes*, at the end of 2007, the company reports pretax income of \$75,500. Included in the calculation of this income are the following items: (1) interest revenue of \$1,500 on investments in municipal bonds, (2) gross profit of \$10,000 on installment sales recognized under the accrual

method, and (3) rent revenue of \$3,000 for the first year of a three-year, \$9,000 rental contract collected in advance.

For *income tax purposes*, the company reports gross profit on installment sales under the installment sales method as cash is collected. It also reports rent revenue for tax purposes as cash is collected. During 2007 the company reports gross profit of \$2,000 on installment sales. The company had a deferred tax liability of \$300 related to an installment sales temporary difference of \$1,000 at the beginning of 2007. The income tax rate is 30% for 2007 and no change in the tax rate has been enacted for future years.

To determine the Sand Company's current and deferred income taxes, the company must first compute its 2007 taxable income. This amount is \$72,000, as we show in Example 19-4. This schedule is similar to the schedule required to reconcile a corporation's pretax financial income to its taxable income on Form 1120, the federal corporate income tax return. In preparing the schedule in Example 19-4, there is one permanent difference and two temporary differences. The permanent difference (\$1,500 tax-exempt interest revenue) is deducted from pretax financial income to determine taxable income. Although the interest revenue is included in pretax financial income, it is not taxable. Thus, it is ignored for deferred tax calculations because it will *never* reverse and never be taxable.

EXAMPLE 19-4 Computation of 2007 Taxable Income	
Pretax financial income Less: Tax-exempt interest revenue on municipal bonds (permanent difference) Excess of gross profit on installment sales over gross profit for taxes	\$75,500 (1,500)
(temporary difference)	(8,000)a
Add: Excess of rent collected in advance over rent revenue (temporary difference)	6,000 ^b
Taxable Income	\$72,000
 a. \$10,000 gross profit on installment sales recognized under accrual method for financial reporting minus \$2,000 gross profit recognized under installment sales method for income taxes. b. \$9,000 collected in advance and reported for income taxes minus \$3,000 rent revenue recognized for finance 	cial reporting.

The \$8,000 excess of the gross profit on installment sales included in pretax financial income (\$10,000) over the gross profit reported for taxes (\$2,000) is subtracted to determine taxable income, because less cash is collected (and taxed). This difference is a *future taxable amount* because it will be included in future taxable income when the cash is collected. On the other hand, the \$6,000 excess of rent collected in advance is added to pretax financial income to determine taxable income, because more cash (\$9,000) is collected (and taxed) than reported as rent revenue (\$3,000) in pretax financial income. This difference is a *future deductible amount* because future taxable income will be less than future pretax financial income when the rent is recognized as rent revenue for financial reporting purposes.

Sand Company applies the following steps that we listed earlier on page 953 to determine its current and deferred income taxes:

- Step 1: It calculates (measures) its \$21,600 (\$72,000 taxable income from Example 19-4 \times 0.30) current income tax obligation for 2007.
- Step 2: It identifies the installment sales difference of \$9,000 (\$1,000 beginning + \$8,000 increase during 2007) as the total *future taxable amount* for 2007. This amount is the difference between the book value of the installment accounts receivable that it reported under the accrual method for financial reporting purposes and the book value of the receivable that it reported under the

- installment sales method for income tax purposes. It identifies the rent difference of \$6,000 (\$6,000 book value of unearned rent reported for financial reporting purposes \$0 book value reported for income tax purposes) as the total *future deductible amount* for 2007.
- Step 3: It calculates (measures) the \$2,700 total deferred tax liability at the end of 2007 by multiplying the \$9,000 total future taxable amount times the 30% enacted future tax rate. Since the company had a \$300 beginning deferred tax liability, it must increase this liability by \$2,400 (\$2,700 \$300).
- Step 4: It calculates (measures) the \$1,800 total deferred tax asset at the end of 2007 by multiplying the \$6,000 total future deductible amount times the 30% enacted future tax rate.
- Step 5: It skips this step because its \$9,000 total future taxable amount is greater than its \$6,000 total future deductible amount so that it does not need a valuation allowance for the deferred tax asset.
- Step 6: It records its income taxes for 2007. It credits income taxes payable for its \$21,600 current income tax obligation. It credits (increases) the deferred tax liability for \$2,400. It debits (increases) the deferred tax asset for \$1,800. It determines the \$22,200 debit to income tax expense by adding the \$2,400 to and subtracting the \$1,800 from the \$21,600 income taxes payable. Sand Company makes the following journal entry at the end of 2007:

 Income Tax Expense (\$21,600 + \$2,400 − \$1,800)
 22,200

 Deferred Tax Asset
 1,800

 Income Taxes Payable
 21,600

 Deferred Tax Liability
 2,400 ♦



SECURE YOUR KNOWLEDGE 19-2

- The following steps are necessary to measure and record a company's current and deferred income taxes:
 - Step 1: Calculate the current income tax obligation by multiplying the current taxable income by the applicable tax rate.
 - Step 2: Identify any temporary differences and classify them as future taxable amounts or future deductible amounts.
 - Step 3: Calculate the deferred tax liability for each future taxable amount using the applicable tax rate.
 - Step 4: Calculate the deferred tax asset for each future deductible amount using the applicable tax rate.
 - Step 5: Reduce any deferred tax assets by a valuation allowance if necessary.
 - Step 6: Prepare journal entries to record income tax expense, the income tax obligation, the change in deferred liabilities and/or deferred tax assets, and the change in the valuation allowance (if any).
- Two basic journal entries are required to account for income taxes:
 - The first journal entry is based on the fact that income tax expense is made up of an amount payable in the current period (income taxes payable) and an amount deferred until a later period (deferred expense or benefit). Note that a company's deferred tax expense or benefit is the change in its deferred tax liability or asset during the year.
 - The second journal entry adjusts the valuation allowance (if necessary) with a matching adjustment to income tax expense. The valuation allowance is reported as a contra-account to the deferred tax asset.

(continued)

- When there are multiple enacted tax rates, the company prepares a schedule to determine the reversing temporary difference each year and uses the applicable enacted tax rate for each year to compute the deferred tax liability or asset.
- Permanent differences are ignored for deferred tax calculations because they will never reverse and will never be taxable.

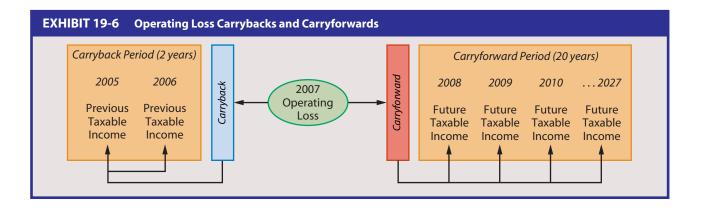
OPERATING LOSS CARRYBACKS AND CARRYFORWARDS

The previous section and examples dealt with the recognition of a deferred tax liability or asset when a corporation had taxable *income* in the current year. This section deals with the situation where a corporation has a *loss* for income tax purposes (and a pretax financial loss) in the current year, resulting in an operating loss carryback or carryforward for income tax purposes.

The IRC allows a corporation reporting an operating loss for income tax purposes in the current year to carry this loss back or carry it forward to offset previous or future taxable income. The corporation may first carry a reported operating loss back two years (in sequential order, starting with the *earliest* of the two years). This procedure is called an **operating loss carryback**. In this case, the corporation files amended income tax returns showing lower taxable income for those years and receives a refund of income taxes previously paid. Operating loss carrybacks can provide significant refunds for companies. For instance, in 2004, **Lucent Technologies** was able to obtain an \$816 million tax refund for carrying back its 2001 operating loss to 1996. (It was able to carry back for more than the usual two years because of a provision in the Job Creation and Worker Assistance Act of 2002, which allowed a longer carryback period to help companies hurt by the economic downturn at that time.)

If a corporation's taxable income for the past two years is not enough to offset the amount of the currently reported operating loss, it then sequentially carries forward the loss for 20 years and offsets the loss against future taxable income, if there is any.¹³ This procedure is called an **operating loss carryforward**. The corporation then pays lower income taxes in the future based on lower future taxable income. Exhibit 19-6 shows a diagram of the operating loss carryback and carryforward sequence. A corporation also may elect to forgo the carryback and, instead, only carry forward an operating loss. Unless higher future income tax rates have been enacted, most corporations do not make this election because an operating loss carryback will result in a definite and immediate income tax refund. However, a carryforward will reduce income taxes payable in future years only to the extent that taxable income is earned.

5 Explain an operating loss carryback and carryforward.



^{13.} Prior to 1998, a corporation could carry back an operating loss 3 years, but it was limited to a 15-year carryforward period.

Conceptual Issues

When a corporation reports an operating loss for financial reporting purposes in a given year, there are several important accounting questions about valuing assets, recognizing income tax expense, and reporting net income. These issues primarily involve operating loss carryforwards, but also relate to operating loss carrybacks.

Operating Loss Carrybacks

The FASB considered two conceptual issues related to an operating loss carryback in FASB Statement No. 109.

1. Should a corporation recognize the tax benefit of an operating loss carryback as a retrospective adjustment or in the current period?

For an operating loss carryback, the corporation obtains a tax benefit in the year of the operating loss. This benefit is a refund of income taxes paid in prior periods (which the corporation reported as income tax expense in those periods). An argument in favor of the corporation reporting the tax benefit of a carryback as a retrospective adjustment is that its prior income is what makes possible the realization of the benefit. The counterargument is that the corporation's prior income that enables use of the carryback only gives value to the carryback. It is the corporation's current operating loss that creates the tax benefit.

2. Should the corporation incurring the operating loss recognize a current receivable for the tax benefit of the carryback?

The recognition of a receivable by a corporation for the tax benefit of an operating loss carryback is conceptually sound. The corporation will realize the tax benefit as an income tax refund when the refund is issued by the federal government. Thus, it is an economic benefit (asset).

Operating Loss Carryforwards

The FASB considered two conceptual issues related to an operating loss carryforward that arises because a corporation either has no prior taxable income or its prior taxable income is not enough to absorb the entire operating loss carryback.

1. Should a corporation recognize the tax effect of an operating loss carryforward in the current period or in the future when it is realized?

For an operating loss carryforward, the tax effect is the result of the corporation's operating loss in the *current* year that it will realize in a *future* year(s) if it earns enough future taxable income. One alternative accounting treatment for the corporation is to recognize the tax effect (i.e., future tax savings) as an asset in the year of its operating loss. This approach is consistent with the concepts of interperiod tax allocation and matching. Arguments for this alternative are: (1) the tax effects are an economic resource of the corporation because it has a right to and control over the future tax benefit, (2) there is better matching because the corporation offsets the tax benefit against the operating loss in the year the loss generated the benefit, (3) it enables better comparisons, because a corporation with an available operating loss carryforward is better off than one without it, and (4) it is consistent with the going-concern assumption.

Another alternative is for the corporation to defer recognition of an operating loss carryforward until it is realized. If this approach were taken, the corporation would not recognize an asset in the loss year. If realization occurs, it would recognize the tax benefit as a reduction in its income taxes payable for that future period. Arguments for this alternative are: (1) an operating loss carryforward is not a current economic resource of the corporation because it will provide a future tax benefit only if the corporation has sufficient future taxable income, (2) this approach is consistent with the consensus that realization should take precedence over matching (that is, when collectibility is not

reasonably assured, recognition should be deferred), and (3) the corporation's operating loss is the past event that created a right to the future benefit; however, it is the future event of earning taxable income that gives value to the carryforward.

2. How should the corporation report the tax effect of an operating loss carryforward on its financial statements?

If the corporation recognizes an operating loss carryforward in the year of the loss, it is generally agreed that the corporation should deduct the tax benefit from its operating loss. If the corporation recognizes the tax effect in the year of realization, it could (1) deduct the tax effect from that year's income tax expense, or (2) report the tax effect as a retrospective adjustment of the year in which the operating loss occurred. An argument for the first approach is that the earning of taxable income in that year enables the corporation to reduce its income taxes, so it should decrease its income tax expense accordingly. An argument for reporting the tax benefit as a prior period adjustment is that the tax benefit arose in the year of the operating loss; it was just a matter of confirming the amount at the time of realization.¹⁴

Generally Accepted Accounting Principles

In FASB Statement No. 109, the FASB accepted parts of both alternatives. It concluded that the GAAP for the financial reporting of operating loss carrybacks and carryforwards are as follows:

- 1. A corporation must recognize the tax benefit of an operating loss carryback in the period of the loss as an asset (current receivable) on its balance sheet and as a reduction of the operating loss on its income statement.
- 2. A corporation must recognize the tax benefit of an operating loss carryforward in the period of the loss as a deferred tax asset. However, it must reduce the deferred tax asset by a valuation allowance if, based on the available evidence, it is *more likely than not* that the corporation will *not* realize some or all of the deferred tax asset.¹⁵

In other words, a corporation handles operating loss carryforwards in the same manner as the future deductible amounts we discussed earlier in the chapter. That is, at year-end:

- The corporation measures a deferred tax asset for an operating loss carryforward using the enacted future tax rate.
- If necessary, it measures a valuation allowance and deducts the amount from the deferred tax asset to determine its net realizable value.
- In the year-end journal entry to record its current and deferred taxes, the corporation treats any increase (decrease) in the deferred tax asset and valuation allowance as an adjustment of its income tax expense (benefit).

