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GAAP Guide

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Topic 6: Taxes



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Topic 6

Taxes

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[¶ 601]**ARB No. 43, Chapter 10 (1953)
Real and Personal Property Taxes**

Real and personal property taxes are taxes that are computed according to some assessed value of real or personal property by a state or other legal authority at some specific point in time (Paragraph 2). Because of the nature of real and personal property taxes, it is difficult to determine when the taxes become a legal liability of an enterprise and what accounting is appropriate. Many dates have been suggested as the appropriate date that the taxes become a liability for an entity, such as the lien date, the assessment date, and the date that the taxes are payable (Paragraph 2). Accounting for real and personal property taxes usually involves two issues: (1) when and what amount should an enterprise report as a liability for property taxes, and (2) how should the tax be reported in the income statement?

Generally, two methods have evolved when accounting for property taxes. Under the first method, which is considered the most appropriate method under ARB No. 43, property tax is accrued monthly over the taxing authority's fiscal year. An enterprise should record a liability and an expense each month for that month's share of the total property tax. The second method requires an accrual of the total amount of property tax on the lien date by establishing a property tax asset and liability. The property tax asset is amortized to expense monthly using a straight-line method over the fiscal year of the taxing authority (Paragraph 8). The property tax liability is reported as a current liability in the balance sheet, and the amount expensed is reported in the income statement either as part of operating expenses, as a line item deducted from income, or as an allocation to various expenses or costs reported in the income statement (Paragraphs 16 and 17).

To illustrate the accounting for real and personal property tax, assume the facts in Example 1.

**Example 1
Assumptions for Property Taxes**

1. Johnson Enterprises, a December 31 year-end company, received a property tax bill on April 15, 20X2 for \$600,000.
2. The taxing authority's fiscal year is from July 1 - June 30, and the lien date is July 1.
3. Johnson can elect to pay for the tax bill in two equal installments on October 1 and January 1.

If the Company elects to accrue the taxes on a monthly basis, no entry is required on April 15, the date that the tax bill was received by the Company. The \$600,000 is charged to expense at a rate of \$50,000 ($\$600,000 \div 12$ months) per month using a straight-line method from July 1 - June 30, the fiscal year of the

taxing authority. Journal entries required on July 31, August 31, and September 30, 20X2 to record accrual for the first three months are as follows:

July 31, August 31, and September 30 Entries

Property Tax Expense	50,000	
Property Tax Payable		50,000

On October 1, one-half or \$300,000 ($\$600,000 \times 1/2$) of the property tax must be paid by the Company. As of October 1, only \$150,000 of the \$300,000 payment has been accrued as a liability. Therefore, the Company will establish an asset for \$150,000 of the payment and reduce the accrued liability for the \$150,000 ($\$50,000 \times 3$ months) balance. The entry required for the \$300,000 payment is as follows:

October 1 Payment

Deferred Property Tax	150,000	
Property Tax Payable	150,000	
Cash		300,000

Deferred property tax is classified as a current asset in the balance sheet. Since the deferred property tax amount is, in effect, a prepayment of taxes for the next three months ($\$50,000$ per month \times 3 months = $\$150,000$), the deferred property tax account is amortized to expense at a rate of $\$50,000$ per month. Entries for October, November, and December are shown below:

October 31, November 30, and December 31 Entries

Property Tax Expense	50,000	
Deferred Property Tax		50,000

On January 1, the second half of the property tax bill is due, and the Company does not have a balance in the property tax liability account; therefore, the payment will be recorded in the deferred property tax account and amortized over the six months remaining in the taxing authority's fiscal year. The entries to record the payment and amortization of the payment over the next six months are as follows:

January 1, 20X3 Payment

Deferred Property Tax	300,000	
Cash		300,000

January 31 - June 30 Amortization

Property Tax Expense	50,000	
Deferred Property Tax		50,000

If the Company elects to use the second method and accrue the total property tax on the lien date, an asset and liability is recorded for $\$600,000$ on July 1, and the asset is amortized over the taxing authority's fiscal year using a straight-line method at an amount equal to $\$50,000$ ($\$600,000 \div 12$ months). Entries to record the liability and amortization of the asset are as follows:

July 1 Accrual of Liability

Deferred Property Tax	600,000	
Property Tax Payable		600,000

July 31, 20X2 - June 30, 20X3 Amortization

Property Tax Expense	50,000	
Deferred Property Tax		50,000

Payments of the tax bill of \$300,000 ($\$600,000 \times 1/2$) are required on October 1 and on January 1. Entries to show these two payments are presented below:

October 1, 20X2 and January 1, 20X3

Property Tax Payable	300,000	
Cash		300,000

This completes the discussion of real and personal property taxes.

[¶ 626]**APB Opinion No. 10 (December 1966)
Omnibus Opinion—1966****APB Opinion No. 2 (December 1962)
Accounting for the “Investment Credit”
and****APB Opinion No. 4 (Amending No. 2) (March 1964)
Accounting for the “Investment Credit”**

Note: The investment tax credit has been repealed by the Tax Reform Act of 1986. This section on the investment tax credit has been left in the book since the FASB has not issued an official pronouncement eliminating APB Opinion Nos. 2 and 4. The material is applicable to qualifying property placed in service prior to 1986.

Flowchart and General Discussion

APB Opinion No. 2 specifies a single acceptable method of accounting for the investment tax credit. This method is referred to as the cost reduction method or the deferral method. Subsequent to the issuance of this Opinion, the Securities and Exchange Commission issued Accounting Series Release No. 96, indicating that, while the method of accounting for the investment tax credit identified in APB Opinion No. 2 was acceptable, an alternative method, known as the tax reduction method (flow-through method), was also acceptable for SEC reporting purposes. The cost reduction method advocated by Opinion No. 2 never gained wide acceptance. Many practitioners preferred the tax reduction method. In an effort to settle the controversy created by the SEC and accounting practitioners, the Accounting Principles Board issued Opinion No. 4, which accepted the tax reduction method as an alternative to the cost reduction method. The Board still maintained that the cost reduction method was preferable for financial reporting purposes.

As a result of this series of events, there now are two acceptable methods of accounting for the investment tax credit. Management is free to choose between

the cost reduction and the tax reduction methods. Each method has a different impact on the balance sheet and income statement in any given year, but, in the long-run, the effects are identical. The situation is similar to selecting straight-line or accelerated depreciation.

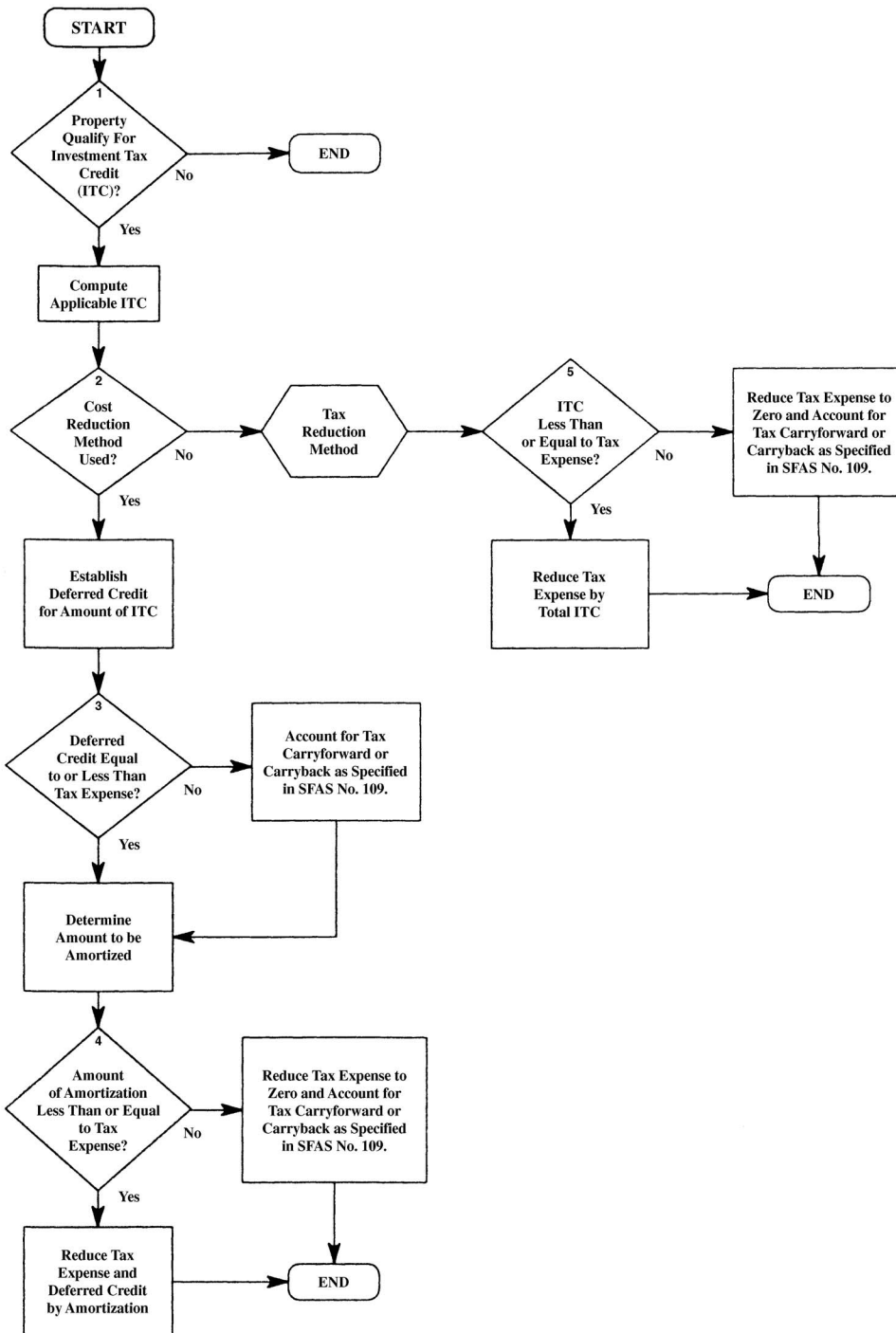
The investment tax credit first was introduced in the Revenue Act of 1962, and was designed as an incentive for business to invest in productive assets. For tax purposes, the investment tax credit is a reduction in the current taxes payable by a company.

For financial accounting purposes, the cost reduction method treats the investment tax credit as a reduction in the cost of the equipment acquired. The amount of the credit is not used to reduce the cost basis of the property for accounting purposes, but is treated as a contra asset or a deferred credit. The investment tax credit established is amortized each period, as a reduction in income tax expense, in relation to the benefits received from the use of the asset, i.e., over the useful life of the asset acquired. The effects of the credit are recognized over the life of the asset and not just in the year the asset was purchased.

The tax reduction method, most commonly referred to as the flow-through method, treats the entire investment tax credit as a reduction in income tax expense in the year the asset is acquired. The entire benefit of the credit is recognized in one year. This is similar to the income tax treatment of the credit. The primary advantage of the tax reduction method is that it will increase income in the year an asset is acquired, while the cost reduction method recognizes the tax saving gradually.

The Flowchart identifies the major decisions required for the application of either the cost reduction or the tax reduction method. Once it has been determined that the acquired asset qualifies for the investment tax credit (Block 1), and the amount of the credit has been determined, the next major decision is to determine which of the two accounting methods is used by the company (Block 2).

Assume that an enterprise has income enough to allow it to utilize the entire investment tax credit applicable to the current year. This assumption will be released later, so that additional accounting considerations may be discussed. If the cost reduction method is used (Block 2), a deferred credit account will be established, or increased, by the amount of the investment tax credit. At the end of the accounting period, the company will determine the proper amortization of the deferred credit. The amount to be amortized usually is determined by the same method used to depreciate the acquired asset, since the investment tax credit must be amortized over the life of that asset. The current period's amortization will be used to reduce the deferred credit account and to reduce the income tax expense. Remember that income tax expense is the amount of tax, whether paid currently or not, that is applicable to the income produced in the current period. If the enterprise uses the tax reduction method, income tax expense would be reduced by the total amount of the investment tax credit. As long as the income tax expense exceeds the investment tax credit, the accounting is quite straightforward.



Now release the assumption concerning the income generated during the period. There may be instances when the income tax expense is not sufficient to absorb the entire amount of the applicable investment tax credit. In this case, the enterprise must deal with an investment tax credit *carryforward* or *carryback*. The carryforward or carryback represents the amount of the investment tax credit that could not be utilized in the current period. (For a complete discussion of tax carryforwards and carrybacks, consult SFAS No. 109.)

The Tax Equity and Fiscal Responsibility Act of 1982 (Section 205) provides for changes in either the amount of the investment tax credit or the tax basis of the asset qualifying for the ITC. The taxpayer was given the option of selecting one of the following alternatives:

1. Take the full amount of the investment tax credit and reduce the tax basis of the asset by 50 percent of the investment tax credit, or
2. Reduce the ITC by two percentage points and use the asset's total cost as the basis for accelerated cost recovery system depreciation (ACRS).

If option 1 is elected where the tax basis of the asset is reduced by 50 percent of the investment tax credit, a difference between the book and tax basis of the asset is created. This difference is accounted for as a temporary difference in the computation of deferred taxes under SFAS No. 109.

Technical Considerations

To illustrate accounting for both the cost reduction and tax reduction methods, the assumptions listed in Example 1 will be used.

Example 1 Investment Tax Credit Assumptions

1. On January 1, 20X1, Tax saver Company, Inc. purchased a piece of equipment that cost \$200,000 and has an estimated useful life of five years. The equipment is to be depreciated, using the straight-line method with a zero salvage value.
2. The Company has elected to reduce the ITC from 10 to eight percent instead of reducing the cost basis of the equipment for tax purposes.
3. Accounting income before taxes for the year ended December 31, 20X1 is \$100,000. Taxable income is also equal to \$100,000, and the tax rate applicable is 40 percent.
4. Tax saver Company has had no deferred tax items since beginning business several years ago.