It is more likely that a corporation will need a valuation allowance for a deferred tax asset related to an operating loss carryforward, because the operating loss itself provides negative evidence as to the likelihood of having sufficient future taxable income to realize the tax benefits. We show several examples in the following sections.

Example: Operating Loss Carryback

Assume that Monk Company reports a pretax operating loss of \$90,000 in 2007 for both financial reporting and income tax purposes. Also assume that reported pretax financial

6 Account for an operating loss carryback.

- 14. For a further discussion, see "Accounting for Income Taxes," FASB Discussion Memorandum (Stamford, Conn.: 1983), and D. Beresford, L. Best, P. Craig, and J. Weber, "Accounting for Income Taxes: A Review of Alternatives," FASB Research Report (Stamford, Conn.: FASB, 1983), par. 150–164 and pp. 95–106.
- 15. FASB Statement No. 109, op. cit., par. 17.

income and taxable income for the previous two years had been: 2005 - \$40,000 (tax rate 25%); and 2006 - \$70,000 (tax rate 30%). Thus, the \$110,000 total pretax income in the previous two years is more than enough to offset the \$90,000 pretax operating loss. When the company carries back its 2007 operating loss, it is entitled to a tax refund of \$25,000, calculated as we show in Example 19-5.

EXAMPLE 19-5	Refund from Operating Loss Carryback		
Year	Pretax Financial Income and Taxable Income Offset by Carryback	Income Tax Rate	Income Tax Refund
2005 2006	\$40,000 50,000	0.25 0.30	\$10,000
	\$90,000		\$25,000

Note in Example 19-5 that all of the 2005 income of \$40,000 is offset by the \$90,000 operating loss carryback, but only \$50,000 of the \$70,000 income in 2006 is offset because the carryback is first applied to the earlier year. (Therefore, the remaining \$20,000 of the 2006 income is available to offset any operating losses that might occur in 2008.) At the end of 2007, Monk Company makes the following journal entry:

Income Tax Refund Receivable Income Tax Benefit from Operating Loss Carryback

25,000

18,000

25,000

Monk Company reports the receivable on its balance sheet as a current asset until it collects the receivable. The company reports the operating loss carryback tax benefit in the

lower portion of its 2007 income statement as follows: Pretax operating loss \$(90,000)

Less: Income tax benefit from operating loss carryback 25,000 Net loss \$(65,000) •

Example: Operating Loss Carryforward and Valuation Allowance

Assume that Lake Company reports a pretax operating loss of \$60,000 in 2007 (its first year of operation) for both financial reporting and income tax purposes. The income tax rate is 30% and no change in the tax rate has been enacted for future years. Because the company had no income prior to 2007, it cannot carry back the operating loss. Since it carries forward the operating loss, the company reports a deferred tax asset at the end of 2007 for the deferred tax consequences (future tax benefit) of the carryforward. It calculates the deferred tax asset to be \$18,000 (\$60,000 \times 0.30). Lake Company makes the following journal entry at the end of 2007:

Deferred Tax Asset Income Tax Benefit from Operating Loss Carryforward 18,000

Because Lake Company has no history of taxable income and has insufficient positive evidence of future taxable income, it must also reduce the deferred tax asset by a valuation allowance. If we assume the company establishes a valuation allowance for the 7 Account for an operating loss carryforward.

entire amount of the deferred tax asset, it also makes the following journal entry at the end of 2007:

Income Tax Benefit from
Operating Loss Carryforward
Allowance to Reduce Deferred Tax
Asset to Realizable Value
18,000

Lake Company reports the \$60,000 operating loss as a net loss on its 2007 income statement because it did not realize any tax benefit from the operating loss carryforward in 2007. The deferred tax asset, offset by the valuation allowance, normally is reported on a company's balance sheet, but the net amount is zero in this example. (Lake Company discloses both the deferred tax asset and the valuation allowance amounts in the notes to its 2007 financial statements, however.) Lake Company also discloses the operating loss carryforward as follows in a note to its 2007 financial statements: "The company has a \$60,000 operating loss carryforward that can be used within 20 years to offset future taxable income and reduce income taxes."

Now assume that in 2008, Lake Company operates successfully and earns pretax operating income of \$100,000 for both financial reporting and income tax purposes. The company realizes the tax benefit of the operating loss carryforward in 2008 as a reduction of its income tax obligation. It offsets the \$60,000 carryforward from 2007 against the \$100,000 pretax income in 2008, resulting in taxable income of \$40,000. Based on the 30% income tax rate, its income taxes payable (and income tax expense) are \$12,000 (\$40,000 \times 0.30). Since the company has used up the tax benefit of the operating loss carryforward, it eliminates the deferred asset and related valuation allowance. Lake Company makes the following journal entry the end of 2008:

Income Tax Expense 12,000		
Allowance to Reduce Deferred Tax Asset		
to Realizable Value	18,000	
Income Taxes Payable		12,000
Deferred Tax Asset		18,000

The lower portion of Lake Company's 2008 income statement is as follows:

Pretax operating income	\$100,000
Less: Income tax expense	(12,000)
Net income	\$ 88,000

The effect of the operating loss carryforward is to reduce the company's income tax expense for 2008 from \$30,000 ($$100,000 \times 0.30$)—the amount without the tax benefit of the carryforward—to \$12,000, so that its 2008 net income (after tax) is increased by \$18,000.

Example: Operating Loss Carryforward and No Valuation Allowance

Now assume the same information as in the previous example, except that the Lake Company has signed a substantial number of contracts for the sales of its products in 2008. Based on this verifiable positive evidence, the company decides that the tax benefit of its operating loss carryforward will be realized in 2008 and that it does not need a valuation allowance at the end of 2007.

In this case, Lake Company makes the same journal entry to record the \$18,000 deferred tax asset as it did in the previous example. However, since it does not record a valuation allowance, the lower portion of Lake Company's 2007 income statement is as follows:

Pretax operating loss	\$(60,000)
Less: Income tax benefit from operating loss carryforward	18,000
Net loss	\$(42,000)

The realizable tax benefit reduces the company's \$60,000 pretax operating loss to a \$42,000 net loss. This is in contrast to the previous example, where the company reported a \$60,000 net loss on its 2007 income statement.

Continuing with the same assumptions as in the previous example, Lake Company earns pretax operating income of \$100,000 in 2008. The \$60,000 operating loss carryforward reduces the company's taxable income to \$40,000, so that its income tax obligation is \$12,000 as in the previous example. The company eliminates the deferred tax asset but since it does not have a valuation allowance, the 2008 income tax expense is \$30,000. Lake Company makes the following 2008 year-end journal entry:

Income Tax Expense	30,000
Income Taxes Payable	12,000
Deferred Tax Asset	18,000

The lower portion of Lake Company's 2008 income statement is as follows:

Pretax operating income	\$100,000
Income tax expense	(30,000)
Net income	\$ 70,000

Note that Lake Company's total net income for 2007 and 2008 is \$28,000 in both the previous and this example. Its income recognition is accelerated in this example, however (through a lower net loss in 2007), because the company had sufficient positive verifiable evidence in 2007 that it would realize the tax benefit from its operating loss carryforward in 2008.

In some cases a corporation's pretax operating income of a given year is not enough to offset the entire amount of an operating loss carryforward. In this situation, it offsets a portion of the operating loss against the income and continues to carry forward the remainder as a deferred tax asset (and discloses the amount in a note). For instance, if in the last example, Lake Company had earned only \$50,000 pretax operating (and taxable) income in 2008, then it would offset \$50,000 of the \$60,000 operating loss carryforward against this income and would pay no income taxes for 2008. The company would report income tax expense of \$15,000 (\$50,000 \times 0.30) and would reduce its deferred tax asset by \$15,000. It would eliminate the \$3,000 (\$18,000 - \$15,000) deferred tax asset (30% of the \$10,000 remaining operating loss carryforward) in a future year(s) when it realized the tax benefit. •

COMPREHENSIVE ILLUSTRATION

The examples in the previous sections showed the accounting for temporary differences separately from operating losses. In this comprehensive example, we show a temporary difference and also an operating loss carryback and an operating loss carryforward. Assume that Branson Company begins operations in 2004 and is profitable through 2006. In 2007 the company reports a pretax financial loss of \$8,000 and a taxable loss of \$8,800. In 2008 and 2009, the company is again profitable, although at the end of 2007 the company felt that future profits were not likely. The income tax rate is 30%. Example 19-6 shows the company's pretax financial income (loss) and taxable income (loss) for the years 2004 through 2009, as well as its income taxes payable (receivable). It is assumed that the only difference between pretax financial income (loss) and taxable income (loss) in any year results from additional (MACRS) depreciation reported for income tax purposes.

As we show in Example 19-6, Branson Company pays \$360 of income taxes in 2004 and \$840 in 2005 and 2006. In 2007, \$2,800 of the \$8,800 operating loss is carried back to offset the 2005 and 2006 taxable income, resulting in a tax refund of \$840. Note that the 2007 operating loss is *not* carried back to 2004 because of the two-year carryback limitation. In 2008 and 2009, the \$6,000 remaining operating loss is carried forward and (1) offsets the \$1,500 taxable income in 2008 so that no income taxes are paid, and (2) offsets \$4,500 of the \$6,400 taxable income in 2009 so that \$570 of income taxes are paid.

EXAMPLE 19-6	Income Taxes Payable or Receivable				
Year	Pretax Financial Income (Loss)	Depreciation Difference	Taxable Income (Loss)	Income Taxes Payable (Receivable)	
2004	\$2,000	\$ 800	\$ 1,200	\$ 360a	
2005–2006	5,000	2,200	2,800	840a	
2007	(8,000)	800	(8,800)	(840)b	
2008	2,200	700	1,500	0c	
2009	7,000	600	6,400	570 ^d	

- a. Taxable income \times 0.30 income tax rate.
- b. \$2,800 carryback to years 2005 and 2006, resulting in tax refund of \$840; remaining carryforward of \$6,000 (\$8,800 \$2,800).
- c. \$1,500 taxable income offset by carryforward, therefore no income taxes owed; remaining carryforward of \$4,500 (\$6,000 \$1,500).
- d. \$6,400 taxable income offset by \$4,500 carryforward; \$1,900 imes 0.30.

For financial reporting purposes, Branson Company must determine its deferred tax liability (or asset) and income tax expense (or refund) for each year. Both the depreciation taxable temporary difference and the operating loss carryforward for each year affect the company's deferred taxes; Example 19-7 shows these calculations. Note in Example 19-7 that the depreciation taxable temporary difference increases each year by the difference in depreciation for financial reporting purposes and income tax purposes shown in Example 19-6.

EXAMPLE 19-7	Deferred Tax	Information			
		ion Temporary D		Operating Loss	
Year	Beginning	Addition	Ending ^a	Carryforward	
2004	\$ 0	\$ 800	\$ 800	_	
2005-2006	800	2,200	3,000	_	
2007	3,000	800	3,800	(6,000)b	
2008	3,800	700	4,500	(4,500) ^c	
2009	4,500	600	5,100	_	
 a. Beginning depreciation temporary difference + additional difference for current year. b. \$8,800 taxable loss - \$2,800 operating loss carryback (see Example 19-6). c. \$6,000 operating loss carryforward from 2007 - \$1,500 taxable income in 2008 (see Example 19-6). 					

The operating loss carryforward of \$6,000 at the end of 2007 is the \$8,800 operating loss in 2007 less the \$2,800 operating loss carryback, as we discussed earlier. The operating loss carryforward at the end of 2008 is only \$4,500, because \$1,500 was used to offset the taxable income in 2008. The following "timeline" diagram further explains the relationships between the taxable incomes and the operating loss carrybacks and carryforwards for the various years:

2004	2005	2006	2007	2008	2009
\$1,200	\$2,	800	\$(8,800)	\$1,500	\$6,400
	(2,	800) ←	2,800		
			\$(6,000)		
			1,500⊣	(1,500)	
			4,500-		→ (4,500)
			\$ 0	\$ 0	\$1,900
		\$1,200 \$2,6		\$1,200 \$2,800 \$(8,800) (2,800) \(\bigsim 2,800 \\ \$(6,000) \\ \bigsim 4,500-\\ \end{array}	\$1,200 \$2,800 \$(8,800) \$1,500 (2,800) \$2,800 \$(6,000) 1,500 \$1,500 4,500

Example 19-8 shows the computations of Branson Company's deferred tax liability and asset (and valuation allowance) for each year, based on the information in Example 19-7. As we show in Example 19-7, the company has \$800 additional depreciation for tax purposes at the end of 2004, which will result in taxable income of the same amount in future years. As we show in Example 19-8, applying the 30% tax rate to the future taxable amount results in a deferred tax liability of \$240 at the end of 2004. Since there was a \$0 deferred tax liability at the beginning of 2004, the company makes a \$240 adjustment (credit) to the deferred tax liability. The company makes similar computations for 2005 through 2009.

Deferred Tax Liability			Deferred Tax Liability Deferred Tax Asset			set	Valuation Allowance		
Year	Beginning	Ending ^a	Adjustment	Beginning	Ending	Adjustment	Beginning	Ending	Adjustment
2004	\$ 0	\$ 240	\$240	_	_	_	_	_	_
2005-06	240	900	660	_	_	_	_	_	_
2007	900	1,140	240	_	\$1,800b	\$1,800	_	\$660c	\$660
2008	1,140	1,350	210	\$1,800	1,350d	(450)	\$660	0e	(660)
2009	1,350	1,530	180	1,350	0	(1,350)	_	_	_
b. \$6,000 op c. [\$6,000 cd. \$4,500 op	erating loss carry	forward (from ,800 ending de forward × 0.30		.30. ary difference (fro	om Example 1	9-7)] × 0.30.			

At the end of 2007, the \$6,000 operating loss carryforward results in an ending deferred tax asset of \$1,800 ($$6,000 \times 0.30$). Since there was a \$0 deferred tax asset at the beginning of 2007, the company makes an \$1,800 adjustment (debit) to the deferred tax asset. A valuation allowance is required at the end of 2007 because the company does not expect to be profitable in future years. However, the valuation allowance does not have to be for the full amount of the deferred tax asset resulting from the operating loss carryforward. This is because the company has an existing depreciation temporary difference that will result in additional future taxable income against which to offset the operating loss carryforward. Since the operating loss carryforward is \$6,000, but the total ending depreciation taxable temporary difference is \$3,800 at the end of 2007 (see Example 19-7), a valuation allowance of only \$660 [(\$6,000 - \$3,800) \times 0.30] is required and the company makes an adjustment (credit) for that amount.

At the end of 2008 Branson Company has a \$1,350 deferred tax asset (\$4,500 operating loss carryforward \times 0.30), which requires a \$450 adjustment (credit) to that account. Since the \$4,500 total ending depreciation taxable temporary difference is the same as the \$4,500 remaining operating loss carryforward, it does not need a valuation allowance. This requires an adjustment (debit) of \$660 to the valuation allowance account. In 2009 the company uses the \$4,500 remaining operating loss carryforward to offset an equal amount of taxable income, so it eliminates (credits) the \$1,350 related deferred tax asset.

At the end of each year, the company prepares a journal entry to record its income taxes, based on the information in Examples 19-6 and 19-8. For instance, at the end of 2007, Branson Company makes the following journal entry:

Income Tax Refund Receivable	840	
Deferred Tax Asset	1,800	
Deferred Tax Liability		240
Allowance to Reduce Deferred Tax Asset to		
Realizable Value		660
Income Tax Benefit from Operating Loss Carry	back	840
Income Tax Benefit from Operating Loss Carry	forward	900

The \$840 income tax benefit from the operating loss carryback relates to the income tax refund receivable. The \$900 income tax benefit from the operating loss carryforward is the net amount that the company will realize in future years and that is related to the deferred tax asset, valuation allowance, and deferred tax liability.

Branson Company reports operating loss carryback and carryforward tax benefits on its 2007 income statement as follows:

Pretax	c operating loss		\$(8,000)
Less:	Income tax benefit from operating loss carryback	\$840	
	Income tax benefit from operating loss carryforward	900	1,740
Net lo	oss		\$(6,260)

The company discloses the remaining operating loss carryforwards in 2007 and 2008 in a note accompanying the respective year's financial statements.

INTRAPERIOD INCOME TAX ALLOCATION

Intraperiod income tax allocation is the allocation of a corporation's total income tax expense for a period to the various components of its income statement (and occasionally the statement of retained earnings, statement of comprehensive income, or statement of changes in stockholders' equity). Income tax allocation within a period is required under GAAP. APB Opinion No. 9 and FASB Statement No. 154 require an allocation of the income tax effects to extraordinary items, retrospective adjustments, and prior period adjustments, and APB Opinion No. 30 requires an allocation of the income tax effects to a disposal of a segment of a business. FASB Statement No. 109 and FASB Statement No. 130 extend the disclosures to the income tax effects of gains and losses included in other comprehensive income. When a corporation has these types of income, it allocates income taxes between them and income from continuing operations. The rationale behind intraperiod tax allocation is based on the matching concept. A corporation matches its income tax expense against the major components of its pretax income to give a fair presentation of the after-tax impact of each of these items on net income.

For intraperiod income tax allocation purposes, on its income statement a corporation reports the income tax expense applicable to its pretax income from continuing operations separately. The disclosure of the tax effect on its income from continuing operations is important because external users are very interested in the corporation's business activities that are expected to continue. The amount is based on the normal income tax rates applied to this income. However, the corporation reports any extraordinary items, the income or loss from the operations of a discontinued component, the gain or loss from the disposal of a discontinued component, retrospective adjustments and prior period adjustments (reported on the statement of retained earnings), and any other comprehensive income items *net* of the related income tax effects. That is, for these items the corporation deducts the income tax expense (or tax "savings" which is called a tax credit in the case of a loss) directly from each item and reports only the after-tax amount. (It discloses the amount of the income tax expense or tax credit for each of these items either parenthetically or in a note to its financial statements.) Because these items are "incremental," the corporation determines the amount of the income tax expense or tax credit for each item by applying the marginal (incremental) tax rate to each item.





⁸ Apply intraperiod tax allocation.

^{16.} Currently, there are four items of other comprehensive income, as we discussed in Chapter 5. For instance, when a company records a change in the unrealized increase (decrease) stockholders' equity account for investments in available-for-sale securities, this causes a change in the deferred tax liability (or asset). In the journal entry to record the change in the deferred tax liability (or asset), the offsetting entry is a reduction of the unrealized increase (decrease) account.

Example: Intraperiod Income Tax Allocation

Assume the Kalloway Company reports the following items of *pretax* financial (and taxable) "income" for 2007:

Income from continuing operations	
(revenues of \$270,000 less expenses of \$190,000)	\$80,000
Gain on disposal of discontinued Division X	18,000
Loss from operations of discontinued Division X	(5,000)
Extraordinary loss from tornado	(10,000)
Prior period adjustment	
(error in calculating bad debt expense for 2006)	(8,000)
Amount subject to income taxes	\$75,000

The company is subject to income tax rates of 20% on the first \$50,000 of income and 30% on all income in excess of \$50,000. Example 19-9 shows the schedule to allocate the total income tax expense, and Example 19-10 shows Kalloway Company's 2007 income statement 17 and statement of retained earnings as a result of applying intraperiod income tax allocation.

EXAMPLE 19-9 Schedule of Income Tax Expense for 2007				
Component (Pretax)	Pretax Amount	×	Income Tax Rate	Income Tax = Expense (Credit)
Income from continuing operations	\$50,000	X	0.20	= \$10,000
	30,000	\times	0.30	= 9,000
Gain on disposal of discontinued Division X	18,000	\times	0.30	= 5,400
Loss from operations of discontinued Division X	(5,000)	\times	0.30	= (1,500)
Extraordinary loss from tornado	(10,000)	\times	0.30	= (3,000)
Prior period adjustment	(8,000)	×	0.30	= (2,400)
Total income tax expense				\$17,500

As we show in Example 19-9, the total income taxes for the Kalloway Company on the \$90,000 subject to income taxes in 2007 are \$17,500. The company computes the \$19,000 $[(0.20 \times \$50,000) + (0.30 \times \$30,000)]$ income tax expense applicable to its pretax income from continuing operations by multiplying this \$80,000 income by the normal income tax rates. This provision for income tax does *not* consider the tax consequences of any items not included in pretax income from continuing operations. The company reports the \$19,000 income tax expense applicable to pretax income from continuing operations on its income statement in Example 19-10 on a separate line directly below pretax income from continuing operations, and subtracts this amount to determine its income from continuing operations. The company reports the gain on the disposal of the discontinued Division X, the loss from the operations of the discontinued Division X, and the extraordinary loss *net of income tax* on its income statement in Example 19-10, and discloses each related income tax effect in parentheses. It reports the prior period adjustment net of its income tax effect on the statement of retained earnings in Example 19-10. The company computed each of the related income tax effects in

^{17.} For simplicity, in Example 19-10 and related homework we do not include earnings per share information.

Example 19-9 by multiplying the marginal tax rate (30%) by the pretax gain or loss. ¹⁸ Kalloway Company makes the following journal entry to record its 2007 intraperiod income tax allocation:

Income Tax Expense	19,000	
Gain on Disposal of Division X	5,400	
Loss from Operations of Discontinued Division X		1,500
Extraordinary Loss from Tornado		3,000
Retained Earnings (prior period adjustment)		2,400
Income Taxes Payable		17,500

EXAMPLE 19-10 Kalloway Company		
Income Statement For Year Ended December 31, 2007		
Revenues (listed separately) Expenses (listed separately) Pretax income from continuing operation Income tax expense Income from continuing operations Results of discontinued operations:		\$270,000 (190,000) \$ 80,000 (19,000) \$ 61,000
Gain on disposal of discontinued Division X (net of \$5,400 income taxes) Loss from operations of discontinued Division X (net of \$1,500 income tax credit)	\$12,600 (3,500)	9,100
Income before extraordinary loss Extraordinary loss from tornado (net of \$3,000 income tax credit) Net Income		\$ 70,100 (7,000) \$ 63,100
Statement of Retained Earnings For Year Ended December 31, 2007		
Retained earnings, January 1, 2007 Less: Prior period adjustment, understatement of 2006 bad debt expens (net of \$2,400 income tax credit)	se	\$435,000 (5,600)
Adjusted retained earnings, January 1, 2007 Add: Net income		\$429,400 63,100 \$492,500
Less: Cash dividends Retained Earnings, December 31, 2007		(23,500) \$469,000

Note that the debit to Income Tax Expense of \$19,000 relates *only* to the income taxes applicable to income from continuing operations. Since the company reports its results of discontinued operations, extraordinary items, and prior period adjustments on the financial statements *net* of their respective income tax effects, it debits or credits the income tax expense or credit related to each of these items directly to the related account

^{18.} In our example only two tax rates were in effect, and the income from continuing operations was large enough so that the gain and losses were taxed at a single marginal rate. It is possible for several tax rates to be in effect at the same time, and for the total income to be increased or decreased by other gains and losses, so that more than one marginal tax rate may be applicable. In these cases, a corporation uses a weighted averaging process to determine the appropriate tax effects on the gains and losses. This process is beyond the scope of this book.

(as we show in the journal entry) to reduce the account balance to its after-tax amount, as it reports in Example 19-10. Note also, in this example, we assume that taxable income and pretax financial income are the same. If a corporation's taxable income is not the same as its pretax financial income because of temporary differences, the total income tax expense is the sum of the income tax obligation and the adjustments to the deferred tax liabilities and assets. In this case, the corporation must determine the impact of the adjustments on each component of pretax financial income before it can properly allocate the income tax expense. For adjustments of (1) a valuation allowance because of changes in circumstances, and (2) deferred tax liabilities and assets because of changes in tax rates or laws, the corporation includes the amounts of the adjustments in its income tax expense related to continuing operations. ¹⁹ •

FINANCIAL STATEMENT PRESENTATION AND DISCLOSURES

FASB Statement No. 109 specifies what is required for (1) reporting deferred tax liabilities and assets on a corporation's balance sheet, and (2) disclosures in the notes to the corporation's financial statements. FASB Statement No. 95 specifies the related statement of cash flows disclosures.

Balance Sheet Presentation

A corporation must report its deferred tax liabilities and assets in two classifications:

- A net current amount
- A net noncurrent amount

It bases these classifications on the classifications of the related assets or liabilities for financial reporting. For instance, a corporation reports a deferred tax liability related to the excess of tax depreciation over financial depreciation as a noncurrent liability because the depreciable assets are noncurrent assets. It classifies a deferred tax liability or asset not directly related to an asset or liability (e.g., related to an operating loss carryforward) according to the expected reversal date of the temporary difference. A valuation allowance is allocated between current and noncurrent deferred assets on a proportional basis.²⁰

In other words, a corporation must:

- 1. separate its deferred tax liabilities into current and noncurrent groups,
- 2. separate its deferred tax assets into current and noncurrent groups,
- 3. combine (*net*) the amounts in the current groups, and
- 4. combine (*net*) the amounts in the noncurrent groups.²¹

If the net amount of the current groups is a debit balance, the corporation reports the amount as a current asset, whereas it reports a net credit amount as a current liability. The corporation reports a net debit balance for the noncurrent groups as a noncurrent asset, and reports a net credit balance as a noncurrent liability. This procedure is one of the few situations in which "offsetting" of assets and liabilities is allowed in financial reporting. The FASB requires this approach because of the close relationship between deferred tax assets and liabilities, and to avoid the detailed analyses necessary for more refined classification methods.

9 Classify deferred tax liabilities and assets.



^{19.} FASB Statement No. 109, op. cit., par. 35.

^{20.} Ibid., par. 41.

^{21.} This "offsetting" applies to each tax jurisdiction. Furthermore, a corporation may have some assets and liabilities (e.g., warranty liability) for which it classifies the portion due to be collected or paid in the next year as current and classifies the remainder as noncurrent. In such a case, it must also proportionally classify the related deferred tax liability or asset into current and noncurrent amounts.