The property acquired qualifies for the investment tax credit of eight percent, or \$16,000 ($\$200,000 \times .08$). Assume that Tax saver uses the cost reduction method of accounting for the investment tax credit. A deferred credit will be established for the amount of the investment tax credit. The first step is to determine if the transaction will result in an investment tax credit carryforward or carryback. To

make this determination, income tax expense must be compared with the amount of the investment tax credit. This comparison is shown below:

Net Income Before Income Taxes	\$100,000
Tax Rate	× .40
	<hr/>
Income Tax Expense	\$40,000
Investment Tax Credit	16,000
	<hr/>
Excess of Expense over Tax Credit	<u>\$24,000</u>

The investment tax credit is less than income tax expense, so it appears that no carryforward or carryback will be recognized. The income taxes payable for 20X1 would be determined as follows:

Taxable Income	\$100,000
Tax Rate	× .40
	<hr/>
Income Taxes Payable Before Credits	\$40,000
Investment Tax Credit	(16,000)
	<hr/>
Income Taxes Payable	<u>\$24,000</u>

For tax purposes, the investment tax credit is treated as a reduction in taxes payable in the year the asset is acquired, subject to certain limitations. Based upon the information developed above, the entry required to record the income tax expense, deferred credit and income taxes payable would be:

Income Tax Expense	40,000	
Deferred Investment Tax Credit		16,000
Income Taxes Payable		24,000

Next, the entry to amortize the investment tax credit must be prepared. The investment tax credit will be recognized over the life of the asset, using the straight-line method of amortization. The amount of the amortization for 20X1 would be \$3,200 ($\$16,000 \div 5$ years). The amount of the amortization is less than the income tax expense for the period, and therefore the entire amount of the amortization will be recognized. The entry to record the amortization is shown below:

Deferred Investment Tax Credit	3,200	
Income Tax Expense		3,200

As a result of the entries prepared above, the income tax expense for 20X1 will be \$36,800 ($\$40,000 - \$3,200$). The balance in the deferred investment tax credit account is \$12,800 ($\$16,000 - \$3,200$). The deferred investment tax credit account may be treated as a contra asset account in property, plant, and equipment, but more commonly is carried as a deferred credit.

Notice that the investment tax credit did not affect the cost basis of the equipment purchased. Depreciation expense recorded on the asset during 20X1 would be \$40,000 ($\$200,000 \div 5$ years).

Assume the same facts as in the preceding example, except that the company uses the flow-through (tax reduction) method of accounting for the investment tax credit. In addition, the company elects to take the full 10-percent ITC and reduce

the asset's cost basis for tax purposes by 50 percent of the investment tax credit. The total investment tax credit of \$20,000 ($\$200,000 \times .10$) is used to reduce both income tax expense and income tax payable since it is less than the \$40,000 tax expense. However, since the tax basis of the asset is reduced by 50 percent of the ITC to \$190,000 ($\$200,000 - (\$20,000 \times .50)$), the \$10,000 difference in asset basis between book and tax is accounted for as a temporary difference. The \$4,000 tax effect ($\$10,000 \times .40$) of the \$10,000 temporary difference is recorded as a deferred tax liability, assuming no other temporary differences. The \$4,000 temporary difference is taxable in the future years that the book value of the asset recovers. See Statement No. 109 in this Topic for a detailed analysis of temporary differences and deferred tax computations. The adjustments to income tax expense and tax payable are summarized below:

	<i>Income Tax Expense</i>	<i>Income Tax Payable</i>
Total tax before ITC	\$40,000	\$40,000
Reduction for ITC ($\$200,000 \times 10\%$)	(20,000)	(20,000)
Tax effect of temporary difference ($\$10,000 \times 40\%$)	4,000	
Total	<u>\$24,000</u>	<u>\$20,000</u>

The entry required to record the impact of the investment tax credit and the taxes payable for 20X1 would be:

Income Tax Expense	24,000	
Income Tax Payable		20,000
Deferred Tax Liability		4,000

Partial income statements for 20X1 under the cost reduction and the flow-through methods are compared below:

	<i>Cost Reduction Method</i>	<i>Flow- Through Method</i>
Net Income Before Income Taxes	\$100,000	\$100,000
Income Tax Expense	36,800	24,000
Net Income	<u>\$63,200</u>	<u>\$76,000</u>

Statement No. 109 in this Topic specifies the disclosures for investment tax credits. This completes the discussion of APB Opinion Nos. 2 and 4.

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SFAS No. 109 (February 1992) Accounting for Income Taxes

Introduction

SFAS No. 109 supersedes Statement No. 96 and revises the approach in the accounting for deferred income taxes and intraperiod tax allocation.¹ The Statement

¹ SFAS No. 108 was issued to delay the effective date of SFAS No. 96 to years beginning after December 15, 1992. Adoption of State-

views differences between book and tax bases of asset and liabilities, caused either by differences between book and tax incomes or direct adjustments to asset and liabilities bases, as temporary differences that are taxable or deductible in future accounting periods when the book values of the assets or liabilities are recovered or settled. All taxable temporary differences are used to compute deferred tax liabilities and all deductible temporary differences are used to compute deferred tax assets. Operating loss carryforwards and tax credit carryforwards are also used in calculating deferred tax assets. Deferred tax assets are adjusted by a valuation allowance for the benefits that have a greater than 50-percent likelihood to not be realized. A balance sheet approach was selected by the FASB when computing deferred taxes. That is, currently enacted future tax rates are applied to future taxable and deductible temporary differences to compute what the balance should be in the deferred tax asset account and the deferred tax liability account. The differences between the beginning balances in the deferred tax accounts and what the balances should be at the end is the deferred tax expense or benefit for the accounting period. The deferred tax expense or benefit plus or minus taxes payable is the income tax expense for the year under consideration.

The income tax expense computed after applying deferred tax accounting procedures is then allocated to items on the income statement and balance sheet, that must be reported net of their related tax effects, using intraperiod tax allocation procedures specified in the Statement. With this brief introduction to Statement No. 109, a general overview of accounting for deferred taxes is provided.

Overview of Deferred Tax Accounting Under SFAS No. 109

Chart 1 provides a general overview of the deferred tax accounting requirements under Statement No. 109. Notice in the Chart that income for financial accounting purposes is determined through the application of generally accepted accounting principles (GAAP). Income for tax purposes is determined through the application of the rules and regulations contained in the Internal Revenue Code (IRC) and the rules specified by various other taxing authorities. The reasons underlying generally accepted accounting principles are different from the reasons supporting the various provisions specified by taxing authorities. For example, depreciation expense for financial accounting purposes represents a rational and systematic allocation of the cost of an asset over its estimated useful life, but depreciation deductions for tax purposes may be designed to serve as an incentive for investment in new assets. The manner in which revenues and expenses are recognized for accounting and tax purposes may not always be the same. Because of the nature of the measurement, there are likely to be some differences between accounting income and taxable income. These differences between financial accounting and tax incomes, that have tax consequences, are divided into (1) differences that relate to assets and liabilities and, therefore, translate into a difference between book and tax bases of assets and liabilities and (2) differences that do not relate to assets and liabilities and do not impact on the tax or book bases of assets

(Footnote Continued)

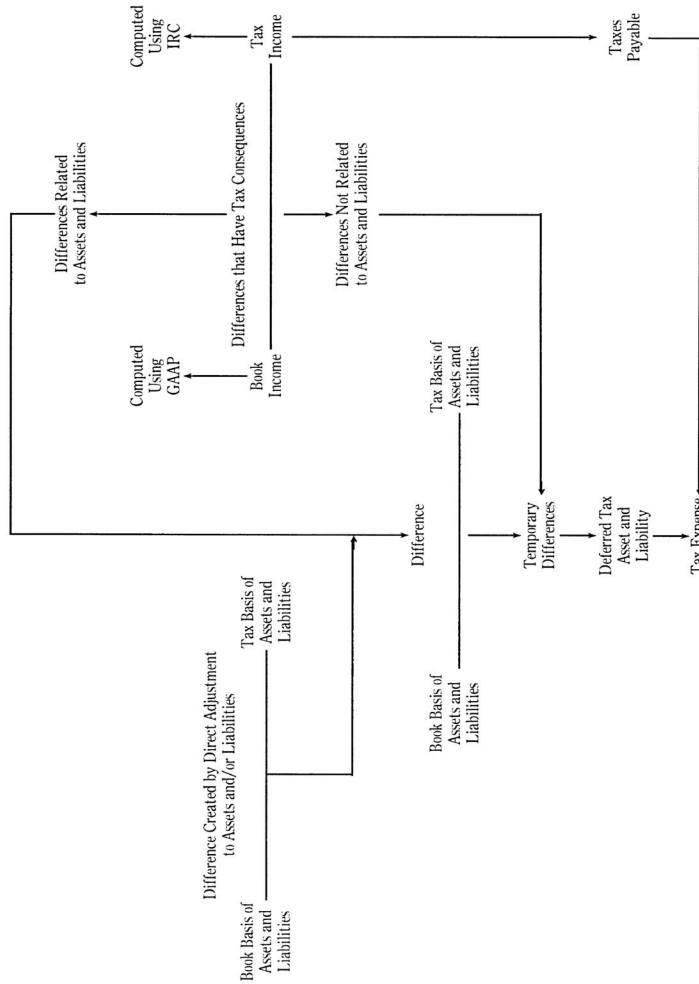
ment No. 96 was delayed until SFAS No. 109 could be issued.

and liabilities. Notice that only differences between book and tax incomes that have tax consequences are considered temporary differences. Therefore, differences that do not have tax consequences, commonly referred to as permanent differences, are not considered in the computation of deferred taxes.

To illustrate a situation where there is a temporary difference related to an asset, assume straight-line depreciation is used for financial accounting and accelerated is used for tax purposes. When accelerated depreciation is used for tax purposes and straight-line is used for financial accounting purposes, a difference is created between book and tax incomes. In addition, since accelerated depreciation is used for tax, accumulated depreciation is greater for tax, and therefore, the tax basis is less than the book basis of the asset. To illustrate a situation in which a difference between financial accounting income and tax income creates a difference between book and tax bases of liabilities, assume that a loss is accrued for the estimated future cost of litigation for financial accounting purposes and is deducted for tax when paid in a future accounting period. Since a liability is created in the year of accrual for financial accounting purposes and no liability is established for tax purposes, a difference exists between the book and tax bases of the liability.

Some differences between book and tax incomes do not relate to assets and liabilities, and therefore, do not cause a difference between book and tax bases of assets or liabilities. For example, the use of percentage of completion for financial accounting and modified percentage of completion for tax on long-term contracts causes a difference that has tax consequences between book and tax income. The difference between financial accounting income and tax income is a temporary difference requiring deferred tax computations, but the difference does not impact on the bases of assets or liabilities.

Chart 1



The last difference between the book and tax bases of assets and liabilities, that gives rise to a temporary difference, is caused by direct adjustments to the asset or liability. For example, differences between assigned values of assets and liabilities for book purposes and their tax bases when a business combination is accounted for as a purchase gives rise to temporary differences that require deferred tax accounting.

Once all temporary differences have been accumulated, the balance that should be in the deferred tax asset and/or liability account(s) at the end of the accounting period is computed by applying appropriate tax rates to total deductible (deferred tax asset)² and to total taxable (deferred tax liability) temporary differences.³ The temporary differences are taxable or deductible in the future years that the book value of the assets and liabilities to which they relate are recovered or settled. An enterprise must use judgment to determine if sufficient income will be available in the future years to realize the benefits from the temporary differences. The difference in the beginning deferred tax balance and the balance that should be in the account at the end of the year is the deferred tax expense or benefit. Taxes payable,⁴ based on tax income, and the deferred tax expense or benefit is added or deducted in computing tax expense. That is, deferred taxes and taxes payable are computed directly and tax expense is computed indirectly (or plugged) by combining taxes payable and the deferred tax expense or benefit. Therefore, a balance sheet approach is used since the balance sheet items are computed directly and the income statement item is computed indirectly.

The overview of interperiod tax allocation illustrates how temporary differences arise in the deferred tax computations. Temporary differences are discussed and illustrated in more detail in the following discussion.

Concept of Temporary Differences

Temporary differences are differences between book and tax bases of assets and liabilities at a particular point in time, plus cumulative temporary differences that arise in the current and prior years that are unrelated to assets and liabilities.⁵ Chart 2 contains types of temporary differences with examples for each type. In addition, the Chart indicates whether each example is taxable or deductible when the financial accounting basis of the asset or liability is recovered or settled (see Paragraph 11 of the Statement for the temporary differences).

² Operating loss carryforwards and tax credit carryforwards are used in the computation of deferred tax assets.

³ APB Opinion No. 10, Paragraph 6 indicates that deferred tax assets and liabilities should not be discounted on a present value basis. The FASB has issued FASB Concept Statement No. 7 on present value. See a summary in Topic 15.

⁴ APB Opinion No. 10, Paragraph 7 states that, generally, income taxes payable cannot be offset against assets to show one net amount, unless there is a right to offset the taxes payable with other assets. An exception exists when

the purchase of securities is, in effect, the prepayment of taxes. In such cases, the assets and taxes payable may be offset. See FASB Interpretation No. 39 in Topic 7 for a more detailed discussion on offsetting of assets and liabilities.

⁵ EITF No. D-31 indicates that deferred taxes are computed for the difference between the tax basis and book basis of LIFO inventory. This situation also would apply to LIFO differences for subsidiaries. D-31 also states that a company cannot compute deferred tax assets for the difference between the tax basis of the net assets of an investee company or subsidiary and the tax basis of the related stock.

Chart 2 shows that all currently existing temporary differences can be divided into nine types. The first four types relate to a difference in financial accounting and tax incomes. A close analysis of these four types reveals that they are the same four temporary differences used in SFAS No. 96 and are the same as timing differences under APB Opinion No. 11. The fifth type of temporary difference also relates to a difference between financial accounting and tax income, but the difference does not cause a difference in book and tax basis of assets and/or liabilities. The remaining four types relate to situations where temporary differences are created when an asset or liability is directly adjusted. Temporary differences for all nine types will become taxable (revenue item) or deductible (expense item) for deferred tax calculations in future years when the book value of the asset or liability is recovered or settled. If the temporary difference does not relate to an asset or liability, the temporary difference is taxable or deductible in the future year(s) that the difference reverses.

For the first type of temporary differences where revenues are included in financial accounting income after they are taxed, the temporary differences created are deductible in future years. The examples, subscriptions in advance and rent and royalties, are included in financial accounting income when earned and taxed when collected. Therefore, since a liability is created for financial accounting purposes, and there is no liability for tax purposes, a temporary difference between the tax and financial accounting basis of the liability that is deductible in future years is created. The temporary difference is deductible in the future years that the liability is settled. The liability is settled when the revenue is earned for financial accounting purposes.

Chart 2 Temporary Differences

TAXABLE/DEDUCTIBLE
IN FUTURE YEARS

EXAMPLES

TYPES

DIFFERENCES BETWEEN FINANCIAL ACCOUNTING INCOME AND TAX INCOME THAT CAUSE DIFFERENCES BETWEEN BOOK AND TAX BASIS OF ASSETS AND LIABILITIES

1. Revenue and gains included in financial accounting income after including them in tax income.
2. Revenue and gains included in financial accounting income before including them in tax income.
3. Expenses and losses deducted in financial accounting income after deducting them in tax income.
4. Expenses and losses deducted in financial accounting income before deducting them in tax income.

DIFFERENCES BETWEEN FINANCIAL ACCOUNTING INCOME AND TAX INCOME THAT DOES NOT CAUSE A DIFFERENCE BETWEEN BOOK AND TAX BASIS OF ASSETS AND LIABILITIES

5. Revenue or expense reported on tax balance sheet but not on financial accounting balance sheet.

DIRECT ADJUSTMENTS TO BOOK OR TAX ASSETS AND LIABILITIES THAT CAUSE A DIFFERENCE BETWEEN BOOK AND TAX BASIS OF ASSETS AND LIABILITIES

6. Tax basis of assets reduced for tax credits.
7. Deferral method used for ITC under APB Opinion No. 2.
8. Indexing for inflation when local currency is functional currency.
9. Purchase business combination where tax and financial basis of assets and/or liabilities are different.

- Subscription in advance.
- Rent or royalties in advance.
- Installment sales.

- Straight-line depreciation for financial income and accelerated for tax income.
- Capitalization of interest.
- Product warranties.
- Litigation losses.

- Long-term contracts—Percentage of completion for financial and modified method for tax.
- Organizational costs expensed for financial and deferred for tax.

- Full investment tax credit (ITC) taken by an entity and tax basis asset reduced by 1/2 of ITC under Tax Act of 1982.
- Financial basis of asset reduced by ITC.

- Indexing causes tax basis of asset to increase.

- Revaluation of financial assets and/or liabilities may cause difference between financial basis and tax basis.

Deductible
Deductible
Taxable

Taxable

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Taxable or^a
Deductible

^a The temporary differences are deductible or taxable depending on whether the difference between the financial accounting basis and the tax basis of the acquired company is a net asset or net liability position and whether the tax basis is more or less than the financial accounting basis.

The second group of differences, where revenue and gains are included in financial accounting income before they are taxed, creates a temporary difference that relates to an asset. Revenue is recognized for financial accounting purposes when the sale is made and for tax purposes when the cash is collected. The temporary difference between the financial accounting basis and the tax basis of the asset is taxable in the future years that the cash is collected. This temporary difference is the gross profit that is deferred on the sale. Please note that recent changes in the tax law have significantly restricted the use of the installment sales method for tax purposes after 1987.

Two examples illustrate situations where temporary differences are created because expenses and losses are deducted in financial accounting income after deductions are taken for tax income. Using straight-line depreciation for financial accounting income and some form of accelerated depreciation for tax income causes the tax basis of the asset to be less than the financial accounting basis. Temporary differences between the tax and the financial accounting basis of the asset are taxable in future years when the book basis of the asset is recovered. The issue of when, in the future years, the book basis is recovered and temporary differences are taxable is covered in more detail after all of the types of temporary differences have been discussed. In the second example, where interest is capitalized as part of the cost of the asset for financial accounting but expensed for tax, the financial accounting basis of the asset exceeds the tax basis by the amount of the interest capitalized. The temporary difference is taxable in the future years that the financial accounting basis of the asset is recovered.

For the fourth type of temporary difference, expenses for financial accounting are deducted before they are deducted in tax income. For financial accounting purposes, estimated costs for product warranties and litigation are treated as contingencies in accordance with SFAS No. 5. Statement No. 5 requires contingent liabilities to be expensed in the accounting period that it is probable that an expense has been incurred and the entity can estimate the amount. For tax, warranties and litigation are deducted when paid. Since a financial accounting liability is recorded at the time of accrual and there is no liability for tax, a temporary difference between the financial accounting and tax basis of the liability is created. As the financial accounting liability is settled (paid), the temporary differences are deductible.

The next types of temporary differences, revenues, or expenses reported on the tax balance sheet but not on the financial accounting balance sheet, are differences between financial accounting and tax income that do not have an impact on book asset or liability basis. Since the temporary differences do not relate to assets or liabilities, the differences are taxable in the future years that the temporary differences reverse. For the first example on long-term contracts, revenue from percentage of completion is included in financial accounting income as costs are incurred and in tax income using a modified percentage of completion method. Since income from long-term contracts is reported in financial accounting income before it is reported in tax income, the temporary differences are taxable when the long-term contract income is reported for tax purposes. The second example,

organizational costs expensed for financial accounting and deferred for tax income, creates a temporary difference between the financial accounting and tax basis of the asset that is deductible in future years when the organizational costs are charged to tax income.

The last four types of temporary differences are caused by direct adjustments to the tax or financial accounting basis of the asset or liability. One type of direct adjustment covers situations where the tax basis of an asset is adjusted directly because of allowable tax credits. As noted in Chart 2, an example includes the reduction in the tax basis of an asset for 50 percent of the related investment tax credit as allowed under the Tax Act of 1982. The direct reduction in the tax basis of the asset creates a temporary difference that is taxable in future years as the book basis of the asset is recovered through depreciation or sale.

For Type 7 temporary differences, the use of the deferral method in accounting for the investment tax credit (ITC) under APB Opinion No. 2 reduces the book basis of the related asset. For book purposes, the investment tax credit is deferred and offset against the related asset. For tax purposes, the ITC is not deferred and there is no adjustment to the tax basis of the asset. The temporary difference between the book and tax basis of the asset is deductible when the book basis of the asset is recovered in future years.

The next type of temporary difference, Type 8, relates to the proposed indexing for inflation when the local currency is the functional currency. Indexing for inflation would increase the tax basis of assets for depreciation and gain and loss computations, but would not change the book basis of the related assets. The increase in the tax basis of the asset for inflation creates a temporary difference between the book and tax basis of the assets. The temporary difference is deductible in the future years that the book basis of the asset is recovered.

The last type of temporary difference,⁶ Type 9, relates to business combinations accounted for as purchases. When a business combination is accounted for as a purchase using the provisions of SFAS No. 141, the book basis of the assets and liabilities acquired are revalued to fair market value. In nontaxable purchase business combinations, the tax bases of the assets and liabilities are not revalued. Therefore, the differences between the tax and book bases of the assets and liabilities are taxable or deductible when the book value of the assets and liabilities are recovered or settled. For example, if the revalued net assets exceed the tax basis of the net assets, the temporary differences will be taxable in the future years

⁶ EITF No. 96-7 states that deferred taxes are not computed for the difference between the costs assigned to research and development for financial accounting purposes in a purchased business combination and the related tax basis when the research and development has no alternative future use. In addition, EITF No. 98-11 states that the difference between the tax basis and the purchase price of an asset acquisition not accounted for as a business combination should be used to adjust the book basis of

the asset. The assigned value of the asset and any related deferred tax items should be determined using the simultaneous equation method described in Exhibit 98-11A. In addition, the EITF concluded that when an entity purchases future tax benefit from a non-government third party, the transaction should be reported using the same model as described above. Statement No. 141 does not impact this conclusion.

that the book basis of the assets are recovered. However, if the revalued net assets are less than the tax basis of the net assets, the temporary differences will be deductible in the future years of recovery.

As indicated in the discussion of Type 3 temporary differences related to depreciation expense, some temporary differences may build up over a period of years and reverse out. Where accelerated depreciation is used for tax purposes and straight-line depreciation is used for financial accounting, temporary differences build up as long as, for any individual accounting period, accelerated depreciation exceeds straight-line depreciation. When straight-line depreciation exceeds accelerated depreciation for any individual future year, the book value of the asset is recovering (the temporary difference is reducing). These types of temporary differences are taxable in the future years that the differences are realized. The differences are realized in the future years that the book value of the asset is recovered.

Accounting for Deferred Taxes—General Discussion

After accumulating all temporary differences from the nine types illustrated in Chart 2, an entity should use the temporary differences in computing deferred taxes for the accounting period under consideration. The temporary differences used in the computation of deferred taxes consists of the temporary differences existing at the end of the current accounting period. These differences will be made up of the net differences arising in the current year and prior years. The balance that should be in the deferred tax asset and/or liability account at the end of the accounting period is the tax results of the temporary differences after incorporating the impact of tax operating loss carryforwards and tax credit carryforwards into the computation.

Several steps are involved in the computation of deferred taxes and an enterprise may use the following step process when computing deferred taxes. The step process should be applied on a separate basis for each tax jurisdiction and for each component within that jurisdiction subject to taxation (Paragraph 17).

STEP 1: Divide the temporary differences into proper categories based on the type of income or expense and its tax implications.

STEP 2: Divide each category of temporary differences from STEP 1 into taxable and deductible differences.

STEP 3: Accumulate all deductible temporary differences in each category.

STEP 4: Determine enacted tax rates in future years under the regular tax system for each category.

STEP 5: If tax rates are constant in future years, the deferred tax asset balance related to temporary differences is equal to the accumulated deductible temporary differences in STEP 2 times the enacted rate.

STEP 6: If tax rates are not constant in future years, the deductible temporary differences are scheduled to years in which the differences will be realized. Groups of years may be combined when the rates stay constant for two or more years.

Apply the appropriate tax rates to the deductible temporary differences to compute the deferred tax asset balance related to temporary differences.

STEP 7: Determine the amounts and expiration dates of all operating loss carryforwards.

STEP 8: Apply the same procedures in STEPS 5 and 6 to the operating loss carryforwards to compute a deferred tax asset balance related to operating losses.

STEP 9: Determine the amounts and expiration dates of tax credit carryforwards.

STEP 10: Compute a deferred tax asset balance related to tax credit carryforwards.

STEP 11: Determine if the enterprise will have sufficient income in future years to realize all benefits from the deferred tax assets.

STEP 12: If there is a greater than 50-percent likelihood that the enterprise will have insufficient income in future years to realize all the deferred tax asset computed, establish a valuation allowance for the part of the deferred tax asset not expected to be realized.

STEP 13: Accumulate all taxable temporary differences in each category.

STEP 14: Apply the same procedures in STEPS 5 and 6 to the taxable temporary differences to compute the ending balance in the deferred tax liability account.

STEP 15: Apply all appropriate tax planning strategies to adjust realization of benefits of deferred tax assets.

STEP 16: If appropriate, measure the deferred tax asset for alternative minimum tax (AMT) credit carryforward.

STEP 17: Compute a valuation allowance for the AMT deferred tax asset if there is more than a 50-percent likelihood that at least a part of the asset will not be realized.

STEP 18: Accumulate all deferred tax assets and compute the deferred tax expense or benefit from deferred tax assets for the accounting period by taking the difference in the beginning and ending balances.

STEP 19: Compute the deferred tax expense or benefit from deferred tax liabilities for the accounting period by taking the difference in the beginning and ending balances.

STEP 20: Compute the change in the valuation allowance account by comparing the beginning and ending balances.

STEP 21: Compute income tax expense for the accounting period by adding to or deducting from income taxes payable the amounts from STEPS 18, 19, and 20.

STEP 22: Classify the deferred tax assets and liabilities as current or long-term based on how the related assets and liabilities are classified. If the deferred tax assets and liabilities do not relate to assets and liabilities, classify them based on when differences will be realized.

STEP 23: Combine deferred tax assets and liabilities to report one net current deferred tax amount and one noncurrent deferred tax amount.

Some of the steps in the step process require further explanation. As noted in STEP 1 it is first necessary to divide temporary differences into appropriate categories, since deductible and taxable differences are offset against income in future years and some types of incomes cannot be offset for tax purposes. For example, temporary differences related to capital gains and losses should be separated from temporary differences for ordinary income and losses. Capital losses can only be deducted up to the amount of capital gains, and capital losses cannot be offset against ordinary income. Whether temporary differences can be offset is a function of existing tax law.

Determining which of the temporary differences are taxable or deductible, as required in STEP 2, may be determined by reviewing the discussion of Chart 2 related to temporary differences. Since a deferred tax asset is computed based on all deductible temporary differences, it is necessary to accumulate all differences that are deductible in each category (STEP 3). This accumulation is necessary for each category since different tax rates and different types of incomes can exist in different categories. Once the deductible temporary differences have been accumulated, it is necessary to determine the appropriate tax rate or rates (based on existing tax law) to be used in the computation of the asset (STEP 4). Notice that the tax rate(s) under the regular tax system is used and there is no direct interaction with the AMT system. If there are no changes in tax rates in future years as noted in STEP 5 it is not necessary to schedule deductible temporary differences to the future years that the differences are realized. All deductible temporary differences can be combined and one tax rate applied to the total differences to compute the deferred tax asset related to deductible temporary differences. However, if rates change in future years or if marginal tax rates are significant, some scheduling of temporary differences may be required. For example, assume an entity has a \$100,000 temporary difference in which \$20,000 will be deductible each year for the future years of 20X3-20X7. Further assume that income is adequate in each of the future years to realize the benefit of the temporary differences, and the currently enacted tax rates are 30 percent for 20X3 and 20X4 and 40 percent for 20X5-20X7. Using this information \$40,000 (\$20,000 for 20X3 + \$20,000 for 20X4) of the temporary difference will be combined and taxed at a rate of 30 percent to compute a deferred tax asset of \$12,000 ($\$40,000 \times 30\%$) and \$60,000 of the temporary differences (20X5-20X7 deductions) will be combined and taxed at a rate of 40 percent to compute a deferred tax asset of \$24,000 ($\$60,000 \times 40\%$) or a total deferred tax asset balance of \$36,000 ($\$24,000 + \$12,000$). In addition, an entity may anticipate losses in some future years. The temporary differences that are deductible in the future years that have losses will not be realized in those years since operating losses are expected. Therefore, deferred taxes are computed on temporary differences using the tax rates in effect in the years in which the differences are realized, the years that encompass the operating loss carryback or carryforward. For example, assume that at the end of 20X2 an entity has a \$100,000 temporary difference that is deductible in 20X4, and also assume that the company anticipates a \$200,000 loss in 20X4 which will be carried back to recapture taxes in 20X1. A deferred tax asset will be computed for the \$100,000 deductible difference using the tax rate in effect in 20X1.