Example: Balance Sheet Presentation

Assume that the Anicar Company has the four deferred tax items we show in Example 19-11. In this situation, the company combines the \$6,000 credit balance of the current deferred tax liability (Item 1) with the \$3,400 debit balance of the current deferred tax asset (Item 3), and reports a \$2,600 net deferred tax liability as a *current liability* on its year-end balance sheet. Likewise, the company combines the \$12,000 credit balance of the noncurrent deferred tax liability (Item 2) with the \$2,500 debit balance of the noncurrent deferred tax asset (Item 4), and reports a \$9,500 net deferred tax liability as a *noncurrent liability* on its year-end balance sheet. •

EXAMPLE 19-11 Schedule of Deferred Assets and Liabilities					
Deferred Tax Accounts	Account Balance	Related Balance Sheet Account	Deferred Income Tax Reporting Classification		
Deferred Tax Liabilities					
1. Installment sales	\$ 6,000 credit	Accounts receivable	Current		
2. Depreciation	12,000 credit	Property, plant, and equipment	Noncurrent		
Deferred Tax Assets					
3. Warranty costs4. Rent revenue (long-term)	3,400 debit 2,500 debit	Warranty liability Unearned rent	Current Noncurrent		

Statement of Cash Flows Presentation

If a corporation uses the indirect method to report its operating cash flows, it adds any increase in its income taxes payable, any increase in its deferred tax liability, or any decrease in its deferred tax asset to net income in the operating activities section of its statement cash flows. It subtracts from net income any decrease in its income taxes payable, any decrease in its deferred tax liability, or any increase in its deferred tax asset. Because of the significance of income taxes, a corporation using the indirect method of reporting its operating cash flows is also required to disclose its income taxes paid. This disclosure may be made in a separate schedule, narrative description, or in the notes to its financial statements.

Financial Statement Disclosures



To help users evaluate a corporation's income taxes, FASB Statement No. 109 also requires extensive income tax disclosures in the notes to the corporation's financial statements (or directly on the statements themselves). We briefly summarize the major disclosures. For the net deferred tax liability or asset, it discloses the causes of the deferred tax assets and liabilities, the total deferred tax liabilities, the total deferred tax assets, and the total valuation allowance. For the income tax expense, it discloses the amount of income tax expense or benefit allocated to continuing operations, discontinued operations, extraordinary items, retrospective adjustments, prior period adjustments, and gains and losses included in other comprehensive income. It also discloses the significant components of income tax expense related to continuing operations for each year. These include, for instance, (1) current tax expense or benefit (i.e., income tax obligation or refund), (2) deferred tax expense or benefit, (3) tax credits, (4) benefits of operating loss carryforwards, and (5) adjustments of the valuation allowance for changes in circumstances.²²

The intraperiod allocation of income taxes on the face of a corporation's income statement (and statement of retained earnings, statement of changes in stockholders' equity, or statement comprehensive income), as we previously illustrated, partially

^{22.} Ibid., par. 43-48.

satisfies the preceding disclosure requirements. A corporation typically discloses the remaining information in a note to its financial statements. We show these disclosures in Real Report 19-1 later in the chapter for Emerson Radio Corp.

MISCELLANEOUS ISSUES

The previous discussion and examples focused on the major issues involved in accounting for income taxes. For simplicity, we omitted several topics.

Change in Income Tax Laws or Rates

As we discussed earlier, a corporation determines the balances of its deferred tax liabilities (or assets) at the end of a given year by applying the currently enacted income tax rate(s) and laws to its taxable (or deductible) temporary differences. Occasionally, Congress may change the income tax laws or rates so that they differ from the laws or rates a corporation previously used to calculate its deferred tax liabilities (or assets). A corporation must disclose the financial impact of this congressional action because it is an event that has economic consequences to the corporation. That is, a corporation's financial condition improves if it owes a smaller amount of future taxes (or would receive a larger refund) and its condition weakens if it owes more future taxes (or would receive a smaller refund).

When a change in the income tax laws or rates occurs, a corporation adjusts the deferred tax liabilities (and assets) for the effect of the change. It makes the adjustment to the balance of each deferred tax liability (and asset) as of the beginning of the year in which the change is made, and includes the resulting tax effect in the income tax expense related to its income from continuing operations.²³ The amount of the adjustment is the difference between the deferred tax liability (or asset) balance at the beginning of the year, based on the newly enacted laws or rates, and the balance that was computed under the old law or rates.

For instance, refer back to the example (page 954) for a deferred tax liability. If, in May 2008, Congress increases the income tax rate from 30% to 35%, then Track Company's deferred tax liability at the end of 2007 should be \$140 (\$400 \times 0.35) instead of \$120, as we previously computed. Therefore, the company increases the deferred tax liability and recognizes a tax effect in the amount of \$20 (\$140 - \$120). In May 2008, Track Company records the increase and recognizes the expense as follows:

The company increases the income tax expense related to income from continuing operations by \$20 on its 2008 income statement, and reports the deferred tax liability at a credit balance of \$140. At the end of 2008 the company computes its deferred taxes in the usual manner, except that it uses the newly enacted 35% income tax rate. A change in the balance of a valuation allowance—because of changes in circumstances concerning the future realization of a deferred tax asset—is recorded and reported in a similar way.

Compensatory Share Option Plans

In Chapter 16, we discussed compensatory share option plans. Since we had not yet discussed deferred taxes, we did not deal with the related deferred tax journal entries. We provide you with a brief overview here.

Recall that a corporation determines the compensation cost of its compensatory share option plan using the fair value method based on an option pricing model. Under this method, it computes the total compensation cost by multiplying the estimated fair value per share option times the estimated number of share options that are expected to

become vested. This compensation cost is then expensed each year over the service period. This expense reduces the corporation's pretax income for financial reporting purposes and, hence, its income tax expense. However, for income tax purposes the corporation is not allowed to deduct any compensation expense related to the share option plan until the employees exercise the share options. Therefore, during the service period, the corporation's pretax financial accounting income is lower than its taxable income, resulting in a future deductible difference and the need to record a journal entry to increase the related deferred tax asset (and decrease income tax expense).

When the employees exercise the share options, income tax rules allow the corporation to take a tax deduction (compensation expense) for the difference between the market price of the shares on the exercise date and the exercise price. Since the exercise date will be *after* the service period, the corporation will have *no* compensation expense for financial reporting purposes at this time because it already deducted the compensation expense during the service period. Hence, the corporation's pretax accounting income will be higher than the corporation's taxable income. In other words, the previous future deductible difference has "reversed" and is now deducted for income tax purposes. This requires a journal entry to eliminate the deferred tax asset (and increase income tax expense).

If the actual market price at the time of exercise is different from the market price estimated under the option pricing model (which is likely because of the use of estimates), the deferred tax issues become more complicated. The difference is a "permanent" difference that decreases income tax expense and income taxes payable. The net tax savings is treated as an increase in additional paid-in capital in the deferred tax journal entry.

Alternative Minimum Tax and Other Tax Credits

The Tax Reform Act of 1986 imposed an *alternative minimum tax* (AMT) on corporations, designed to help ensure equity in income tax payments. A corporation pays the higher of its AMT (as computed according to the income tax laws) or its regular income tax liability. Thus, the AMT may affect the corporation's income tax obligation in a given year. The AMT also may affect the corporation's deferred tax liability or asset because calculation of the AMT depends, in part, on "adjusted current earnings (ACE)" adjustments related to certain temporary differences. Also, if a corporation pays the AMT, generally it can credit the amount paid against its future income taxes. The corporation uses this credit in a given future year when the regular tax liability exceeds the AMT. It may not carry back the minimum tax credit, but may carry it forward indefinitely.

The federal tax law also allows certain other "tax credits" that a corporation may deduct from its computed income taxes to determine the income taxes it owes. Among the tax credits that are, or have been, in the tax law are credits for certain research and experimental activities, for foreign taxes paid, for hiring certain employees, and for using certain fuels. To illustrate a foreign tax credit, assume the following situation for a corporation (amounts in millions):

	U.S.	Foreign
Taxable income	\$100	\$ 20
Tax rate (assumed)	0.35	0.40
Income taxes payable	\$ 35	\$ 8

On its U.S. income tax return, the corporation reports a total taxable income of \$120 (\$100 + \$20), receiving a foreign tax credit based on the foreign taxes paid. However, the amount of the foreign tax credit cannot exceed an amount equal to the U.S. income tax imposed on the foreign-source income. Therefore, its foreign tax credit is the lesser of \$8, the foreign tax imposed, or \$7 (\$20 \times 35%), the U.S. tax imposed on foreign income. The corporation pays \$35 [(\$120 \times 35%) - \$7] to the U.S. government. However, it pays total income tax of \$43 (\$35 + \$8), which is also its income tax expense

(assuming there are no temporary differences). In the notes to its financial statements, the corporation discloses that there is a difference between the statutory tax rate in the United States of 35% and its effective tax rate of 36% ($$43 \div 120).

As we showed, specific restrictions apply to tax credits, and sometimes a corporation cannot use all of its tax credits in a given year. In some circumstances, the corporation may carry forward these tax credits and apply them against future taxes owed in a manner similar to operating loss carryforwards. When this arises, the steps we outlined earlier in the chapter for computing a corporation's deferred taxes must be modified to include measurement of a deferred tax asset for each type of tax credit. Because the AMT and tax credits are complex and vary across corporations, we do not discuss them further.



LINK TO INTERNATIONAL DIFFERENCES

The international accounting principles for deferred income taxes differ in certain respects from those in the United States. Recall that *FASB Statement No. 109* requires comprehensive income tax allocation of temporary differences using the asset/liability method. International accounting standards require a company to use comprehensive allocation (in most cases) of temporary differences using the "balance sheet liability method" (which is very similar to the asset/liability method). However, there are differences between U.S. and International GAAP. For instance, for deferred tax assets, international accounting standards allow a company to recognize a deferred tax asset only when it is *probable* that it will have sufficient future taxable income against which to utilize the deferred tax asset. For deferred tax liabilities, a company recognizes a deferred tax liability if it revalues its assets. The measurement of a company's deferred tax assets and liabilities is based on future tax rates as well as how the tax laws of the country in which it is located allow it to recover or settle the deferred tax asset or liability.

International accounting standards require a company to report the income tax expense related to its pretax income from ordinary activities as a separate line item on its income statement and to show extraordinary items net of tax. It reports the tax effects of any equity adjustments (e.g., asset revaluations) directly in equity. A company is required to report its deferred tax balances as separate items on its balance sheet. However, in some instances it may offset any debit and credit balances representing deferred tax items. It may *not* report deferred tax assets or liabilities as current items.



SECURE YOUR KNOWLEDGE 19-3

- If a company has an operating loss for income tax purposes (tax deductible expenses exceed taxable revenue), it can choose to:
 - Carry the operating loss back two years (in sequential order starting with the earliest year) to offset previous taxable income and create a refund of income taxes previously paid; any remaining loss can then be carried forward sequentially for 20 years to offset future taxable income, or
 - Forgo the operating loss carryback and choose to carry forward sequentially the operating loss for 20 years to offset future taxable income.
- The income tax benefit of an operating loss carryback is recognized in the year the operating loss occurs as a current receivable on the balance sheet and as a reduction of the operating loss on the income statement.

(continued)

- The income tax benefit of an operating loss carryforward is recognized in the year the operating loss occurs as a deferred tax asset (reduced by a valuation allowance, if necessary) on the balance sheet and as a reduction of the operating loss on the income statement.
- Intraperiod income tax allocation is the allocation of a corporation's total income tax
 expense for a period to the various components of its income statement (and occasionally the statement of retained earnings, statement of comprehensive income, or
 statement of changes in stockholders' equity).
 - Intraperiod tax allocation is based on the concept of matching income tax expense against the major components of pretax income to provide more useful information to external users.
 - Extraordinary items, the income or loss from a discontinued component, retrospective adjustments, prior period adjustments, and any other comprehensive income item are reported net of the related income tax effects where the income tax effect is based on the company's marginal tax rate.
- A company reports deferred tax liabilities and assets as a net current amount and a net noncurrent amount based on the classifications of the related assets or liabilities for financial reporting. Extensive disclosure in the notes to the financial statements is also required.
- A change in income tax laws or rates requires an adjustment of the deferred tax liabilities (and assets) as of the beginning of the year in which the change is made with the resulting tax effect included in income tax expense relating to income from continuing operations.
- The recording of compensation expense relating to compensatory share options (no tax deduction is allowed until the options are exercised) results in a decrease in income tax expense and an increase in the related deferred tax asset. Upon exercise of the share options, the deferred tax asset is eliminated and income tax expense is increased.
- In computing its income tax obligation, a corporation may be allowed tax credits (i.e., credits for alternative minimum tax paid in previous years, research and experimental activities) that reduce the amount of income taxes owed and create a deferred tax asset for each type of tax credit.

ILLUSTRATIVE DISCLOSURES

Real Report 19-1 shows the 2004 income tax disclosures (in part) of Emerson Radio Corp. These disclosures are representative of the type necessary under the generally accepted accounting principles of FASB Statement No. 109.