If graduated tax rates are not significant in the computation of deferred taxes, an entity should use the highest graduated rate. However, in some future years, income may be at varying levels, which would require different graduated tax rates. The Board indicates in Paragraph 236 that some form of an average graduated tax rate would be appropriate in order to eliminate a great deal of scheduling of temporary differences when graduated rates are significant. However, it is important to note that some scheduling of temporary differences may be required when computing deferred taxes.

Once deferred tax assets are computed for deductible temporary differences, it is necessary to compute deferred taxes for tax operating loss⁷ carryforwards (STEPS 7 and 8). The same procedures used in STEPS 5 and 6 for temporary differences related to scheduling and appropriate tax rates would be applicable to operating losses. Next in STEPS 9 and 10 deferred tax assets are measured for tax credit carryforwards. The amount of the tax credit carryforward that can be used as a deferred tax asset depends on existing tax law and anticipation of future income.⁸

As noted in STEP 11, once an enterprise has computed a deferred tax asset, it is necessary to determine if all the benefit from the deferred tax asset will be realized. Since realization depends on future income, some assessment must be made as to whether, in the judgment of management, income in future years will be sufficient to realize all of the deferred tax asset. If it is likely (more than 50 percent so) that the entire deferred tax asset will not be realized, a valuation allowance must be established equal to the amount of the deferred tax asset that is not expected to be realized. The valuation allowance is a contra asset that is used to reduce the deferred tax asset account. Any change in the valuation account, generally, is an adjustment to income tax expense (Paragraph 17).⁹

Both positive and negative information should be used when judging the likelihood of future income. Historical information about the operations of the enterprise provides management with some information about the probability of income in future years. In addition, the Board provides selected guidelines for sources of income that an enterprise may use when judging if income is sufficient in future years to realize the benefits from deferred tax assets. The sources are provided in Paragraph 21 and include the following:

1. Taxable temporary differences that reverse in future years.

⁷ EITF No. D-33 indicates that SFAS No. 109, Paragraph 268 may be used to account for carryforwards that arise before and after a reorganization.

⁸ EITF No. 85-31 states that the amount of deferred tax assets computed under Statement No. 109 and presented in accordance with generally accepted accounting principles should not be impacted by regulatory requirements limiting the amount of deferred tax assets in a bank's financial statements filed for regulatory purposes with the Comptroller of the Currency.

⁹ EITF No. 94-10 states that changes in the deferred tax asset or the related valuation allowance from transactions with existing stockholders should be included in income, but the tax impact of changes in asset and liability bases from transactions with stockholders should be included in stockholders' equity. EITF No. 99-15 states that a reduction in the valuation allowance from a change in tax regulation or tax law is included as an element of income from continuing operations if the valuation allowance was recorded as part of the allocation process from a business combination accounted for as a purchase.

2. Taxable income in future years that does not include taxable temporary differences and loss carryforwards.
3. Taxable income available from prior years that encompass the carryback period under existing tax law.
4. Taxable income generated from tax planning strategies (discussed in STEP 15).

After determining any required valuation allowance for the deferred tax asset, an enterprise must compute any required deferred tax liability (STEP 14). The same procedures used in STEPS 5 and 6 for deferred tax assets are used to compute deferred tax liabilities.

While performing the computations of deferred tax assets and liabilities using STEPS 5-14, an enterprise should consider using all appropriate tax planning strategies (STEP 15). A tax planning strategy is an action by an enterprise, meeting certain requirements, that allows them to take advantage of an operating loss carryforward or tax credit carryforward that otherwise would expire (Appendix E). A tax planning strategy (1) must be possible and prudent; (2) is an action that management might not otherwise undertake, that allows the use of a loss carryforward or tax credit carryforward that otherwise would be lost; and (3) allows deferred tax assets to be realized (Paragraph 22). Examples of tax planning strategies include using loss carryforwards that would normally expire by expediting amounts taxable and changing from nontaxable to taxable income (Paragraph 21).

Deferred tax asset calculations are impacted when the alternative minimum tax (AMT) system is required to be used.¹⁰ When AMT is appropriate, a deferred tax asset is established for the AMT tax credit carryforward (STEP 16). The AMT tax credit carryforward is the excess of the tentative minimum tax (TMT) over tax, computed by using the regular tax system. The TMT is the tax computed by using the AMT system and equals the tentative alternative minimum income times the AMT rate of 20 percent. The tentative alternative minimum income is taxable income under the regular tax system adjusted for AMT preference and adjustment items and the adjusted current earnings adjustment. If a deferred tax asset is computed for an AMT tax credit carryforward, an entity must determine if there is a greater than 50-percent likelihood that all of the deferred tax asset related to the AMT system will not be realized. If all of the deferred tax asset is not expected to be realized, a valuation allowance must be established for the part of the asset that the entity does not anticipate realizing (STEP 17). The procedures used in STEPS 11, 12, and 15 to determine if future income is sufficient to realize the benefit of the deferred tax asset can be used in the determination of the AMT valuation allowance (Paragraph 239).

Once all deferred tax assets and liabilities have been computed, the deferred tax expense and/or benefit can be computed. In STEP 18 all ending balances of deferred tax assets are accumulated and compared to the beginning balances. A

¹⁰ EITF No. 87-8 covers several alternative form Act of 1986. See EITF No. 87-8 for a minimum tax issues impacted by the Tax Re- detailed discussion of these issues.

deferred tax benefit exists if the deferred tax asset balance increases, and a deferred tax expense is created if the deferred tax asset balance decreases during the year. STEP 19 requires a comparison of beginning and ending balances of the deferred tax liability account. If the liability balance increases, a deferred tax expense is created, and if the balance decreases a deferred tax benefit is created. Next, STEP 20 requires that the change in the valuation allowance be calculated by comparing the ending balance with the beginning balance. Any change in the account will be an adjustment to the valuation allowance account and, generally, to income tax expense.

After computing the deferred tax expense and deferred tax benefit for the accounting period, income tax expense can be indirectly calculated by adding and/or deducting the deferred tax expense, deferred tax benefit and the change in the valuation allowance amounts to income taxes payable (STEP 21).

Once the ending deferred tax asset and liability balances have been calculated, they are classified as current or long-term for presentation in the financial statements (STEP 22). A deferred tax asset or liability is classified as current if it relates to a current asset or current liability. If a deferred tax asset relates to a warranty liability that is payable within one year, the deferred tax asset is classified as current because the warranty liability is classified as current. In addition, a deferred tax asset or liability is classified as noncurrent if it relates to a noncurrent asset or liability. For example, a deferred tax liability that relates to property, plant, and equipment is classified as long-term since the property, plant and equipment are classified as long-term. Deferred tax assets from operating loss carryforwards, tax credit carryforwards, and certain other deferred tax assets and liabilities are not directly related to balance sheet assets and liabilities. These types of deferred tax assets and liabilities are classified as current or long-term based on when they are expected to be realized in future years. If they are expected to be realized within the next year, the deferred item is classified as current. However, if realization is anticipated in a period of time in excess of one year, the deferred item is classified as long-term. Once all deferred tax assets and liabilities have been classified as current or long-term, current assets must be netted against current liabilities and one net current amount reported in the financial statements (STEP 23). In addition, noncurrent assets must be netted against noncurrent liabilities and one net noncurrent amount reported (Paragraphs 41 and 42).

This completes the general discussion of deferred tax accounting. The next section covers the technical considerations of accounting for deferred taxes.

Accounting for Deferred Taxes—Technical Considerations

Four examples are used to illustrate the technical aspects of deferred tax calculations. Assumptions for the first example are as follows:

Example 1
Assumption for Deferred Tax Computations

1. Johnson Enterprises is computing deferred taxes for 20X2, using the provisions of Statement No. 109, and has accumulated the following information about financial accounting basis and tax basis of assets and liabilities:

	Tax Basis	Financial Basis	Temporary Difference
a. Litigation liability	\$ 0	\$105,000	\$105,000
b. Warranty liability	0	38,000	38,000
c. Compensated absence liability	0	47,000	47,000
d. Rent in advance	0	60,000	60,000
e. Depreciable assets	600,000	920,000	320,000
f. Installment sales	0	180,000	180,000

2. There are no operating loss or tax credit carryforwards for tax purposes, and the alternative minimum tax is not applicable in this situation. The company meets the requirements for use of the installment sales basis, and the amount represents gross profit on the sale.

3. Based on all available information the company estimates that it will have sufficient income in all future years to realize all benefits from the temporary differences.

4. The deferred tax asset balance at the beginning of 20X2 is \$10,000, and the deferred liability balance is \$25,000.

5. Warranty liability and compensated absence liability are classified as current liabilities in the 20X2 balance sheet, and litigation liability and rent in advance are classified as long-term. Installment sales is classified as a current asset.

6. Tax income for 20X2 is \$400,000, and tax income in all future years is expected to exceed \$75,000. Currently enacted tax rates for 20X2 and all future years are as follows and graduated tax rates are not significant:

\$0-\$50,000	15%
\$50,001-\$75,000	25%
Over \$75,000	34%

Using the information from Example 1, deferred taxes for Johnson Enterprises can be computed using the step process illustrated in the general discussion. Table 1 illustrates calculation of the deferred tax asset and deferred tax liability balance at the end of 20X2, computation of the deferred tax benefit and deferred tax expense for 20X2, and calculation of income tax expense and income taxes payable for 20X2.

Table 1
Computation of Deferred Taxes, Taxes Payable and
Tax Expense for 20X2

	Deductible Differences	Taxable Differences	Total
Temporary Differences:			
Litigation liability	\$(105,000)		
Warranty liability	(38,000)		
Compensated absence liability	(47,000)		
Rent in advance	(60,000)		
Depreciable assets		\$320,000	
Installment sales		180,000	
Total temporary differences	\$(250,000)	\$500,000	
Future enacted tax rates	34%	34%	
Ending deferred tax (asset)/liability balance	\$(85,000)	\$170,000	
Beginning deferred tax asset balance	10,000		
Beginning deferred tax liability balance		(25,000)	
Deferred tax (benefit) for 20X2	\$(75,000)		\$(75,000)
Deferred tax expense for 20X2		\$145,000	145,000
Taxes payable computation (Example 1 assumptions):			
	\$ 50,000 ×		
	15% =	\$7,500	
	25,000 ×		
	25% =	6,250	
	325,000 ×		
	34% =	110,500	
Taxes payable for 20X2			124,250
Tax expense for 20X2			\$194,250

Notice that, at the end of 20X2, all deductible temporary differences are aggregated into one total deductible amount to compute what the ending balance should be in the deferred tax asset account, and all taxable temporary differences are aggregated into one total taxable amount to calculate the ending balance in the deferred tax liability account. Scheduling over the future periods that the book basis of the asset or liability is recovered or settled is unnecessary in this situation since the currently enacted tax rate stays constant over the period of time that the temporary differences are recovered, and graduated tax rates are not significant. It is only necessary to determine which temporary differences are deductible and which are taxable.

Temporary differences related to the litigation liability, the warranty liability, the liability for compensated absences (vacation pay), and the liability for rent in advance are deductible differences that can be combined as one total amount since benefit from the differences will be realized at the same tax rate regardless of which future years the liabilities are settled. Expenses related to all the liabilities, except

for rent in advance, were accrued for financial accounting purposes in 20X2 or prior years and are deductible for tax purposes in the future years that the liability is paid or settled. Rent received in advance was recorded as a liability for financial accounting purposes when the cash was received. However, it will not be recognized as revenue for books until it is earned. The rent in advance was recognized as revenue and taxed in the accounting period that the cash was received. Therefore, the liability will be settled, and the temporary difference deductible, when the revenue is recognized for book purposes.

Temporary differences related to depreciation and installment sales are taxable amounts and are combined as one total to compute the deferred tax liability at the end of 20X2. Again, scheduling of the temporary differences to the future years that the book asset is recovered is unnecessary since the differences will be taxed at the same tax rate regardless of the year of recovery. Temporary differences related to depreciation are taxable as the book value of the depreciable assets are recovered. Since accelerated depreciation is used by Johnson for tax purposes and straight-line is used for financial accounting purposes, the tax basis of the asset is less than the book basis and taxable temporary differences are created. The book basis of the asset recovers and temporary differences are taxable in the years when annual book depreciation exceeds annual tax depreciation.

Since there are no operating loss or tax credit carryforwards, only the deductible temporary differences are used in the computation of the deferred tax asset balance. In addition, no valuation allowance is required for the deferred tax asset since Assumption 3 from Example 1 indicates that the company estimates that income will be sufficient in future years to realize the benefits from all temporary differences. Also, the alternative minimum tax is not applicable to this situation, according to Assumption 2.

Using the information from Table 1, the balances that should be in the deferred tax asset and deferred tax liability at the end of 20X2 are \$85,000 and \$170,000, respectively. Since the beginning balance in the deferred tax asset account is \$10,000, the change in the account for the year is a \$75,000 increase. The deferred tax asset account increased during the year, and the increase will decrease income tax expense. The increase in the asset is a deferred tax benefit. If the deferred tax asset account had decreased during the year, the decrease would be a deferred tax expense since the change would cause income tax expense to increase. The beginning balance in the deferred tax liability account is \$25,000, and the deferred tax liability account increased by \$145,000. The \$145,000 increase is a deferred tax expense since it increases income tax expense. If the change in the deferred tax liability account for the year had been a decrease, the change would be a deferred tax benefit since income tax expense would decrease. The deferred tax benefit of \$75,000 and the deferred tax expense of \$145,000 are combined with the \$124,250 taxes payable to compute income tax expense of \$194,250 for 20X2. Notice that the 34-percent tax rate, the highest graduated rate, is used in the computation of deferred taxes because income in all future years is expected to exceed the income that would be taxed at the highest graduated rate and the graduated rates

are not significant. Using the information from Table 1, the required journal entry at the end of 20X2 can be prepared as follows:

Income Tax Expense	194,250	
Deferred Tax Asset	75,000	
Deferred Tax Liability		145,000
Income Taxes Payable		124,250

The deferred tax asset balance of \$85,000 and the deferred tax liability balance of \$170,000 are classified as current or long-term based on how the asset or liability to which they relate is classified. Since the warranty liability, compensated absence liability and receivable from installment sales are classified as current, the tax effect of the temporary differences related to these three items are classified as current. The tax impact of the temporary differences related to depreciable assets and litigation liability are classified as long-term since both items are classified as long-term in the financial statements. The computation below shows the amounts of current and long-term deferred tax assets and liabilities.

	<i>Temporary Difference</i>		<i>Tax Rate</i>	<i>Current</i>	<i>Noncurrent</i>
<i>Deferred Tax Assets:</i>					
Litigation liability	\$(105,000)	×	34%		\$(35,700)
Rent in advance	(60,000)	×	34%		(20,400)
Warranty liability	(38,000)	×	34%	\$(12,920)	
Compensated absences	(47,000)	×	34%	(15,980)	
Total deferred tax assets				<u>\$(28,900)</u>	<u>\$(56,100)</u>
<i>Deferred Tax Liabilities:</i>					
Depreciable assets	\$320,000	×	34%		\$108,800
Installment sales	180,000	×	34%	\$61,200	
Total deferred tax liabilities				<u>\$61,200</u>	<u>\$108,800</u>

For financial statement disclosure purposes, current deferred tax assets are combined with current deferred tax liabilities, and a net current amount is presented in the financial statements. In addition, noncurrent deferred tax assets are combined with noncurrent deferred tax liabilities, and a net noncurrent amount is presented in the financial statements. For 20X2, a net current deferred tax liability of \$32,300 (\$61,200 current deferred tax liability – \$28,900 current deferred tax asset), and a net noncurrent deferred tax liability of \$52,700 (\$108,800 noncurrent deferred tax liability – \$56,100 noncurrent deferred tax asset) are reported in the financial statements.

This completes the analysis of Example 1. Example 1 assumed that the currently enacted tax rate stayed constant during the period of time that the temporary differences were taxable or deductible. Example 2 illustrates a situation where the currently enacted tax rates change over time. Assumptions for Example 2 are as follows:

Example 2
Assumptions for Deferred Tax Computations

1. Maxwell Enterprises is computing deferred taxes for 20X1 using the provisions of Statement No. 109 and has accumulated all necessary information relative to temporary differences.

2. The Company purchased depreciable property in 20X0 at a cost of \$300,000 and with a useful life of 10 years. Straight-line depreciation with a useful life of 10 years is used for financial accounting purposes, and a five-year accelerated method is used for tax purposes. Depreciation expense for both book and tax purposes is reported as follows:

Year	Financial Accounting Depreciation	Tax Depreciation	Difference
20X0	\$30,000	\$60,000	\$(30,000)
20X1	30,000	96,000	(66,000)
20X2	30,000	57,600	(27,600)
20X3	30,000	34,500	(4,500)
20X4	30,000	34,500	(4,500)
20X5	30,000	17,400	12,600
20X6	30,000		30,000
20X7	30,000		30,000
20X8	30,000		30,000
20X9	30,000		30,000
Total	<u>\$300,000</u>	<u>\$300,000</u>	

3. The Company had the following differences between tax and book bases of assets and liabilities other than depreciable assets (above). In addition, the future accounting periods that the temporary differences are estimated to be taxable or deductible are provided.

Difference	20X2	20X3	20X4	20X5	20X6	20X7	20X8	20X9	Total
Installment sales	\$20,000	\$30,000	\$75,000	\$60,000	\$80,000	\$90,000	\$70,000	\$75,000	\$500,000
Litigation liability	0	40,500	20,000	30,000	60,000	40,000	95,000	20,000	305,500
Warranty liability	10,000	15,000	16,000	20,000	25,000	20,000	25,000	30,000	161,000

Assume that the installment sales basis meets the limited exception for use for tax purposes, and the amount shown is the gross profit on the sale.

4. There are no operating loss carryforwards or tax credit carryforwards for tax purposes, and the alternative minimum tax is not applicable in this situation.

5. The deferred tax asset balance at the beginning of 20X1 is \$124,600, and the deferred liability balance is \$122,000.

6. Taxable net incomes for 20X0 and 20X1 are \$25,000 and \$30,000, respectively. Reconciliation of taxable income to financial accounting income for 20X1 is as follows:

Financial accounting income before differences without tax consequences	\$141,000
Goodwill impairment	(25,000)
Interest on nontaxable bonds	50,000
	<hr/>
Financial accounting income	\$166,000
Differences without tax consequences for 20X1:	
Goodwill impairment	25,000
Interest on nontaxable bonds	(50,000)
Temporary differences for 20X1:	
Depreciation	(66,000)
Installment	(200,000)
Litigation	100,000
Warranties	55,000
	<hr/>
Taxable income	<u>\$30,000</u>

7. Currently enacted tax rates are as follows: 30 percent for 20X0 and 20X1, 35 percent for 20X2-20X4, 40 percent for 20X5-20X7, and 45 percent for 20X8-20X9.

8. Based on all available information, the company estimates that it will have sufficient income in all future years to realize all benefits from the temporary differences.

Using the information from Example 2, deferred tax asset and liability balances at the end of 20X1 can be computed for Maxwell Enterprises. It is assumed that the alternative minimum tax is not applicable, and there are no operating loss or tax credit carryforwards to be considered in the computations. Calculations of the deferred tax asset and liability balances at the end of 20X1 are presented in Table 2.

Table 2
Computation of Deferred Taxes for 20X1

	Temporary Differences Recovered From Future Years			20X1 Balance
	20X2/X4	20X5/X7	20X8/X9	
Deductible Temporary Differences:^a				
Litigation liability	\$(60,500)	\$(130,000)	\$(115,000)	
Warranty liability	(41,000)	(65,000)	(55,000)	
Total deductible temporary differences	\$(101,500)	\$(195,000)	\$(170,000)	
Currently enacted future tax rates	35 %	40 %	45 %	
Deferred tax asset	\$ (35,525)	\$ (78,000)	\$ (76,500)	\$ (190,025)
Taxable Temporary Differences:^a				
Installment receivable	\$125,000	\$230,000	\$145,000	
Recovery of asset (depreciation)	0	72,600	23,400	
Total taxable temporary differences	\$125,000	\$302,600	\$168,400	
Currently enacted future tax rates	35 %	40 %	45 %	
Deferred tax liability	\$43,750	\$121,040	\$75,780	\$240,570

^a Unless otherwise indicated in the text of the material, the amount for each taxable or deductible temporary difference is the summation of the temporary differences that would be taxable or deductible in the years indicated. For example, the deductible temporary difference of litigation liability of \$60,500 for 20X2/X4 is composed of the following: \$0 from 20X2, \$40,500 from 20X3, and \$20,000 from 20X4.

Since currently enacted tax rates change in this example, some scheduling of temporary differences to future years is required. Assumption 8 in Example 2 indicates that income will be available in all future years to realize the benefit from all temporary differences. Therefore, all temporary differences will be realized in the future years that the temporary differences are estimated to be taxable or deductible. The tax rate remains the same (35 percent) from 20X2 to 20X4; therefore, all deductible differences expected to be realized during this time period are combined as one total amount, and all taxable differences are combined. The tax rate of 40 percent is applicable for 20X5-20X7 and all temporary differences estimated to be deductible during this time period are combined; all temporary differences expected to be taxable during this period are combined. Again, the tax rate changes and 45 percent is used for deductible and taxable temporary differences during 20X8-20X9, and the temporary differences during this time period are combined.

All the temporary differences were discussed in detail in Example 1 and require no further explanation, except for depreciation. Notice that the depreciation temporary difference at the end of 20X1 is \$96,000 (\$30,000 for 20X0 + \$66,000 for 20X1). The depreciation temporary difference will continue to build up through 20X4, and, in 20X5, the temporary difference will start to be realized as the book basis of the asset begins to recover. Of the \$96,000 in temporary differences,

\$12,600 is recovered in 20X5, \$30,000 in 20X6, \$30,000 in 20X7, and the remaining \$23,400 (\$96,000 - \$12,600 - \$30,000 - \$30,000) in 20X8. Therefore, \$72,600 (\$12,600 + \$30,000 + \$30,000) of temporary differences related to depreciation is used in the 20X5-20X7 computation, and the remaining \$23,400 (\$96,000 - \$72,600) is included in the 20X8-20X9 calculation.

No valuation allowance is required for the deferred tax asset since the company estimates that income in future years will be sufficient to realize all benefits from the reversing temporary differences.

Using the \$190,025 ending deferred tax asset balance and the \$240,570 ending deferred tax liability balance from Table 2, deferred tax expense, deferred tax benefit, and income tax expense for 20X1 are computed in Table 3.

Table 3
Computation of Deferred Tax Expense/Benefit, Taxes Payable, and Tax Expense for 20X1

Computation of Deferred Tax Benefit/Expense:		
Ending deferred tax asset balance (from Table 2)	\$(190,025)	
Ending deferred tax liability balance (from Table 2)		\$240,570
Beginning deferred tax asset balance	124,600	
Beginning deferred tax liability balance		(122,000)
Deferred tax benefit for 20X1	<u>\$(65,425)</u>	
Deferred tax expense for 20X1		<u>\$118,570</u>
Computation of Taxes Payable and Tax Expense:		
Taxable income (Example 2 assumptions)		\$30,000
Tax rate in 20X1 (Example 2 assumptions)		<u>30 %</u>
Taxes payable for 20X1		\$9,000
Deferred tax benefit for 20X1 (above)		(65,425)
Deferred tax expense for 20X1 (above)		<u>118,570</u>
Income tax expense for 20X1		<u>\$62,145</u>

Using the information from Table 3, the required tax journal entry for 20X1 is presented as follows:

Income Tax Expense	62,145	
Deferred Tax Asset	65,425	
Income Taxes Payable		9,000
Deferred Tax Liability		118,570

The \$190,025 deferred tax asset balance and the \$240,570 deferred tax liability balance are classified as current or long-term based on how the asset or liability to which the temporary difference relates is classified. The 20X2 payment on the warranty liability is classified as a current liability and all remaining payments are long-term. The 20X2 payment that is to be received from the installment sales is

classified as current and all remaining payments are classified as long-term. The litigation liability and depreciable assets are classified as long-term. Using this information, classification of the deferred tax asset balance and the deferred tax liability balance is presented in Table 4.

Table 4
Classification of Deferred Tax Assets and Liabilities

	Temporary Difference		Tax Rate	Current	Noncurrent
Deferred Tax Assets:					
Warranty liability—20X2	\$ (10,000)	×	35%	\$ (3,500)	
Warranty liability—20X3/X4	(31,000)	×	35%		\$ (10,850)
Warranty liability—20X5/X7	(65,000)	×	40%		(26,000)
Warranty liability—20X8/X9	(55,000)	×	45%		(24,750)
Litigation liability—20X3/X4	(60,500)	×	35%		(21,175)
Litigation liability—20X5/X7	(130,000)	×	40%		(52,000)
Litigation liability—20X8/X9	(115,000)	×	45%		(51,750)
Total Deferred Tax Assets				<u>\$ (3,500)</u>	<u>\$ (186,525)</u>
Deferred Tax Liabilities:					
Installment sales—20X2	\$20,000	×	35%	\$7,000	
Installment sales—20X3/X4	105,000	×	35%		\$36,750
Installment sales—20X5/X7	230,000	×	40%		92,000
Installment sales—20X8/X9	145,000	×	45%		65,250
Depreciable assets—20X5/X7	72,600	×	40%		29,040
Depreciable assets—20X8/X9	23,400	×	45%		10,530
Total Deferred Tax Liabilities				<u>\$7,000</u>	<u>\$233,570</u>

For 20X1 a net current deferred tax liability of \$3,500 (\$7,000 current deferred tax liability - \$3,500 current deferred tax asset), and a net noncurrent deferred tax liability of \$47,045 (\$233,570 noncurrent deferred tax liability - \$186,525 noncurrent deferred tax asset) is reported in the financial statements.

Using the information from Assumption 6 of Example 2 and the preceding journal entry, a partial income statement may be presented for Maxwell for 20X1.

Maxwell Enterprises
Partial Income Statement
For the Year Ended December 31, 20X1

Income from continuing operations		\$166,000
Income tax expense:		
Current	\$9,000	
Deferred	53,145	
Income tax expense	<u>(62,145)</u>	
Net Income		<u>\$103,855</u>

The net deferred tax expense of \$53,145 (\$118,570 deferred tax expense for 20X1 - \$65,425 deferred tax benefit for 20X1) reported as part of the income tax expense for 20X1 is the net impact of the deferred tax expense and deferred tax benefit for 20X1.

Notice that goodwill impairment¹¹ and interest on nontaxable bonds (Example 2, Assumption 6) are not used as temporary differences in the computation of deferred taxes. Only differences that have tax consequences are considered temporary differences for deferred tax computations. Since goodwill, in this situation, is not deductible for tax purposes, it does not have tax consequences and is not a temporary difference. Also, interest on nontaxable bonds does not have tax consequences and is not a temporary difference since it is not included in revenue for tax purposes. Differences between tax and books that do not have tax consequences have been referred to as permanent differences in prior deferred tax standards.

Computation of deferred taxes becomes more complex when there is more than one enacted future tax rate, and an entity assumes, based on available information, that losses will occur in one or more future years. The possibility of future losses creates problems as to when temporary differences will be realized. To illustrate, assume the same information in Example 2, except that Maxwell estimates that tax losses of about \$55,000 will be incurred in years 20X2 and 20X3, and any losses will be used as carrybacks to 20X0 and 20X1. The company estimates that income in 20X4-20X9 will be sufficiently large to utilize all deductible items. Using these changed assumptions, deferred tax assets and liabilities are computed in Table 5, below:

¹¹ EITF No. 93-12 indicates that when a company elects to amortize tax basis goodwill on a retroactive basis, as a result of the 1993 change in tax law, the benefit from the retroactive

amortization in excess of book deduction is reported in the income statement as part of income from continuing operations in the accounting period that the law was enacted.