Real Report 19-1 Income Tax Disclosures

(in thousands)		
Income Statement (in part):		
	Years End	ed March 31
	2004	2003
Income (loss) before income taxes	\$(1,585)	\$16,924
Provision (benefit) for income taxes	2,150	(9,282)
Income (loss) from continuing operations	\$(3,735)	\$26,206
Balance Sheet (in part):		
	Mar	ch 31
	2004	2003
Assets		
Current Assets (in part):		
Deferred tax assets	\$ 5,887	\$ 6,761
		Continued

		March 31	
		2004	2003
Noncurrent Assets (in part):			
Deferred tax assets		15,263	17,595
Current Liabilities (in part):			
Income taxes payable		509	752
Notes to Consolidated Financial Stateme	nts (in part):		
NOTE 7—INCOME TAXES (in part)			
	2004	2003	2002
		(In thousands)	
Current:			
Federal	\$ —	\$ —	\$ (160)
Foreign, state and other	667	2,018	468
Deferred:			
Federal	1,843	(11,300)	(7,899)
Foreign, state and other	(360)		
	\$2,150	\$ (9,282)	\$(7,591)

The difference between the effective rate reflected in the provision for income taxes and the amounts determined by applying the statutory U.S. rate of 34% to income before income taxes from continuing operations for the years ended March 31, 2004, 2003, and 2002 are analyzed below:

	2004	2003 (In thousands)	_2002_
Statutory provision (recovery)	\$ (539)	\$ 5,389	\$ 4,089
Increase (decrease) in valuation allowance	1,981	(13,069)	(12,057)
Foreign income taxes	434	(1,192)	254
State taxes	662	559	372
Minority interest	(268)	(706)	(606)
Other, net	(120)	(263)	357
Total income tax (benefit)	\$2,150	\$ (9,282)	\$ (7,591)

As of March 31, 2004 and 2003, the significant components of the Company's deferred tax assets and liabilities are as follows:

	2004	2003
	(In thousands)	
Deferred tax assets:		
Accounts receivable reserves	\$ 3,405	\$ 4,707
Inventory reserves	1,710	1,963
Net operating loss carryforwards	24,791	25,005
Other	1,248	637
Total deferred tax assets	31,154	32,312
Valuation allowance	(7,543)	(5,562)
Net deferred tax assets	23,611	26,750
Deferred tax liabilities:		
Intangible assets	(578)	(415)
Investment in affiliate	(1,883)	(1,883)
Other		(96)
Net deferred taxes	<u>\$21,150</u>	\$24,356

Total deferred tax assets for the consumer electronics segment at March 31, 2004 and 2003 include the tax benefit of net operating loss carry forwards subject to annual limitations

Continued

(as discussed below) and future deductible temporary differences to the extent management believes it is more likely than not that such benefits will be realized.

Total deferred tax assets for the sporting goods segment at March 31, 2004 and 2003 include the tax benefit of net operating loss carryforwards, which expire in the years 2011 through 2023. Such assets are recorded net of a valuation allowance of \$7,543,000 to reflect the extent to which management believes it is more likely than not that such tax benefits will be realized.

Income (loss) of foreign subsidiaries before taxes was \$(2,872,000), \$6,198,000, and \$2,808,000 for the years ended March 31, 2004, 2003, and 2002, respectively.

As of March 31, 2004, Emerson and its consolidated subsidiaries had a federal net operating loss carryfoward of approximately \$98,000,000, which will expire in the years 2006 through 2019. The utilization of these net operating losses are subject to limitations under IRC section 382. In addition, SSG has federal net operating loss carryforwards of approximately \$25,500,000, which will expire in the years 2011 though 2022.

Questions:

- 1. What does Emerson call its income tax expense?
- 2. How much of the income tax expense shown on the 2004 income statement is currently payable and how much is deferred?
- 3. Does the company have an operating loss carryback or carryforward?
- 4. Explain why Emerson reports a provision for taxes in a year in which it has a loss before taxes and reports a benefit from income taxes in a year that it has income before taxes?
- 5. Does the schedule of deferred tax assets (liabilities) shown in Note 7 reconcile to the deferred tax items shown on the balance sheet?

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. **Understand permanent and temporary differences.** A *permanent* difference is a difference between pretax financial income and taxable income in an accounting period, that will never reverse in a later accounting period. A *temporary* difference is a difference between the tax basis of an asset (or liability) and the financial statement reported amount of the asset (or liability) that will result in taxable or deductible amounts in future years when the reported amount of the asset is recovered (or the liability is settled).
- 2. **Explain the conceptual issues regarding interperiod tax allocation.** Conceptually, there are two objectives of income tax reporting. The first is that a corporation should recognize the amount of its income tax obligation (or refund) for the current year. The second is that the corporation should recognize deferred tax liabilities and assets for the future tax consequences of all events that it has recognized in its financial statements or income tax returns.
- 3. **Record and report deferred tax liabilities.** Measure the ending deferred tax liability for each future taxable amount using the applicable tax rate. Record the increase (or decrease) in the deferred tax liability. Report the ending deferred tax liability as a current or noncurrent liability on the ending balance sheet.
- 4. **Record and report deferred tax assets.** Measure the ending deferred tax asset for each future deductible amount using the applicable tax rate. Record the increase (or decrease) in the deferred tax asset. Report the ending deferred tax asset as a current or noncurrent asset on the ending balance sheet. Reduce the deferred tax asset by a valuation allowance when appropriate.
- 5. **Explain an operating loss carryback and carryforward**. An operating loss *carryback* occurs when a corporation carries back a current year operating loss to offset any taxable income in the previous two years. An operating loss *carryforward* occurs when a corporation's taxable income for the previous two years is not enough to offset the amount of the current year operating loss, so that it carries forward the loss to offset any future taxable income over the next 20 years.
- 6. Account for an operating loss carryback. Determine the amount of pretax financial (and taxable) income, as well as the income taxes paid in the previous two years. Carry back the pretax operating loss of the current year to the previous years and offset the previous pretax financial (and taxable) income. Report the resulting income tax refund of the income taxes

- previously paid as a receivable on the balance sheet and subtract the income tax benefit due to the carryback from the pretax operating loss on the income statement.
- 7. **Account for an operating loss carryforward.** Recognize the tax benefit of an operating loss carryforward in the current year as a deferred tax asset. Determine the amount by multiplying the current income tax rate times the pretax operating loss. Establish a valuation allowance for the amount of the deferred tax asset that the corporation is not likely to realize.
- 8. **Apply intraperiod tax allocation.** Report the income tax expense applicable to pretax income from continuing operations separately on the income statement, basing the expense on the normal income tax rates. Report any results of discontinued operations, extraordinary items, retrospective adjustments, and prior period adjustments net of the income tax effects (with each related income tax effect reported in parentheses).
- 9. Classify deferred tax liabilities and assets. A corporation reports its deferred tax liabilities and assets in two classifications, a *net* current amount and a *net* noncurrent amount. To do so, it separates its deferred tax liabilities and deferred tax assets into current and noncurrent groups, and then combines (nets) the amounts in the current groups and the noncurrent groups.

Answers to Real Report Questions

Real Report 19-1 Answers

- Emerson calls its income tax expense "provision (benefit) for income taxes." The provision represents income tax expense while the benefit represents income tax savings.
- 2. At the end of 2004, Emerson has current income tax payable of \$509,000 and deferred tax assets of \$21,150,000 (\$5,887,000 current asset + \$15,263,000 noncurrent asset).
- 3. The company has a operating loss carryforward of approximately \$98,000,000.
- 4. In 2003, when Emerson reported income before income taxes of \$16,924,000 it recorded an income tax provision of \$5,389,000 (disclosed in Note 7). However, the company also changed its estimate of the amount of the operating loss carryforward that was expected to be applied against future taxable income. Expecting future taxable income, the valuation allowance related to the deferred tax asset was decreased by \$13,069,000 with a corresponding decrease in the provision for income taxes. This was
- the primary contributing factor to Emerson recognizing an income tax benefit in 2003 although it had future taxable income. In 2004, Emerson's loss before income taxes (\$1,585,000) resulted in a tax benefit of \$539,000. However, the company again revised its estimate of the amount of the deferred tax asset to be realized and increased the valuation allowance, with a corresponding increase in the provision for income taxes, by \$1,981,000. This action, along with taxable income in foreign countries and various states contributed to Emerson reporting income tax expense in a year in which it reported a loss on the income statement.
- 5. The schedule of deferred tax assets shows a net deferred tax asset of \$21,150,000 and \$24,356,000 for 2004 and 2003, respectively. This reconciles to the total of the current and noncurrent deferred tax asset shown on the balance sheet for the respective years.

QUESTIONS

- **Q19-1** Distinguish between the objectives of financial reporting and the Internal Revenue Code.
- **Q19-2** Identify the five groups of possible differences between pretax financial income and taxable income (or between income tax expense and income taxes payable).
- **Q19-3** What is a permanent difference? Give two examples.
- **Q19-4** What is a temporary difference? Give two examples.
- **Q19-5** What did the FASB conclude in *FASB Statement No.* 109 regarding interperiod income tax allocation?
- **Q19-6** What are the two objectives of accounting for income taxes identified in *FASB Statement No. 109?*
- **Q19-7** How does a corporation determine its deferred taxes under generally accepted accounting principles?

- **Q19-8** What are the three characteristics of a liability and why does a deferred tax liability of a corporation meet these characteristics?
- **Q19-9** What are the three characteristics of an asset and why does a deferred tax asset of a corporation meet these characteristics?
- **Q19-10** When does a corporation establish a valuation allowance? Give an example of positive evidence that might be used to justify that a valuation allowance is not needed.
- **Q19-11** List the steps necessary to measure and record a corporation's current and deferred income taxes.
- **Q19-12** Describe an operating loss carryback. List the two conceptual questions concerning accounting for a carryback.
- **Q19-13** Describe an operating loss carryforward. List the two conceptual questions concerning accounting for a carryforward.

Q19-14 Briefly summarize the generally accepted accounting principles for the financial reporting of operating loss carrybacks and carryforwards.

Q19-15 What is intraperiod income tax allocation? How is income tax expense reported on a corporation's income statement and retained earnings statement?

Q19-16 How are deferred tax liabilities and assets reported on a corporation's balance sheet?

Q19-17 Briefly describe the adjustment of a deferred tax liability (or asset) and the related income statement disclosure for a change in the income tax rate.

MULTIPLE CHOICE

Select the best answer for each of the following.

M19-1 A permanent difference is a difference between pretax financial income and taxable income in an accounting period that will never reverse in a later period. Which of the following is *not* an example of a permanent difference?

- a. Fine for air pollution
- b. Percentage depletion in excess of cost depletion on a wasting asset
- c. Interest on municipal bonds
- d. Rent received in advance

M19-2 Prior to and during 2007, the Shadrach Company reported tax depreciation at an amount higher than the amount of financial depreciation, resulting in a book value of the depreciable assets of \$24,500 for financial reporting purposes and of \$20,000 for tax purposes at the end of 2007. In addition, the company recognized a \$3,500 estimated liability for legal expenses in the financial statements during 2007; it expects to pay this liability (and deduct it for tax purposes) in 2011. The current tax rate is 30%, no change in the tax rate has been enacted, and the company expects to be profitable in future years. What is the amount of the net noncurrent deferred tax liability at the end of 2007?

a. \$300b. \$450c. \$1,050d. \$1,350

M19-3 Which of the following is an argument in favor of the asset/liability method of interperiod income tax allocation?

- a. Deferred taxes are the result of historical transactions and should be reported in a similar manner.
- b. Tax effects should be recorded in the same manner as all other revenue and expense transactions that involve changes in specific asset and liability accounts.
- c. The predictive value of future cash flows, liquidity, and financial flexibility are increased when deferred taxes are reported based on enacted tax rates that will be in effect when the temporary differences reverse.
- d. Historical tax rates are more verifiable and, therefore, the deferred tax amount is more reliable.

M19-4 At the beginning of 2007, Conley Company purchased an asset at a cost of \$10,000. For financial reporting purposes, the asset has a four-year life with no residual value, and is depreciated by the straight-line method beginning in 2007. For tax purposes, the asset is depreciated under MACRS using a five-year recovery period. Prior to 2007, the company had no deferred tax liability or

asset. The difference between depreciation for financial reporting purposes and income tax purposes is the only temporary difference between pretax financial income and taxable income. The current income tax rate is 30% and no change in the tax rate has been enacted for future years. In 2007 and 2008, taxable income will be higher or lower than financial income by what amount?

	2007	2008
a.	Higher by \$150	Lower by \$210
b.	Higher by \$500	Lower by \$700
C.	Lower by \$500	Higher by \$700
d.	Lower by \$1,500	Higher by \$100

M19-5 Brooks Company reported a prior period adjustment of \$12,000 in pretax financial "income" and taxable income for 2008. The prior period adjustment was the result of an error in calculating bad debt expense for 2007. The current tax rate is 30% and no change in the tax rate has been enacted for future years. When the company applies intraperiod income tax allocation, the prior period adjustment will be

- a. Shown on the income statement at \$12,000
- b. Shown on the income statement at \$8,400 (net of \$3,600 income taxes)
- c. Shown on the retained earnings statement at \$12,000
- d. Shown on the retained earnings statement at \$8,400 (net of \$3,600 income taxes)

M19-6 In 2007 Swope Company reports a pretax operating loss of \$70,000 for both financial reporting and income tax purposes. Pretax financial income and taxable income for the previous three years had been: 2004—\$15,000 (tax rate 20%); 2005—\$24,000 (tax rate 25%); and 2006—\$49,000 (tax rate 30%). The current tax rate is 30% and no change in the tax rate has been enacted for future years. At the end of 2007 the journal entry recorded would contain an income tax benefit from an operating loss carryback of

a. \$0 c. \$19,800 b. \$18,300 d. \$19,950

M19-7 *FASB Statement No. 109* came to which of the following conclusions regarding interperiod income tax allocation?