Table 5
Computation of Deferred Taxes for 20X1

	Temporary Differences Recovered from Future Years				
	Prior and Current Year	20X4	20X5/X7	20X8/X9	20X1 Balance
Deductible Temporary Differences:^a					
Litigation liability	\$ (40,500)	\$ (20,000)	\$ (130,000)	\$ (115,000)	
Warranty liability	(25,000)	(16,000)	(65,000)	(55,000)	
Total deductible temporary differences	\$ (65,500)	\$ (36,000)	\$ (195,000)	\$ (170,000)	
Currently enacted future tax rates	30 %	35 %	40 %	45 %	
Deferred tax asset	\$ (19,650)	\$ (12,600)	\$ (78,000)	\$ (76,500)	\$ (186,750)
Taxable Temporary Differences:^a					
Installment receivable	\$50,000	\$75,000	\$230,000	\$145,000	
Recovery of asset (depreciation)	0	0	72,600	23,400	
Total taxable temporary differences	\$50,000	\$75,000	\$302,600	\$168,400	
Currently enacted future tax rates	30 %	35 %	40 %	45 %	
Deferred tax liability	\$15,000	\$26,250	\$121,040	\$75,780	\$238,070

^a Unless otherwise indicated in the text of the material, the amount for each taxable or deductible temporary difference is the summation of the temporary differences that would be taxable or deductible in the years indicated. For example, the deductible temporary difference of litigation liability of \$40,500 that was deductible in 20X2 and 20X3 was recovered by a loss carryback to 20X0 (a prior year) and 20X1 (the current year). The \$40,500 is composed of the following: \$0 from 20X2 and \$40,500 from 20X3.

All items in Table 5 have been explained in prior examples, except for the 20X2 and 20X3 temporary differences that are assumed to be recovered in 20X0 and 20X1. The \$65,500 (20X3 litigation liability of \$40,500 + 20X2 warranty liability of \$10,000 + 20X3 warranty liability of \$15,000) of temporary differences that are expected to be deducted in 20X2 and 20X3 when the book basis of the liabilities are settled will not be realized in those years, because losses are expected to be reported. Therefore, the benefit of the deductible differences will be realized in the years in which the loss is used to offset income. In this example the losses that are estimated to occur in 20X2 and 20X3 are assumed to be carried back to 20X0 and 20X1 and offset against income in those years. As a result, the deductible differences are realized in 20X0 and 20X1 when the tax rate is 30 percent. The \$50,000 (\$20,000 in 20X2 + \$30,000 in 20X3) in temporary differences expected to be taxable in 20X2 and 20X3 also are assumed to be realized in 20X0 and 20X1 as a result of the expected carryback of the 20X2 and 20X3 losses. If the \$50,000 in temporary differences had not been taxable in 20X2 and 20X3 the \$55,000 of losses would have been \$50,000 more. The taxable temporary differences reduce the loss carryback from what it would have been without the differences. Therefore, the taxable temporary differences are realized in 20X0 and 20X1 using the 30-percent tax rate applicable to the years that offset the 20X2/X3 losses.

Using the \$186,750 deferred tax asset balance and the \$238,070 deferred tax liability balance from Table 5, the deferred tax benefit, the deferred tax expense, income taxes payable, and tax expense can be computed in Table 6.

Table 6
Computation of Deferred Tax Benefit/Expense, Taxes Payable, and Tax Expense for 20X1

Computation of Deferred Tax Benefit/Expense:		
Ending deferred tax asset balance (from Table 5)	\$(186,750)	
Ending deferred tax liability balance (from Table 5)		\$238,070
Beginning deferred tax asset balance	124,600	
Beginning deferred tax liability balance		(122,000)
Deferred tax benefit for 20X1	\$(62,150)	
Deferred tax expense for 20X1		\$116,070
Computation of Taxes Payable and Tax Expense:		
Taxable income (Example 2 assumptions)		\$30,000
Tax rate in 20X1 (Example 2 assumptions)		30%
Taxes payable for 20X1		\$9,000
Deferred tax benefit for 20X1 (above)		(62,150)
Deferred tax expense for 20X1 (above)		116,070
Income tax expense for 20X1		\$62,920

Using the information from Table 6, the required tax journal entry for 20X1 can be prepared.

Income Tax Expense	62,920	
Deferred Tax Asset	62,150	
Income Taxes Payable		9,000
Deferred Tax Liability		116,070

The income statement presentation of income tax expense and deferred taxes has been illustrated in the prior example. You may wish to refer back to the prior solution for the presentation.

This completes the analysis of Example 2. Example 2 illustrated a situation where currently enacted tax rates changed over the time period that temporary differences were taxable or deductible. Example 3 illustrates a situation where a valuation allowance must be established for a deferred tax asset. The assumptions for Example 3 are as follows:

Example 3
Assumptions for Deferred Tax Computations

1. Clark Enterprises is computing deferred taxes for 20X2 using the provisions of Statement No. 109 and has accumulated the following information about financial accounting basis and tax basis of assets and liabilities:

	Tax Basis	Financial Basis	Temporary Difference
a. Litigation liability	\$ 0	\$350,000	\$350,000
b. Depreciable assets	500,000	790,000	290,000
c. Rent in advance	0	200,000	200,000

2. The company also has temporary differences of \$170,000 related to long-term contracts that are a result of using percentage of completion for books and the modified method for tax purposes. Temporary differences related to the long-term contract are estimated to be realized as follows: \$45,000 during 20X3, and \$45,000 during 20X4, \$50,000 during 20X5-20X6, and \$30,000 during 20X7-20X8. Temporary differences of \$290,000 for depreciable assets relate to excess of accelerated depreciation for tax purposes over straight-line depreciation for books. For each of the future years 20X3-20X8 book depreciation is exceeding tax depreciation, and the book value of the assets is being recovered during this time period. The recovery is estimated as follows: \$65,000 during 20X3, and \$65,000 during 20X4, \$90,000 during 20X5-20X6, and \$70,000 during 20X7-20X8. Temporary differences of \$350,000 related to the litigation liability were created when the expense was accrued for book purposes. It will be deducted for tax when paid. The litigation liability is estimated to be settled in the following time periods: \$20,000 in 20X3, and \$20,000 in 20X4, \$100,000 in 20X5-20X6, and \$210,000 in 20X7-20X8. The \$200,000 in temporary differences related to rent in advance was recorded as a liability when the cash was received. The liability is estimated to be settled as follows: \$15,000 in 20X3, and \$15,000 in 20X4, \$75,000 during 20X5-20X6, and \$95,000 during 20X7-20X8.

3. There are no operating loss or tax credit carryforwards for tax purposes, and the alternative minimum tax is not applicable in this situation.

4. Taxable income for 20X2 is \$500,000, and based on all available information the company estimates that it will have sufficient income in all future years to realize all benefits from the temporary differences, except for \$100,000 of deductible temporary differences in 20X7 and 20X8. There is a greater than 50-percent likelihood that the deferred tax asset related to these differences will not be realized.

5. The deferred tax asset balance at the beginning of 20X2 is \$120,000 and the deferred liability balance is \$116,000.

6. Currently enacted tax rates are as follows:

20X2	30%
20X3-20X4	35%
20X5-20X6	40%
20X7-20X8	45%

Using the information from Example 3, the deferred tax asset balance and the deferred tax liability balance at the end of 20X2 can be computed in Table 7.

Table 7
Computation of Deferred Taxes for 20X2

	Temporary Differences Recovered from Future Years			20X2 Balance
	20X3/X4	20X5/X6	20X7/X8	
Deductible Temporary Differences: ^a				
Litigation liability	\$ (40,000)	\$ (100,000)	\$ (210,000)	
Rent in advance	(30,000)	(75,000)	(95,000)	
Total deductible temporary differences	\$ (70,000)	\$ (175,000)	\$ (305,000)	
Currently enacted future tax rates	35 %	40 %	45 %	
Deferred tax asset	\$ (24,500)	\$ (70,000)	\$ (137,250)	\$ (231,750)
Taxable Temporary Differences: ^a				
Long-term contracts	\$90,000	\$50,000	\$30,000	
Recovery of asset (depreciation)	130,000	90,000	70,000	
Total taxable temporary differences	\$220,000	\$140,000	\$100,000	
Currently enacted future tax rates	35 %	40 %	45 %	
Deferred tax liability	\$77,000	\$56,000	\$45,000	\$178,000

^a Unless otherwise indicated in the text of the material, the amount for each taxable or deductible temporary difference is the summation of the temporary differences that would be taxable or deductible in the years indicated. For example, the deductible temporary difference for litigation liability of \$40,000 for 20X3/X4 is composed of the following: \$20,000 from 20X3, and \$20,000 from 20X4.

All temporary differences and change in tax rate computations used in Table 7, except for temporary differences related to long-term contracts, have been explained in detail in prior examples and will not be repeated in this illustration. Temporary differences related to long-term construction contracts do not cause a difference between the book and tax basis of an asset or liability since the differences are reported on the tax balance sheet but not on the financial accounting balance sheet (see Chart 2). Revenue from the contracts are recognized for book purposes as costs are incurred and at a later date for tax purposes. Therefore, the temporary differences are taxable in the future years when the revenue is recognized for tax purposes. You may wish to refer back to prior examples for a detailed review of other temporary differences. The information computed in Table 7 can now be used with other assumptions from Example 3 to compute the information for the tax journal entry for 20X2. The information for the 20X2 journal entry is computed in Table 8.

Table 8
Computation of Deferred Tax Benefit/Expense, Taxes Payable, Tax Expense,
and Deferred Tax Asset Valuation Allowance for 20X2

Computation of Deferred Tax Benefit/Expense:		
Ending deferred tax asset balance (from Table 7)	\$(231,750)	
Ending deferred tax liability balance (from Table 7)		\$178,000
Beginning deferred tax asset balance	120,000	
Beginning deferred tax liability balance		(116,000)
Deferred tax benefit for 20X2	<u>\$(111,750)</u>	
Deferred tax expense for 20X2		<u>\$62,000</u>
Computation of Taxes Payable and Tax Expense:		
Taxable income (Example 3 assumptions)		\$500,000
Tax rate in 20X2 (Example 3 assumptions)		30 %
Taxes payable for 20X2		\$150,000
Deferred tax benefit for 20X2 (above)		(111,750)
Deferred tax expense for 20X2 (above)		62,000
Income tax expense for 20X2		<u>\$100,250</u>
Computation of Valuation Allowance:		
Deductible temporary difference not expected to be realized		\$100,000
Tax rate in 20X7/X8		45 %
Valuation allowance at the end of 20X2		\$45,000
Valuation allowance at the end of 20X1		0
Increase/(decrease) in valuation allowance		<u>\$45,000</u>

Since there is a greater than 50-percent likelihood that \$100,000 of temporary differences expected to be deductible in 20X7 and 20X8 will not be realized because

of the lack of income, a valuation allowance account must be established to reduce the deferred tax asset account, computed in Table 7, to the amount that is likely (more than 50 percent) to be realized. Since the temporary differences not expected to be realized are deductible in 20X7 and 20X8 when the tax rate is 45 percent, the valuation allowance will be established at the 45-percent tax rate. All calculations in the Table have been discussed in detail in prior examples and no further explanation is required.

Using information from Table 8, the tax journal entries required for 20X2 are as follows:

Income Tax Expense	100,250	
Deferred Tax Asset	111,750	
Income Taxes Payable		150,000
Deferred Tax Liability		62,000
Income Tax Expense	45,000	
Valuation Allowance to Reduce Deferred Tax Asset to Realizable Amounts		45,000

The Valuation Allowance to Reduce Deferred Tax Asset to Realizable Amounts account is a contra asset and will be offset against the deferred tax asset balance.

The deferred tax asset valuation allowance account may change from accounting period to accounting period as assumptions change relative to future income. To illustrate, assume the same information in Example 3, except for the following: (1) Clark Enterprises is computing deferred taxes for 20X3, (2) taxable income for 20X3 is \$400,000, (3) taxable and deductible temporary differences reverse out in 20X3 as indicated in the Example 3 assumptions, and (4) the company estimates that there is a greater than 50-percent likelihood that only \$20,000 of temporary differences expected to be deductible in 20X7 and 20X8 will not be realized because of the lack of income. Using these changed assumptions, deferred taxes are computed for 20X3 in Table 9.

Table 9
Computation of Deferred Taxes for 20X3

	Temporary Differences Recovered From Future Years			
	20X4	20X5/X6	20X7/X8	20X3 Balance
Deductible Temporary Differences:^a				
Litigation liability	\$ (20,000)	\$ (100,000)	\$ (210,000)	
Rent in advance	(15,000)	(75,000)	(95,000)	
Total deductible temporary differences	\$ (35,000)	\$ (175,000)	\$ (305,000)	
Currently enacted future tax rates	35 %	40 %	45 %	
Deferred tax asset	\$ (12,250)	\$ (70,000)	\$ (137,250)	\$ (219,500)
Taxable Temporary Differences:^a				
Long-term contracts	\$45,000	\$50,000	\$30,000	
Recovery of asset (depreciation)	65,000	90,000	70,000	
Total taxable temporary differences	\$110,000	\$140,000	\$100,000	
Currently enacted future tax rates	35 %	40 %	45 %	
Deferred tax liability	\$38,500	\$56,000	\$45,000	\$139,500

^a Temporary differences for construction of Table 9 were taken from Example 3, Assumption 1.

Using the deferred tax asset and liability balances from Table 9, the information needed for the tax journal entries at the end of 20X3 is computed in Table 10.

Table 10
Computation of Deferred Tax Benefit/Expense, Taxes Payable, Tax Expense, and Deferred Tax Asset Valuation Allowance for 20X3

Computation of Deferred Tax Benefit/Expense:		
Ending deferred tax asset balance (from Table 9)	\$(219,500)	
Ending deferred tax liability balance (from Table 9)		\$139,500
Beginning deferred tax asset balance (from Table 7)	231,750	
Beginning deferred tax liability balance (from Table 7)		(178,000)
Deferred tax expense for 20X3	\$12,250	
Deferred tax benefit for 20X3		\$(38,500)
Computation of Taxes Payable and Tax Expense:		
Taxable income (assumptions in text)		\$400,000
Tax rate in 20X3 (Example 3 assumptions)		35 %
Taxes payable for 20X3		\$140,000
Deferred tax benefit for 20X3 (above)		(38,500)
Deferred tax expense for 20X3 (above)		12,250
Income tax expense for 20X3		\$113,750
Computation of Valuation Allowance:		
Deductible temporary difference not expected to be realized		\$20,000
Tax rate in 20X7/X8		45 %
Valuation allowance at the end of 20X3		\$9,000
Valuation allowance at the end of 20X2 (from Table 8)		(45,000)
Increase/(decrease) in valuation allowance		\$(36,000)

Notice from the Table 10 computations that, since no temporary differences were added in 20X3 and the temporary differences at the end of 20X2 that were expected to be recovered in 20X3 were recovered as anticipated, both the deferred tax asset and liability balances decreased for 20X3. The decrease in the deferred tax asset is a deferred tax expense for 20X3, and the decrease in the deferred tax liability is a deferred tax benefit. In addition, the Table indicates that, since assumptions changed relative to the amount of deductible temporary differences that are estimated to be realized, the valuation allowance must be adjusted at the end of 20X3. At the end of 20X3, Clark estimates that there is a greater than 50-percent likelihood that \$20,000 of the deductible temporary differences at the end of 20X3 will not be realized. Therefore, the valuation allowance account should only have a balance of \$9,000, and it must be decreased by \$36,000 to reflect the

fact that more of the deferred tax asset is expected to be realized. Information from Table 10 can be used to prepare the tax journal entries at the end of 20X3.

Income Tax Expense	113,750	
Deferred Tax Liability	38,500	
Income Taxes Payable		140,000
Deferred Tax Asset		12,250
Valuation Allowance to Reduce Deferred Tax Asset to Realizable Amounts	36,000	
Income Tax Expense		36,000

This completes the analysis of Example 3 for 20X3. The next example illustrates the accounting for deferred taxes when an entity has an actual tax loss and investment tax credit carryforward. Assumptions for Example 4 are as follows:

Example 4 Assumptions for Deferred Tax Computations

1. Howard Enterprises is computing deferred taxes for 20X4 using the provisions of Statement No. 109 and has accumulated the following information about financial accounting basis and tax basis of assets and liabilities as of the end of 20X4.

	Tax Basis	Financial Basis	Temporary Difference
a. Litigation liability	\$ 0	\$300,000	\$300,000
b. Warranty liability	0	60,000	60,000
c. Compensated absence liability	0	40,000	40,000
d. Rent in advance	0	100,000	100,000
e. Depreciable assets	500,000	800,000	300,000
f. Installment sales	0	150,000	150,000

2. The company meets the requirements for use of the installment sales basis, and the temporary difference represents gross profit from the sale.

3. In addition to the temporary differences listed above, the company has \$125,000 of temporary differences related to long-term construction contracts from using percentage of completion for financial accounting purposes and modified percentage of completion for tax purposes.

4. The company has an investment tax credit carryforward of \$50,000 at the end of 20X4. Assume there is no limitation on its use.

5. Tax income for 20X1, 20X2, and 20X3 is \$70,000, \$156,000, and \$150,000, respectively. The company reported a tax loss of \$350,000 for 20X4 and elected to carry the loss back two years and forward twenty. In addition, assume that there is no limitation on the use of the loss.

6. At the beginning of 20X4 the deferred tax asset balance related to temporary differences is \$75,000, the deferred tax asset balance related to the investment tax credit is \$50,000, and the deferred tax liability balance is \$55,000.

7. Based on all available information, the company estimates that it will have sufficient income in all future years to realize all benefits from temporary differences, investment tax credits, and operating loss carryforwards.

8. Currently enacted tax rates are as follows:

20X1	20%
20X2	25%
20X3	30%
20X4	35%
20X5 and after	40%

Using the assumptions in Example 4, all information for the tax journal entry at the end of 20X4 is computed in Table 11.

Table 11
Computation of Receivable from Loss Carryback, Deferred Tax
Asset/Liability, Deferred Tax Benefit/Expense,
Taxes Payable, and Tax Expense for 20X4

Computation of Receivable from Loss Carryback:			
20X2 tax income	156,000	× 25% =	39,000
20X3 tax income	150,000	× 30% =	45,000
Total receivable from loss carryback			<u>\$84,000</u>
Computation of Deferred Tax Asset:			
Deferred Tax Asset from Temporary Differences:			
Litigation liability		\$(300,000)	
Warranty liability		(60,000)	
Compensated absence liability		(40,000)	
Rent in advance		<u>(100,000)</u>	
Total deductible temporary differences		\$(500,000)	
Currently enacted tax rate		40 %	
Deferred tax balance at the end of 20X4		\$(200,000)	
Beginning deferred tax asset balance		<u>75,000</u>	
Deferred tax benefit from temporary differences (20X4)			\$(125,000)
Deferred Tax Asset from Operating Loss Carryforward:			
Operating loss carryforward		\$(44,000) ^a	
Currently enacted tax rate		<u>40 %</u>	
Deferred tax asset balance at the end of 20X4		\$(17,600)	
Beginning deferred tax asset balance		<u>0</u>	
Deferred tax benefit from operating loss carryforward			(17,600)
Deferred Tax Asset from Investment Tax Credit (ITC) Carryforward:			
ITC carryforward at the end of 20X4		\$(50,000)	
Beginning deferred tax asset from ITC		<u>50,000</u>	
Deferred tax benefit from ITC carryforward			0
Computation of Deferred Tax Liability:			
Taxable Temporary Differences:			
Recovery of depreciable assets		\$300,000	
Installment sales		150,000	
Long-term contracts		<u>125,000</u>	
Total taxable temporary differences		\$575,000	
Currently enacted tax rate		<u>40 %</u>	
Deferred tax liability balance at end of 20X4		\$230,000	
Beginning deferred tax liability balance		<u>(55,000)</u>	
Deferred tax expense for 20X4			175,000
Income tax expense for 20X4			<u>\$32,400</u>

^a The \$44,000 operating loss carryforward is the \$350,000 tax loss for 20X4 - \$156,000 20X2 carryback - \$150,000 20X3 carryback.

Howard Enterprises had a tax operating loss during 20X4 and elected to first carry the loss back two years to 20X2 and 20X3 and recapture taxes actually paid in those years. Notice that \$156,000 of the loss is used to recapture taxes of \$39,000 in 20X2, and \$45,000 of taxes is recaptured in 20X3 when the tax rate is 30 percent. The company will record a receivable for \$84,000, which is the amount of taxes recovered from prior years. The company used \$306,000 (\$156,000 + \$150,000) of the \$350,000 operating loss as a carryback, leaving \$44,000 of the loss that can be used as a loss carryforward in the computation of a deferred tax asset. Notice that the 20X4 ending deferred tax asset balance of \$267,600 is composed of three parts as follows:

- (1) a \$200,000 asset related to temporary differences,
- (2) a \$17,600 asset related to the operating loss carryforward, and
- (3) a \$50,000 asset related to the investment tax credit carryforward.

However, the change in the deferred tax asset account for 20X4 is only \$142,600 (deferred tax asset benefit of \$125,000 + \$17,600 deferred tax benefit from the operating loss carryforward). All temporary differences can be combined together when computing the deferred tax asset since the currently enacted tax rate of 40 percent is the same in all future years. The operating loss carryforward is used to compute a deferred tax asset since it can be used to offset taxable income in future years and reduce the amount of taxes paid. The deferred asset associated with the operating loss is computed by multiplying the appropriate tax rate by the operating loss. The appropriate tax rate or rates is the enacted future rate in the period that the operating loss is realized. Since the tax rate in this example is constant, it is unnecessary to determine when the operating loss carryforward is going to be realized. The investment tax credit carryforward is applied directly to reduce taxes payable; consequently, the amount of the credit is a deferred tax asset. The assumptions in Example 4 specify that the company will have sufficient income in all future years to realize all benefits from the temporary differences, operating loss carryforward and the investment tax credit carryforward; therefore, a valuation allowance for the deferred tax asset balance is unnecessary. Notice that the deferred tax asset related to the deductible temporary differences created a deferred tax benefit of \$125,000 for 20X4, since there was a beginning balance in the asset account of \$75,000. There is a \$17,600 deferred tax benefit from the operating loss carryforward because there was no beginning deferred tax asset balance for the operating loss. There is no deferred tax benefit in 20X4 for the ITC carryforward, since there is no change in the deferred tax asset balance related to the ITC. All deductible and taxable temporary differences have been discussed in detail in previous examples and will not be repeated.

By using the information from Table 11, the tax journal entry at the end of 20X4 can be prepared as follows:

Income Tax Expense	32,400	
Receivable from Loss Carryback	84,000	
Deferred Tax Asset	142,600	
Tax Effect of Loss Carryback		84,000
Deferred Tax Liability		175,000

The Receivable from Loss Carryback is classified as a current asset, and the Tax Effect of Loss Carryback is reported in the income statement following income tax expense. It will decrease the loss for 20X4 by \$84,000.

Accounting for Deferred Taxes Under APB Opinion No. 23¹²

SFAS No. 109 does not supersede APB Opinion No. 23, related to accounting for special areas such as subsidiaries and corporate joint ventures. However, the Opinion is amended in certain areas by the new standard.

¹² EITF No. 95-9 concludes that a tax charged a company based on the distribution of dividends should be included in stockholders' equity when certain conditions are met, because the tax is viewed as a tax withheld for the party receiving the dividend. See EITF No.

APB Opinion No. 23, as amended by SFAS No. 109, covers the income tax accounting for special areas such as subsidiaries and corporate joint ventures. The central issue addressed by the Opinion is the income tax accounting for undistributed earnings. Undistributed earnings of these companies are equal to the difference between the parent company's percentage share of the reported earnings and the dividends distributed. Under the equity method of accounting for investments in subsidiaries and corporate joint ventures, the parent company recognizes income as earned by the subsidiary or joint venture, rather than as it is received. (APB Opinion No. 18 in Topic 3 details the analysis of accounting for investments using the equity method.) Therefore, the parent would recognize income based upon the entire reported income, whether distributed or undistributed. The income thus recognized would be included in the parent company's income and enter into the computation of the deferred taxes of the parent. However, income is not recognized for tax purposes until such time as the dividends are received. The issue raised by the Opinion is: Should the undistributed earnings of the subsidiary or corporate joint venture be treated as a temporary difference?

Normally, undistributed earnings of a subsidiary or corporate joint venture should be treated as a temporary difference in the computation of deferred tax liabilities by the parent company. The reason for this treatment is based upon the assumption that eventually all earnings will be paid to the parent in the form of dividends. According to Paragraph 31 of Statement No. 109, an exception to this general rule exists if a subsidiary or corporate joint venture (classified as domestic) had undistributed earnings that were earned on or prior to December 15, 1992 evidence to indicate that the subsidiary or joint venture has permanently invested or will permanently invest the undistributed earnings, or will pay out the undistributed earnings in the form of a tax-free liquidation (that is, the difference is permanent in duration). The determination of whether a company intends to indefinitely postpone the payment of undistributed earnings is largely a matter of managerial judgment. (See APB Opinion No. 23, Paragraph 12, for some guidance on the question of indefinite postponement.) If undistributed earnings arise in a domestic subsidiary or domestic corporate joint venture in years beginning after December 15, 1992, the undistributed earnings are treated as temporary differences in the deferred tax computation unless the temporary differences are nontaxable (Paragraph 32). The differences are considered nontaxable when the earnings can be recovered tax free according to tax law and the entity intends to use that method to recover the investment.

When undistributed earnings are treated as temporary differences, the differences should be included in the computation of deferred tax liabilities using the provisions of Statement No. 109.¹³

(Footnote Continued)

95-9 for more details on the required conditions.

¹³ EITF No. 93-16 specifies that a deferred tax liability should be reported for temporary differences of a foreign subsidiary where the

tax basis of the assets has been increased and that the indefinite reversal aspect contained in APB No. 23 is not applicable in this situation. Companies that have not recorded deferred tax liabilities for such differences must do so for all temporary differences within foreign subsidiar-

If it was assumed previously that distribution of part or all of the undistributed earnings would be indefinitely postponed, but it now appears that these earnings will be distributed in the form of dividends, the deferred tax computation in the current period must include the temporary differences related to undistributed earnings.

The opposite situation would occur where deferred taxes were established for temporary differences related to undistributed earnings, but it now appears that those earnings will not be distributed. Rather, they will be permanently invested by the subsidiary or corporate joint venture. In this case, the parent company should remove the related temporary differences when computing the current year deferred taxes.

If the investment in a subsidiary decreases so that the investment is no longer accounted for as a subsidiary, the amount of the temporary differences and deferred tax liability will change. However, if an investment in an investee increases so that the investee becomes a subsidiary, any temporary differences for undistributed earnings prior to the date the investee becomes a subsidiary will continue to be treated as temporary differences unless cumulative dividends exceed cumulative earnings subsequent to the date of the change from investee to a subsidiary status.

Paragraphs 31 and 32 of SFAS No. 109 cover two other areas related to subsidiaries,¹⁴ joint ventures and investee companies. If an entity has an investment of 50 percent or less in an investee company, the excess of book basis of the investment over its tax basis is treated as a temporary difference for purposes of computing a deferred tax liability, except for corporate joint ventures the duration of which is considered permanent (hereafter referred to as “considered permanent”). When an enterprise has an investment in a foreign subsidiary or foreign joint venture (considered permanent) and there is an excess of book basis over tax basis of the investment, the excess is not accounted for as a temporary difference.

An entity may have an investment in a subsidiary or corporate joint venture where the tax basis of the investment is in excess of the book basis. In this situation, the excess should be treated as a temporary difference and a deferred tax asset established (even for ventures considered permanent) if it appears that the difference will reverse in the future. When a deferred tax asset is established for this type of a situation, the entity must determine whether a valuation allowance is required for the asset.

(Footnote Continued)

ies for accounting periods beginning after December 15, 1992.