- a. The partial allocation approach should be applied.
- b. The net-of-tax method of income tax allocation should be used.
- c. Nonallocation of income tax expense is appropriate.
- d. The asset/liability method of income tax allocation should be used.

M19-8 Which of the following is *not* a cause of a difference between pretax financial income and taxable income in a given period?

- a. Operating loss carrybacks and carryforwards
- b. Permanent differences
- c. Applicable tax rates
- d. Temporary differences

M19-9 Which component of current income is not disclosed on the income statement net of tax effects?

- a. Extraordinary loss from flood
- b. Gain on disposal of milling machine
- c. Gain from sale of discontinued segment
- d. Loss from operations of discontinued component

M19-10 The Oliver Company earned taxable income of \$7,500 during 2007, its first year of operations. A reconciliation of pretax financial income and taxable income indicated that an additional \$2,500 of accelerated depreciation was deducted for tax purposes and that an estimated expense of

\$5,800 was deducted for financial reporting purposes. The estimated expense is not expected to be deductible for tax purposes until 2010, when the liability is paid. The current tax rate is 30% and no change in the tax rate has been enacted for future years. The resulting journal entry for 2007 would be:

a. Income Tax Expense	1,260	
Deferred Tax Asset	1,740	
Deferred Tax Liability		750
Income Taxes Payable		2,250
b. Income Tax Expense	1,260	
Deferred Tax Asset	990	
Income Taxes Payable		2,250
c. Income Tax Expense	3,240	
Deferred Tax Liability		990
Income Taxes Payable		2,250
d. Income Tax Expense	3,000	
Deferred Tax Liability		750
Income Taxes Payable		2,250

EXERCISES

E19-1 *Future Taxable Amount* The Durn Company began operations at the beginning of 2007. At the end of 2007 the company reported taxable income of \$9,800 and pretax financial income of \$11,200, because of a single temporary difference. The income tax rate for the current year is 30%, but Congress has enacted a 40% tax rate for 2008 and beyond.

Required

Prepare the income tax journal entry of the Durn Company at the end of 2007.

E19-2 *Temporary Difference* At the end of 2007, its first year of operations, the Slater Company reported a book value for its depreciable assets of \$40,000 for financial reporting purposes and \$33,000 for income tax purposes. The company earned taxable income of \$97,000 during 2007. The company is subject to a 30% income tax rate and no change has been enacted for future years. The depreciation was the only temporary difference between taxable income and pretax financial income.

Required

- 1. Prepare the income tax journal entry of the Slater Company at the end of 2007.
- 2. Show how the deferred taxes would be reported on the Slater Company's December 31, 2007 balance sheet.

E19-3 *Single Temporary Difference: Multiple Rates* At the end of 2007, Fulhage Company reported taxable income of \$9,000 and pretax financial income of \$10,600. The difference is due to depreciation for tax purposes in excess of depreciation for financial reporting purposes. The income tax rate for the current year is 40%, but Congress has enacted tax rates of 35% for 2008 and 30% for 2009 and beyond.

Fulhage Company has calculated the excess of its financial depreciation over its tax depreciation for future years as follows: 2008, \$600; 2009, \$700; and 2010, \$300. Prior to 2007, the company had no deferred tax liability or asset.

Required

Prepare the income tax journal entry of the Fulhage Company at the end of 2007.

E19-4 Future Deductible Amount Pito Company has been in operation for several years. During those years the company has been profitable, and it expects to continue to be profitable in the foreseeable future. At the beginning of 2007, the company has a deferred tax asset of \$360 pertaining to one future deductible amount. During 2007, the company earned taxable income of \$51,000, which was taxed at a rate of 30% (no change in the tax rate has been enacted for future years). At the end of 2007, the book value of the current liability to which the deferred tax asset relates for financial reporting purposes exceeded the book value for income tax purposes by \$6,000.

Required

- 1. Prepare the income tax journal entry of the Pito Company at the end of 2007.
- 2. Show how the deferred tax asset is reported on the Pito Company's December 31, 2007 balance sheet.

E19-5 *Valuation Account* At the end of 2007, its first year of operations, the Beattie Company reported taxable income of \$38,000 and pretax financial income of \$34,400. The difference is due to the way the company handles its warranty costs. For tax purposes, the company deducts the warranty costs as they are paid. For financial reporting purposes, the company provides for a year-end estimated warranty liability based on future expected costs. The company is subject to a 30% tax rate for 2007 and no change in the tax rate has been enacted for future years. Based on verifiable evidence, the company decides it should establish a valuation allowance of 60% of its ending deferred tax asset.

Required

- 1. Prepare the income tax journal entry of the Beattie Company at the end of 2007.
- 2. Prepare the lower portion of the Beattie Company's 2007 income statement.

E19-6 *Income Taxes* Thun Company has been in operation for several years. It has both a deductible and a taxable temporary difference. At the beginning of 2007, its deferred tax asset was \$690 and its deferred tax liability was \$750. The company expects its future deductible amount to be "deductible" in 2008 and its future taxable amount to be "taxable" in 2009. In 2006 Congress enacted income tax rates for future years as follows: 2007, 30%; 2008, 34%; and 2009, 35%. At the end of 2007, the company reported income taxes payable of \$12,600, an increase in its deferred tax liability of \$300, and an ending balance in its deferred tax asset of \$860. The company has prepared the following schedule of items related to its income taxes for 2007.

Item	Amount
Taxable income for 2007	
Future taxable amount, 12/31/07	
Increase in future deductible amount during 2007	
Income tax expense for 2007	

Required

Fill in the blanks in the preceding schedule. Show your calculations.

E19-7 Originating and Reversing Difference The Tanner Corporation begins operations in 2006 and reports the following amounts of pretax financial income and taxable income for the years 2006 through 2010. The company has only one temporary difference, and only one originating or reversing difference occurs in any single year. The company is subject to a tax rate of 30% for all the years.

Year	Pretax Financial Income	Taxable Income	
2006	\$70,000	\$ 50,000	
2007	85,000	75,000	
2008	90,000	90,000	
2009	82,000	92,000	
2010	93,000	113,000	

Required

- 1. Prepare the income tax journal entry for each year.
- 2. What do you notice about the balance in the deferred taxes over the five years?

E19-8 *Multiple Temporary Differences* Vickers Company reports taxable income of \$4,500 for 2007. The company has two temporary differences between pretax financial income and taxable income at the end of 2007. The first difference is expected to result in taxable amounts totaling \$2,470 in future years. The second difference is expected to result in deductible amounts totaling \$1,360 in future years. The company has a deferred tax asset of \$372 and a deferred tax liability of \$690 at the beginning of 2007. The current tax rate is 30% and no change in the tax rate has been enacted for future years. The company has positive, verifiable evidence of future taxable income.

Required

Prepare the income tax journal entry of the Vickers Company at the end of 2007.

E19-9 *Operating Loss* At the end of 2007, Keil Company reports a pretax operating loss of \$80,000 for both financial reporting and income tax purposes. Prior to 2007 the company had been successful and had reported and paid taxes on the following pretax financial income and taxable income: 2004, \$37,000; 2005, \$50,000; and 2006, \$54,000. The company had been subject to tax rates of 20% in 2004, 25% in 2005, and 30% in 2006.

Required 🌌

- 1. Prepare the income tax journal entry of the Keil Company at the end of 2007.
- 2. Prepare the lower portion of Keil's 2007 income statement.

E19-10 *Operating Loss* At the end of 2007, its first year of operations, the Swelland Company reported a pretax operating loss of \$32,000 for both financial reporting and income tax purposes. At that time the company had no positive verifiable evidence that it would earn future taxable income. However, due to successful management, the company reported pretax operating income (and taxable income) of \$70,000 in 2008. During both years, the income tax rate was 30% and no change had been enacted for future years.

Required

- 1. Prepare the income tax journal entries of the Swelland Company at the end of 2007.
- 2. Prepare the income tax journal entry of the Swelland Company at the end of 2008.
- 3. Prepare the lower portion of Swelland's 2008 income statement.

E19-11 *Operating Loss* Baxter Company began operations in 2003 and was profitable through 2006, during which time the tax rate was 30%. At the end of 2007, the company reported a pretax operating loss of \$135,000 for both financial reporting and income taxes. Because the tax rate was increased to 40% in 2007, the company elects to forgo any carryback of the operating loss. In 2008 the company reported pretax operating income of \$150,000.

Required

- 1. Prepare the income tax journal entry of the Baxter Company at the end of 2007.
- 2. Prepare the lower portion of Baxter's 2007 income statement.
- 3. Explain why Baxter Company elected to forgo any carryback in 2007.
- 4. Prepare the income tax journal entry of the Baxter Company at the end of 2008.
- 5. Prepare the lower portion of Baxter's 2008 income statement.

E19-12 *Intraperiod Tax Allocation* The Wright Company reports the following information for the year ended December 31, 2007:

Pretax income from continuing operations	\$160,000a
Pretax gain from sale of investment (extraordinary item)	30,000
Pretax income from operations of discontinued Division M	27,000
Pretax loss on disposal of Division M	(45,000)
Pretax correction of error in understating depreciation in 2006	(8,000)
Retained earnings, January 1, 2007	410,000
Cash dividends during 2007	48,000
Total income tax	$36,000^{b}$

- a. Of this amount, revenues are \$400,000 and expenses are \$240,000.
- b. Of this amount \$7,500 relates to the extraordinary item; \$6,750 relates to the pretax income from the operations of discontinued Division M; the pretax loss on the disposal of Division M resulted in an income tax savings of \$11,250; and the pretax correction of the depreciation error resulted in an income tax savings of \$2,000.

Required

- 1. Prepare the year-end journal entry necessary to record the 2007 intraperiod income tax allocation in regard to the preceding information.
- 2. Prepare Wright's 2007 income statement and statement of retained earnings.

E19-13 *Calculating Intraperiod Income Taxes* The Stam Corporation reports the following *pretax* accounting (and taxable) income items during 2007:

Income from continuing operations	\$90,000a
Loss from operations of a discontinued division	(10,000)
Gain from the disposal of the discontinued division	25,000
Extraordinary gain	20,000

a. Of this amount, revenues are \$320,000 and expenses are \$230,000.

Required 🔀

- 1. Prepare the journal entry necessary to record the 2007 intraperiod income tax allocation in regard to the preceding information. Assume a tax rate of 15% on the first \$40,000 of income and a rate of 30% on income in excess of \$40,000.
- 2. Prepare Stam's 2007 income statement.

E19-14 *Disclosure of Intraperiod Tax Allocation* The Lester Corporation reports \$119,000 of both *pretax* accounting "income" and taxable income in 2007. In addition to income from continuing operations (of which revenues are

\$500,000), included in this "income" is a \$25,000 extraordinary loss from a fire, a \$17,000 loss from operations of discontinued Division W, a \$15,000 gain on the disposal of Division W, and a \$14,000 correction of an error due to the understatement of bad debt expense in 2006. The company is subject to a 20% tax rate on the first \$50,000 of income and a rate of 25% on income in excess of \$50,000.

Required

- 1. Show how this information is disclosed on Lester's 2007 income statement.
- 2. Prepare Lester's 2007 statement of retained earnings. (Assume a beginning retained earnings balance of \$191,000 and cash dividends during 2007 amounting to \$65,000.)

E19-15 *Balance Sheet Presentation* The Thiel Company reports the following deferred tax items at the end of 2007:

Deferred Tax Item #	Account Balance	Related Asset or Liability
1	\$ 7,200 credit	Current asset
2	6,700 debit	Current liability
3	15,500 credit	Noncurrent asset
4	10,600 debit	Noncurrent liability

Required

Show how the preceding deferred tax items are reported on the Thiel Company's December 31, 2007 balance sheet.

E19-16 *Change in Tax Rates* At the end of 2007, Rowet Company reported a deferred tax liability of \$6,120 based on an income tax rate of 30%. On June 1, 2008 Congress changed the income tax rate to 35%.

Required

- 1. Calculate the amount of the adjustment to Rowet Company's 2007 year-end deferred tax liability.
- 2. Prepare the journal entry to correct Rowet Company's deferred tax liability.

PROBLEMS

Based on a	n analysis of the company's current taxable income and pretax financial income, you have identified the following
items that o	create differences between the two amounts and that may result in differences between the company's future tax-
able incom	e and its future pretax financial income:
1.	Percentage depletion deducted for taxes in excess of cost depletion for financial reporting
	Warranty costs to be deducted for taxes that were deducted as warranty expense for financial reporting
3.	Gross profit to be recognized for taxes under the completed-contract method that was recognized for financial
	reporting under the percentage-of-completion method
	Officers' life insurance premium expense deducted for financial reporting
5.	Rent revenue to be recognized for financial reporting that was reported for taxes when collected in advance
6.	Loss from writedown of inventory that was recognized for financial reporting but that will be deducted for taxes
	when the inventory is sold
7.	Interest revenue on municipal bonds recognized for financial reporting
8.	Loss due to contingent liability that was deducted for financial reporting that will be deducted for taxes when
	the liability is actually paid
9.	Gross profit to be recognized under installment method for tax purposes that was recognized on accrual basis
	for financial reporting
10.	Depreciation to be recognized for financial reporting in excess of MACRS depreciation to be deducted for tax
	purposes
11.	Investment income that has been recognized under the equity method for financial reporting that will be recognized.

P19-1 Temporary and Permanent Differences In the current year you are calculating a diversified company's deferred taxes.

Required

For each difference, indicate whether it is a temporary difference (T) or a permanent difference (P) by placing the appropriate letter on the line provided. If the difference is a temporary difference, also indicate for the current year whether it will result in a future taxable amount (T) or a future deductible amount (D).

nized as fully taxable for tax purposes when dividends are collected

P19-2 *Definitions* The FASB has defined several terms in regard to accounting for income taxes. Below are various code letters (for terms) followed by definitions.

Code Letter	Term	Code Letter	Term
A	Future deductible amount	Н	Deferred tax consequences
В	Income tax obligation (or refund)	I	Future taxable amount
С	Operating loss carryback	J	Deferred tax liability
D	Valuation allowance	K	Temporary difference
E	Deferred tax asset	L	Income tax expense (or benefit)
F	Operating loss carryforward	M	Deferred tax expense (or benefit)
G	Taxable income		• • • • • • • • • • • • • • • • • • • •
 The deferred tax consequences of future deductibles amounts and operating loss car A difference between the tax basis of an asset or liability and its reported amount in t will result in taxable or deductible amounts in future years when the reported amount recovered or settled, respectively Temporary difference that results in taxable amounts in future years when the relate ered or settled, respectively The future effects on income taxes, as measured by the applicable enacted tax rate ar tax law, resulting from temporary differences and operating loss carryforwards at the The change during the year in a corporation's deferred tax liabilities and assets The deferred tax consequences of future taxable amounts The portion of a deferred tax asset for which it is more likely than not that a tax benefit Temporary difference that results in deductible amounts in future years when the recovered or settled, respectively The sum of income tax obligation and deferred tax expense (or benefit) The amount of income taxes paid or payable (or refundable) for the current year An excess of tax deductible expenses over taxable revenues in a year that may be carried income in a future year An excess of tax deductible expenses over taxable revenues in a year that may be carried income in a future year 		orted amount in the financial statements that the reported amount of the asset or liability is a recoveracted tax rate and provisions of the enacted tryforwards at the end of the current year and assets that a tax benefit will not be realized be years when the related asset or liability is nefit) ne current year that may be carried forward to reduce taxable emptions for the year	

Required

Indicate which terms belongs with each definition by inserting the corresponding code letter on the line preceding the definition.

P19-3 Multiple Temporary Differences Wilcox Company has prepared the following reconciliation of its pretax financial income with its taxable income for 2007:

Pretax	x financial income	\$3,000
Add:	Estimated expense on one-year warranties recognized for financial reporting in excess of	
	actual warranty costs deducted for income taxes	100
Less:	MACRS depreciation deducted for income taxes in excess of depreciation recognized for financial reporting	(150)
Taxab	le income	\$2,950

At the beginning of 2007, Wilcox Company had a deferred tax liability of \$495. The current tax rate is 30% and no change in the tax rate has been enacted for future years. At the end of 2007, the company anticipates that actual warranty costs will exceed estimated warranty expense by \$100 next year and that financial depreciation will exceed tax depreciation by \$1,800 in future years. The company has earned income in all past years and expects to earn income in the future.

- 1. Prepare the income tax journal entry of the Wilcox Company at the end of 2007.
- 2. Prepare the lower portion of Wilcox's 2007 income statement.
- 3. Show how the income tax items are reported on Wilcox's December 31, 2007 balance sheet.

P19-4 Interperiod Tax Allocation Klerk Company had four temporary differences between its pretax financial income and its taxable income during 2007, as follows:

Number	Temporary Difference
1	Gross profit on certain installment sales is recognized under the accrual method for financial reporting
	and under the installment method for income taxes
2	MACRS depreciation is used for income taxes; a different depreciation method is used for financial reporting
3	Rent receipts are included in taxable income when collected in advance; rent revenue is recognized under
	the accrual method for financial reporting
4	Warranty expense is estimated for financial reporting; warranty costs are deducted as incurred for income taxes

At the beginning of 2007, the company had a deferred tax liability of \$84,300 related to temporary difference #2 and a deferred tax asset of \$21,090 related to temporary difference #4. Based on its tax records, the company earned taxable income of \$270,000 for 2007. The company's accountant has prepared the following schedule showing the total future taxable and deductible amounts at the end of 2007 for its four temporary differences:

Future		Future		
Taxable Amounts		Deductible Amounts		
#1	#2	#3	#4	
\$77,900	\$241,000	\$20,000	\$55,300	

The company has a history of earning income and expects to be profitable in the future. The income tax rate for 2007 is 40%, but in 2006 Congress enacted a 30% tax rate for 2008 and future years.

During 2007, for financial accounting purposes, the company reported revenues of \$750,000 and expenses of \$447,100. The deferred tax related to temporary differences #1, #2, and #4 are considered to be noncurrent by the company; the deferred tax related to temporary difference #3 is considered to be current.

Required

- 1. Prepare the income tax journal entry of the Klerk Company for 2007.
- 2. Prepare a condensed 2007 income statement for the Klerk Company.
- 3. Show how the income tax items are reported on Klerk Company's December 31, 2007 balance sheet.

P19-5 *Interperiod Tax Allocation* Peterson Company has computed its pretax financial income to be \$66,000 in 2007 *after* including the effects of the appropriate items from the following information:

1.	Depreciation taken for tax purposes	\$40,000
2.	Officers' life insurance premium expense recorded on accounting records	15,000
3.	Interest revenue on investment in municipal bonds recorded on accounting records	25,000
4.	Percentage depletion taken for tax purposes in excess of cost depletion taken for financial reporting purposes	10,000
5.	Depreciation taken for financial reporting purposes	48,000
6.	Actual product warranty costs deducted for tax purposes	20,000
7.	Gross profit on installment sales recognized for tax purposes	80,000
8.	Estimated product warranty expense recorded on accounting records	27,000
9.	Gross profit on installment sales recognized for financial reporting purposes	91,000

The company's accountant has prepared the following schedule showing the future taxable and deductible amounts at the end of 2007 for its three temporary differences:

	Totals
Future Taxable Amounts	_
Depreciation difference	\$33,800
Installment sales: gross profit difference	26,700
Future Deductible Amounts	
Warranty difference	56,500

At the beginning of 2007 the company had a deferred tax liability of \$12,540 related to the depreciation difference and \$4,710 related to the installment sales difference. In addition, it had a deferred tax asset of \$14,850 related to the warranty difference. The current tax rate is 30% and no change in the tax rate has been enacted for future years.

Required

- 1. Compute the Peterson Company's taxable income for 2007.
- 2. Prepare the income tax journal entry of the Peterson Company for 2007 (assume no valuation allowance is necessary).
- 3. Identify the permanent differences in Items 1–9 and explain why you did or did not account for them as deferred tax items in Requirement 2.

P19-6 *Interperiod Tax Allocation* Quick Company reports the following revenues and expenses in its pretax financial income for the year ended December 31, 2007:

Revenues	\$229,600
Expenses	(160,100)
Pretax financial income	\$ 69,500

The revenues included in pretax financial income are the same amount as the revenues included in the company's taxable income. A reconciliation of the expenses reported for pretax financial income to the expenses reported for taxable income, however, reveals four differences:

- 1. Depreciation deducted for financial reporting exceeded depreciation deducted for income taxes by \$11,000
- 2. Percentage depletion deducted for income taxes exceeded cost depletion deducted for financial reporting by \$15,600

- 3. Warranty costs deducted for income taxes exceeded warranty expenses deducted for financial reporting by \$8,900
- 4. Legal expense of \$9,800 was deducted for financial reporting; it will be deducted for income taxes when paid in a future year

The company expects its percentage depletion to exceed its cost depletion in each of the next five years by the same amount as in 2007. At the end of 2007 the other three expenses are expected to result in total future taxable or deductible amounts as follows:

	Totals
Future Taxable Amounts	
Depreciation expense difference	\$63,000
Future Deductible Amounts	
Warranty expense difference	48,400
Legal expense difference	9,800

At the beginning of 2007 the company had a deferred tax liability of \$22,200 related to the depreciation difference and a deferred tax asset of \$17,190 related to the warranty difference. The income tax rate for 2007 is 35%, but in 2006 Congress enacted a 30% rate for 2008 and future years.

Required

- 1. Compute the Quick Company's taxable income for 2007.
- 2. Prepare the income tax journal entry of the Quick Company for 2007. Assume no valuation allowance is necessary.
- 3. Prepare a condensed 2007 income statement for the Quick Company.

P19-7 *Deferred Tax Liability: Depreciation* At the beginning of 2007, its first year of operations, Cooke Company purchased an asset for \$100,000. This asset has an eight-year economic life with no residual value, and it is being depreciated by the straight-line method for financial reporting purposes. For tax purposes, however, the asset is being depreciated using the MACRS (200%, 5-year life) method.

During 2007, the company reported pretax financial income of \$51,500 and taxable income of \$44,000. The depreciation temporary difference caused the difference between the two income amounts. The tax rate in 2007 was 30% and no change in the tax rate had been enacted for future years.

Required 🔀

- 1. Prepare a schedule that shows for each year, 2007 through 2014, (a) MACRS depreciation, (b) straight-line depreciation, (c) the annual depreciation temporary difference, and (d) the accumulated temporary difference at the end of each year.
- 2. Prepare a schedule that computes for each year, 2007 through 2014, (a) the ending deferred tax liability, and (b) the change in the deferred tax liability.
- 3. Prepare the income tax journal entry at the end of 2007.
- 4. Explain what happens to the balance of the deferred tax liability at the end of 2007 through 2014.

P19-8 *Deferred Tax Liability: Depreciation* Gire Company began operations at the beginning of 2007, at which time it purchased a depreciable asset for \$60,000. For 2007 through 2010, the asset was depreciated on the straight-line basis over a four-year life (no residual value) for financial reporting. For income tax purposes the asset was depreciated using MACRS (200%, three-year life).

For 2007 through 2010, the company reported pretax financial income and taxable income of the following amounts (the differences are due solely to the depreciation temporary differences):

Year	Pretax Financial Income	Taxable Income
2007	\$24,998	\$20,000
2008	38,670	27,000
2009	27,886	34,000
2010	29,446	40,000

Over the entire four-year period, the company was subject to an income tax of 30% and no change in the tax rate had been enacted for future years.

Required

- 1. Prepare a schedule that shows for each year, 2007 through 2010, the (a) MACRS depreciation, (b) straight-line depreciation, (c) annual depreciation temporary difference, and (d) accumulated temporary difference at the end of each year.
- 2. Prepare the income tax journal entry at the end of (a) 2007, (b) 2008, (c) 2009, and (d) 2010. (Round to the nearest dollar.)
- 3. Prepare the lower portion of the income statement for (a) 2007, (b) 2008, (c) 2009 and (d) 2010.

P19-9 *Deferred Taxes: Multiple Rates* Wicks Corporation began operations on January 1, 2007. At the end of 2007 the company reported pretax financial income of \$60,000 and taxable income of \$57,700, due to two temporary differences. The

income tax rate is 30% for 2007, but Congress has enacted a tax rate of 35% for 2007 and beyond. To determine its deferred taxes, the company prepared the following schedule of expected future taxable and deductible amounts for the two temporary differences:

	2008	2009	2010	2011
Future taxable amounts	\$4,900	\$4,200	\$ 4,600	\$4,100
Future deductible amount			(15,500)	

Required

- 1. Prepare the income tax journal entry of the Wicks Corporation at the end of 2007. Assume a valuation allowance is not required.
- 2. Prepare the lower portion of the 2007 income statement for the Wicks Corporation.

P19-10 Operating Loss Ross Company has been in business for several years, during which time it has been profitable. For each of those years, the company reported (and paid taxes on) taxable income in the same amount as pretax financial income based on the following revenues and expenses:

	Revenues	Expenses
2003	\$182,000	\$150,000
2004	220,000	170,000
2005	253,000	180,000
2006	241,000	196,000

The company was subject to the following income tax rates during this period: 2003, 20%; 2004, 25%; 2005, 30%; and 2006, 25%. During 2007 the company experienced a severe decrease in the demand for its products. The company tried to offset this decrease with an expensive marketing campaign, but was unsuccessful. Consequently, at the end of 2007 the company determined that its revenues were \$60,000 and its expenses were \$193,000 during 2007 for both income taxes and financial reporting.

The company decided to carry back its 2007 operating loss because it was not confident it could earn taxable income in the future carryforward period. The income tax rate was 30% in 2007 and no change in the tax rate had been enacted for future years.

In 2008 the company developed and introduced a new product that proved to be in high demand. On June 1, 2008 the company received a refund check from the government based on the tax information it filed at the end of 2007. For 2008 the company reported revenues of \$181,000 and expenses of \$155,000 for both income taxes and financial reporting. The applicable income tax rate was 30%.

Required

- 1. Prepare the income tax journal entries of the Ross Company at the end of 2007.
- 2. Prepare the Ross Company's 2007 income statement. Include a note for any operating loss carryforward.
- 3. Prepare the journal entry to record the receipt of the refund check on June 1, 2008.
- 4. Prepare the income tax journal entry at the end of 2008.
- 5. Prepare the Ross Company's 2008 income statement.

P19-11 *Operating Loss* Refer to the information in Problem 19-10 and modify it as follows: The company decided to carry back its 2007 operating loss. Furthermore, since the company had already begun to develop the new product at the end of 2007 and had contracts for its sale in 2008, the company was confident at the end of 2007 that it would earn sufficient taxable income in the future carryforward period.

Required

- 1. Prepare the income tax journal entries of the Ross Company at the end of 2007.
- 2. Prepare the Ross Company's 2007 income statement. Include a note for any operating loss carryforward recognition.
- 3. Prepare the journal entry to record the receipt of the refund check on June 1, 2008.
- 4. Prepare the income tax journal entry at the end of 2008.
- 5. Prepare the Ross Company's 2008 income statement.

P19-12 *Balance Sheet Reporting and Tax Rate Change* At the end of 2006, Dolf Company prepared the following schedule of its deferred tax items (based on the currently enacted tax rate of 30%):

Deferred Tax Item #	Account Balance	Related Asset or Liability	
1	\$ 8,400 debit	Current asset	
2	10,200 debit	Noncurrent asset	
3	5,700 credit	Current liability	
4	17,700 credit	Noncurrent liability	

On April 30, 2007 Congress changed the income tax rate to 40% for 2007 and future years. At the end of 2007 the company reported taxable income of \$62,500 for 2007. At that time, the company determined that its deferred tax items should have balances as follows at the end of 2007 (based on the 40% tax rate): #1, \$10,700 debit; #2, \$15,000 debit; #3, \$7,000 credit; #4, \$25,900 credit.

- 1. Show how the deferred tax items are reported on the Dolf Company's December 31, 2006 balance sheet.
- 2. Prepare the April 30, 2007 journal entry to correct Dolf Company's deferred tax items.
- 3. Prepare the income tax journal entry of the Dolf Company at the end of 2007.
- 4. Show how the current and deferred tax items are reported on the Dolf Company's December 31, 2007 balance sheet.
- 5. Calculate the total income tax expense for 2007.

P19-13 *Comprehensive* Colt Company reports *pretax* financial "income" of \$143,000 in 2007. In addition to pretax income from continuing operations (of which revenues are \$295,000), the following items are included in this pretax "income":

Extraordinary gain	\$30,000
Loss from disposal of Division B	(10,000)
Income from operations of discontinued Division B	16,000
Prior period adjustment	(8,000)

The taxable income of the company totals \$123,000 in 2007. The difference between the pretax financial income and the taxable income is due to the excess of tax depreciation over financial depreciation on assets used in continuing operations.

At the beginning of 2007 the company had a retained earnings balance of \$310,000 and a deferred tax liability of \$8,100. During 2007 the company declared and paid dividends of \$48,000. It is subject to tax rates of 15% on the first \$50,000 of income and 30% on income in excess of \$50,000. Based on proper interperiod tax allocation procedures, the company has determined that its 2007 ending deferred tax liability is \$14,100.

Required

- 1. Prepare a schedule for the Colt Company to allocate the total 2007 income tax expense to the various components of pretax income.
- 2. Prepare the income tax journal entry of the Colt Company at the end of 2007.
- 3. Prepare Colt Company's 2007 income statement.
- 4. Prepare Colt Company's 2007 statement of retained earnings.
- 5. Show the related income tax disclosures on the Colt Company's December 31, 2007 balance sheet.

P19-14 *Comprehensive* At the beginning of 2007 Norris Company had a deferred tax liability of \$6,400, because of the use of MACRS depreciation for income tax purposes and units-of-production depreciation for financial reporting. The income tax rate is 30% for 2006 and 2007, but in 2006 Congress enacted a 40% tax rate for 2008 and future years.

The accounting records of the Norris Company show the following *pretax* items of financial income for 2007: income from continuing operations, \$120,000 (revenues of \$352,000 and expenses of \$232,000); gain on disposal of Division F, \$23,000; extraordinary loss, \$18,000; loss from operations of discontinued Division F, \$10,000; and prior period adjustment, \$15,000, due to an error that understated revenue in 2006. All of these items are taxable; however, financial depreciation for 2007 on assets related to continuing operations exceeds tax depreciation by \$5,000. The company had a retained earnings balance of \$161,000 on January 1, 2007 and declared and paid cash dividends of \$32,000 during 2007.

Required

- 1. Prepare the income tax journal entry of the Norris Company at the end of 2007.
- 2. Prepare Norris Company's 2007 income statement.
- 3. Prepare Norris Company's 2007 statement of retained earnings.
- 4. Show the related income tax disclosures on the Norris Company's December 31, 2007 balance sheet.

P19-15 *Comprehensive* Jayryan Company sells products in a volatile market. The company began operating in 2005 and reported (and paid taxes on) taxable income in 2005 and 2006. It has one taxable temporary difference (future taxable amount), and reconciled its taxable income to its pretax financial income for 2005 and 2006 as follows:

	2005	2006
Taxable income	\$25,000	\$53,000
Temporary difference	2,500	4,800
Pretax financial income	\$27,500	\$57,800

In 2007, because of a downturn in the market, the company reported a taxable loss of \$90,000 and it was uncertain as to future profits. A temporary difference of \$2,700 resulted in an \$87,300 pretax operating loss for financial reporting. In 2008 and 2009 the company was again profitable and reported the following items:

	2008	2009
Taxable income	\$7,000	\$19,000
Temporary difference	2,300	2,800
Pretax financial income	\$9,300	\$21,800

The income tax rate has been 30% since 2003 and no change in the tax rate has been enacted for future years.

Required

- 1. Prepare a schedule that shows the Jayryan Company's income taxes payable (or receivable) for each year, 2005 through 2009.
- 2. Prepare a schedule that shows the deferred tax information (change in temporary difference and operating loss carryforward) for each year, 2005 through 2009.
- 3. Prepare a schedule that shows the deferred taxes for each year, 2005 through 2009.
- 4. Based on the schedule prepared in Requirement 3, prepare the income tax journal entry at the end of 2007.
- 5. Prepare a partial income statement for 2007. Include a note for any operating loss carryforward.

CASES

COMMUNICATION

C19-1 Asset/Liability Method and Temporary Differences

Interperiod tax allocation is necessary because there are differences in the timing of revenues and expenses between a corporation's financial statements and its federal income tax returns.

Required

- 1. Identify the two goals and four basic principles of accounting for income taxes.
- 2. Briefly explain interperiod income tax allocation under generally accepted accounting principles.
- 3. List the four groups of items that result in temporary differences and give examples for each group.

C19-2 Interperiod Tax Allocation

A friend in a business policy class says, "I always thought the income taxes reported on a corporation's income statement were the same as the income taxes paid during that period. Now I am not so sure because some other students mentioned interperiod income tax allocation. Furthermore, I have heard about comprehensive and partial allocation. I am confused. Please explain this to me."

Required

Prepare a written response for your friend. In your discussion be sure to discuss permanent and temporary differences, and to compare comprehensive allocation with partial allocation. Include the reasons for interperiod allocation and comprehensive allocation.

C19-3 Methods of Interperiod Tax Allocation

Three methods of interperiod income tax allocation have been advocated. These include (1) the asset/liability method, (2) the deferred method, and (3) the net-of-tax method.

Required

Define *interperiod income tax allocation* and briefly explain the three methods that have been advocated. Conclude by summarizing the generally accepted accounting principles for interperiod income tax allocation.

C19-4 Operating Losses

The Internal Revenue Code allows a corporation to carry back or carry forward an "operating loss" for a given year.

Required

- 1. Describe an operating loss carryback and a carryforward.
- 2. For a carryback, identify and briefly explain the two important conceptual questions.
- 3. For a carryforward, identify and briefly explain the two important conceptual questions.
- 4. Briefly summarize the generally accepted accounting principles for the financial reporting of (a) an operating loss carryback and (b) an operating loss carryforward.

C19-5 Intraperiod Tax Allocation

Income tax allocation is an integral part of generally accepted accounting principles. Income tax allocation consists of both intraperiod and interperiod tax allocation.

Required

- 1. Explain the difference between interperiod and intraperiod income tax allocation.
- 2. Explain how a corporation discloses its income tax expense (or credit) for the year under intraperiod allocation.
- 3. Provide an example of intraperiod tax allocation on a corporation's income statement that includes income from continuing operations, a loss from the sale of a discontinued component, a gain from the operations of the discontinued component, and an extraordinary gain. Assume a 30% tax rate.

CREATIVE AND CRITICAL THINKING

C19-6 Permanent and Temporary Differences

To implement interperiod income tax allocation, an accountant must be able to distinguish between permanent and temporary differences. The following is a list of three differences between a corporation's pretax financial income and taxable income:

- a. Estimated warranty costs (covering a three-year warranty) are expensed for financial reporting purposes at the time of sale but are deducted for tax purposes when incurred.
- MACRS depreciation for income tax purposes exceeds straight-line depreciation for financial reporting purposes.
- Percentage depletion for tax purposes exceeds cost depletion for financial reporting purposes.

- 1. Define (a) permanent difference and (b) temporary difference.
- 2. Define *interperiod income tax allocation* and briefly describe its application under generally accepted accounting principles.
- 3. Indicate and explain whether each of the three differences listed in this case should be treated as a temporary or permanent difference.

C19-7 Deferred Tax Assets and Liabilities

A friend says to you, "I don't understand how taxable temporary differences can be 'liabilities' and how deductible temporary differences can be 'assets.' It seems to me that these temporary differences relate only to the future, and that accounting is based on 'historical cost.' Furthermore, the government frequently changes the tax laws, so no one knows what the future tax laws will be."

Required

Prepare a written response for your friend that explains why deferred tax assets and deferred tax liabilities are recognized and reported on a corporation's balance sheet. Include a discussion of a valuation allowance.

C19-8 Interperiod Tax Allocation

AICPA Adapted Chris Green, CPA, is auditing Rayne Co.'s 2007 financial statements. For the year ended December 31, 2007, Rayne is applying *Statement of Financial Accounting Standards No. 109*, "Accounting for Income Taxes." Rayne's controller, Dunn, has prepared a schedule of all differences between financial statement and income tax return income. Dunn believes that as a result of pending legislation, the enacted tax rate at December 31, 2007 will be increased for 2008. Dunn is uncertain which differences to include and which rates to apply in computing deferred taxes under *FASB 109*. Dunn has requested an overview of *FASB 109* from Green.

Required

Prepare a brief memo to Dunn from Green that identifies the objectives of accounting for income taxes, defines temporary differences, explains how to measure deferred tax assets and liabilities, and explains how to measure deferred income tax expense or benefit.

C19-9 Analyzing Coca-Cola's Income Tax Disclosures

Refer to the financial statements and related notes of The Coca-Cola Company in Appendix A of this book.

Required

- 1. What was the total income tax expense relating to income before income taxes for 2004? How much of this was current? How much was deferred?
- 2. What were the total deferred tax assets at the end of 2004? Total deferred tax liabilities? Net deferred tax liability?
- 3. How much was the noncurrent deferred tax liability at the end of 2004 and where was it reported?
- 4. How much were the operating loss carryforwards at the end of 2004? Over what time periods must these be utilized?



C19-10 Ethics and Deferred Taxes

It is the end of 2008, and the auditing firm for which you work is auditing the Weiss Company for the first time. Prior to 2008, Weiss was

audited by another firm. A substantial amount of Weiss Company's revenues for 2007 came from installment sales. Weiss has considerable property, plant, and equipment. It also has a large amount of debt outstanding, and one of the debt covenants is that the company maintain a 2.00 current ratio.

You have been reviewing the deferred taxes of Weiss at the end of 2008. On its preliminary ending balance sheet for 2008, Weiss has included a noncurrent deferred tax liability of \$45,000. On its ending 2007 balance sheet, Weiss had also reported a noncurrent deferred tax liability. Upon examining the calculations supporting the \$45,000, you find that one-third relates to the receivables from the installment sales and two-thirds relates to the depreciation on the property, plant, and equipment. Nearly all of the 2007 deferred tax liability related to the latter.

Based on your analysis, you raise the issue with Weiss Company's controller about the possibility of reclassifying \$15,000 of the deferred taxes as a current liability. The controller responds, "We have always listed our deferred taxes as a noncurrent liability. This was okay with our previous auditor. It just isn't worth the hassle of splitting the amount into current and noncurrent portions. It is clearly not material, since our total equity is over \$400,000. Besides, if we did that it would bring our current ratio down to 1.95 and we would have our creditors on our backs. Everyone knows that deferred taxes are never really paid, so that is a good reason for not including the amount in our current liabilities."

Required

From financial reporting and ethical perspectives, prepare a response to Weiss Company's controller.