¹⁴ EITF No. 95-10 states that when a foreign company is taxed at a different rate on income that is not distributed to stockholders compared to income that is distributed to stockholders, a tax credit is given to the company for the tax difference when the company pays out dividends from undistributed income. Any tax benefit from the tax credit is used to reduce tax expense in the accounting period that the tax

credit is used to reduce taxable income, and, therefore, the tax impact of temporary differences should be computed using the rate that is applied to income not distributed to stockholders. EITF No. 95-20 states that use by a parent company of a foreign subsidiary described in EITF No. 95-10, of either the rate for undistributed income or the rate for distributed income for the tax impact of the foreign company's operations, depends upon the parent company's use of the indefinite reversal aspect of APB Opinion No. 23.

APB Opinion No. 23, as amended by Statement No. 109, also covers the accounting for deferred taxes related to bad debt reserves of savings and loan associations and policyholders' surplus of stock life insurance companies. Paragraphs 31 and 32 specify the following deferred tax accounting for these entities:

1. Do not compute deferred taxes for tax bad debt reserves of qualified lenders such as U.S. savings and loan associations that were created in tax years that began before December 31, 1987, if it does not appear that these differences will reverse in the future.
2. Do compute deferred taxes for Item 1, above, for differences that arose after December 31, 1987.
3. Do not compute deferred taxes for stock life insurance companies' policyholders' surplus that was created in years that started on or prior to December 15, 1992.

All disclosures for issues covered in APB Opinion No. 23, as amended, are specified by SFAS No. 109.

Other Considerations Related to Deferred Tax Calculations¹⁵

This section covers several miscellaneous situations relating to deferred tax calculations that are specialized in nature such as transition to Statement No. 109, business combinations, foreign assets and liabilities, interim accounting periods, changes in tax rates and laws, and leveraged leases.

When initially making the transition to SFAS No. 109, an entity may elect a retroactive approach or a prospective approach. When an enterprise elects a retroactive approach, one or more of the prior years' financial statements are restated using the provisions of Statement No. 109. The earliest year restated may or may not be presented with the current year financial statements. When the earliest year restated is not included with the current year financial statements, the effect (cumulative effective of the transition similar to what is reported under APB Opinion No. 20) of the restatement is included as an adjustment to beginning

¹⁵ EITF No. 88-4 specifies that payments made to the IRS by partnerships and S corporations when retaining a fiscal year that differs from a calendar year should be accounted for as an asset. EITF No. 91-8 states that the 1991 Texas law regarding franchise taxes is considered an income tax only for the part of the tax in excess of the tax on net capital and that deferred taxes are reported for the tax effect of temporary differences when certain conditions are met. See EITF No. 91-8 for a more detailed discussion of this issue. EITF No. 94-1 covers several issues related to tax impacts from investments in affordable housing projects through limited partnerships. Some of the conclusions reached by the Task Force are as follows: (1) an entity should not recognize

the total benefit of the tax credit to be received during the term of the investment on the date the investment is purchased, (2) an entity may elect to use the effective yield method to account for the investment, (3) an entity should use SOP 78-9 to account for the investment if the effective yield method is not selected, (4) an entity should amortize the excess, if any, of the carrying amount of an investment over its residual value during the time period that the tax credits are allocated to the investor when the cost method is used, (5) an entity should review its investment for impairment on a periodic basis, and (6) an entity should report a liability for unconditional and legally binding delayed equity contributions. See EITF No. 94-1 for more details.

retained earnings of the earliest year presented. When the earliest year restated is included with current year financial statements, the cumulative effect of the change to SFAS No. 109 is included in the income of the earliest year restated. When the prospective method of transition is elected by an enterprise, financial statements of prior accounting periods are not restated. The cumulative effect of the change is included in income of the current year (the year of adoption). The cumulative effect is the difference in beginning retained earnings using APB Opinion No. 11 or Statement No. 96 and what beginning retained earnings would be if SFAS No. 109 had been used in all prior accounting periods. See a detailed analysis of changes in accounting principles using APB Opinion No. 20 in Topic 1 (Paragraph 51).

An enterprise that enters into a business combination under SFAS No. 141, after adopting the provisions of SFAS No. 109, must recognize a deferred tax asset or liability for temporary differences related to the difference between the tax bases of the assets and liabilities and the assigned book fair value of the assets and liabilities. An entity should not compute deferred taxes on the differences between book and tax bases of goodwill if not deductible for tax purposes and excess over cost, leveraged leases, and differences under APB Opinion No. 23 not allocated.¹⁶

When a business combination is accounted for under the provisions of Statement No. 141,¹⁷ the acquired company may have deductible temporary differences, operating loss carryforwards and tax credit carryforwards. A valuation allowance may have to be established for the deferred tax asset related to these differences. Subsequent to the consummation of the business combination, any reduction in the valuation allowance account through realization of the tax benefits from the items should be accounted for in the following manner (Paragraph 30):

- a. First, offset goodwill with the tax benefits, and reduce goodwill to zero, if necessary.

¹⁶ EITF No. 86-9 states that non-SEC registrants are not required to use push-down accounting for acquisitions meeting certain requirements and when the historical basis is retained in such acquisitions, all three methods of distributing the consolidated tax provision described in EITF No. 86-9 are acceptable. See EITF No. 86-9 for more details. EITF No. 02-13 discusses the appropriate accounting for impairment testing of goodwill when an entity has a difference between the tax and book bases of assets and liabilities (deferred taxes). The specific issues addressed by the EITF are as follows: (1) should a taxable or nontaxable purchase or sale of the reporting unit be assumed when estimating fair value of the unit, (2) should deferred taxes be used in the carrying amount of the reporting unit when making the initial screening test for goodwill impairment (a comparison of fair value with carrying value of the reporting unit), and (3) should the

existing or new income tax bases for assets and liabilities be used when performing Step 2 of the goodwill impairment testing (comparison of implied fair value of goodwill with its carrying amount)? EITF No. 02-13 states relative to issue one that whether a taxable or nontaxable purchase or sale is assumed should be evaluated based on the circumstances of each case. In addition, relative to issue two, the EITF states that deferred taxes should be included in the carrying amount of the reporting unit. An entity should use existing income taxes bases of assets and liabilities if the transaction is assumed to be nontaxable when estimating fair value, and the new income tax bases should be used in fair value determination if it is assumed to be a taxable transaction.

¹⁷ EITF No. 93-7 states that the provisions of SFAS No. 109 should be used when accounting for uncertainties associated with income taxes in a business combination.

- b. Next, if goodwill is reduced to zero, offset other noncurrent intangible assets, and reduce to zero if necessary.
- c. Last, use any excess benefit to reduce income tax expense.

When an enterprise is required to remeasure its foreign assets and liabilities from a local currency to a functional currency under SFAS No. 52, there may be a difference between the historical rates and the rates used in the remeasurement process. Under Statement No. 96 this difference was treated as a temporary difference for deferred tax computations. Under the provisions of SFAS No. 109 this difference is not accounted for as a temporary difference.

When an enterprise prepares interim period reports, tax expense must be computed using the estimated annual effective tax rate applied on a year-to-date basis with taxes from prior quarters of the current year deducted from the year-to-date amount. This approach is consistent with the provisions of APB Opinion No. 28 and FASB Interpretation No. 18, except as noted, below. Since SFAS No. 109 requires that a balance sheet approach using an asset/liability method be used in the computation of deferred taxes, the calculation of the estimated annual effective tax rate is more complex. Under Statement No. 109, both the taxes payable (current part of tax expense) and the deferred tax expense or benefit (deferred part of tax expense) are computed directly and combined to indirectly compute income tax expense. Therefore, computing the effective annual tax rate for interim reporting purposes requires a two-step calculation. First, the part of the effective rate related to the current part of the tax expense can be computed based on the estimated annual tax liability. Second, the deferred part of the tax rate should be based on the estimated annual deferred tax provision. A combination of the two steps provides the annual effective tax rate for interim reporting purposes. The two-step process requires an estimate of the year-end taxes payable and the year end deferred tax asset and liability computation.

Statement No. 109 amends APB Opinion No. 28 related to changes in tax law and tax rates, and changes in valuation allowances for deferred tax assets. Changes in tax laws and tax rates should be included in the interim period encompassing the enactment date, and adjustments to valuation allowance accounts as a result of changes in judgment should be included in the interim period when the judgments about the account change. Paragraph 194 of SFAS No. 109 states that estimated tax rates should not be adjusted in such a way as to cause an allocation of the change to interim periods subsequent to the change.

Since deferred tax assets and deferred tax liabilities are computed based on existing tax law, a change in tax law or a change in enacted tax rates will have an impact on the deferred tax asset and liability calculations.¹⁸ An adjustment is required for deferred tax assets and liabilities when changes in tax law or tax rates occur, and the impact of the adjustment should be included as a component of income from continuing operations in the accounting period that encompasses the

¹⁸ EITF No. 93-13 states that the impact of a change in tax rates that must be applied retroactively should be computed on the enactment date, using tax income and temporary differences on the enactment date.

date of enactment.¹⁹ In addition to the impact on deferred taxes from changes in tax laws or tax rates, deferred taxes may be impacted by a change in the tax status of an enterprise. For example, a corporation may change to a partnership or a partnership may change to a corporation. Deferred tax assets and/or liabilities should be added or eliminated when the tax status of the enterprise changes using the provisions of Statement No. 109. The impact of the change is included in income from continuing operations (Paragraphs 27 and 28).

Deferred taxes related to leveraged leases should be accounted for using the provisions of SFAS No. 13, as amended by SFAS No. 109. The Board, in Statement No. 109, did not change accounting for deferred taxes related to leveraged leases. However, in some cases, an integration of the temporary differences computed for leveraged leases using Statement No. 13 is required with other temporary differences computed using SFAS No. 109.

This completes the discussion of deferred tax computations. The next section covers intraperiod tax allocation.

Intraperiod Tax Allocation

Intraperiod tax allocation is the process of allocating the income tax expense or benefit computed using the deferred tax procedures, discussed in the preceding section, to individual items on the income statement and balance sheet that have individual tax consequences and are required to be reported separately and net of their related tax effect. For example, APB Opinion No. 20 requires that the cumulative effect of a change in accounting principle be reported separately after extraordinary items and net of its related tax expense or tax benefit. In addition, APB Opinion No. 30 requires that segment dispositions and extraordinary items be reported as separate items on the income statement and net of their related tax effect.

Statement No. 109 supersedes SFAS No. 96 related to intraperiod tax allocation and requires that income tax expense/benefit computed using the deferred tax procedures be allocated within one accounting period among the following items when the income statement and balance sheet are prepared (Paragraph 35).

- a. Income from continuing operations.
- b. Gains and losses from discontinued operations.²⁰
- c. Extraordinary gains and losses.
- d. Changes in accounting principles where the cumulative effect is reported in the income statement.
- e. Stockholders' equity items.

¹⁹ EITF No. D-30 states that the impact of a change in tax rates should be reported in the accounting period that contains the enactment date.

²⁰ EITF No. 93-17 concludes that when there is a temporary difference between the book

basis and tax basis of an investment in a subsidiary and the subsidiary is to be sold and accounted for as a discontinued operation, the tax impact of the difference should be recognized at the measurement date for the discontinued operation. This conclusion is not impacted by SFAS No. 144.

For a detailed analysis of the accounting and reporting requirements of items a through d, see APB Opinion Nos. 20 and 30 in Topic 1. Paragraph 36 of Statement No. 109 provides a listing of the types of items that are considered stockholders' equity items. A summary of the items is presented, below:

1. Direct adjustments to beginning retained earnings for error corrections and changes in accounting principles that require a retroactive restatement of prior year financial statements.
2. Gains and losses from transactions where the gains and losses are not reported in net income but are reported in comprehensive income, as defined in the conceptual framework.
3. Costs that are reported differently for tax and book incomes for stock option plans under APB Opinion No. 25.
4. Changes in paid-in-capital, such as reductions in paid-in-capital for expenses related to the issuance of stock.
5. Dividend payments charged to retained earnings for shares of stock related to an ESOP.
6. Temporary differences that are deductible and carryforwards on the date that an entity has a quasi-reorganization, unless exempt by Paragraph 39 of SFAS No. 109.
7. Tax basis of assets that were increased when a tax benefit was recognized for assets acquired in a taxable pooling-of-interest business combination.

Some of the items listed above require further explanation. For example, gains and losses included in comprehensive income but excluded from net income are unrealized gains and losses that are viewed as gains and losses but are not reported in the income statement. For example, under SFAS No. 115 (Topic 3), an unrealized holding gain or loss from available-for-sale securities is viewed as a gain or loss, but the change in market value is reported in stockholders' equity and not in the income statement. The items that are included in comprehensive income but excluded from net income may change from time to time. Other examples are as follows:

- (1) foreign currency translation adjustments (Topic 12) and
- (2) additional pension liability that is reported in stockholders' equity as specified by SFAS No. 87 (Topic 11).

The topics in this book that provide a detailed discussion of each of these examples is noted at the end of each item.

Under APB Opinion No. 25, Paragraph 17, the amount of compensation expense deducted for book purposes may differ from the amount deducted for tax purposes. In some cases, this difference is an adjustment to the contributed capital of an enterprise and may require intraperiod tax allocation. A more detailed discussion of some of the other items in stockholders' equity that require intraperiod tax allocation may be found in the Standard.

Income tax expense or tax benefit computed for the accounting period is applied to the items on the income statement and balance sheet that are required to be reported net of tax using an incremental approach. First, income tax expense or tax benefit (tax expense/benefit) computed on income from continuing operations, assuming no other income or losses, is allocated to income from continuing operations.²¹ This amount is adjusted for the tax impact of (1) changes in judgment about deferred tax asset realization, (2) tax law or rate changes, (3) tax status changes, and (4) dividends to stockholders that are tax deductible (Paragraph 35). Second, the tax expense/benefit on total income is determined, and the excess of the tax expense/benefit on total income less the tax expense/benefit on income from continuing operations is the total incremental tax expense/benefit. The incremental tax expense/benefit is allocated to all items requiring intraperiod tax allocation, except income from continuing operations. When the total incremental tax does not equal the sum of the incremental tax effects of two or more items, a formula basis is required in the allocation process. The following four-step process may be used in the allocation when a formula basis is required (Paragraph 38 of Statement No. 109).

STEP 1: Compute the tax benefit of the total net loss items, other than loss from continuing operations.

STEP 2: Apportion ratably to each loss item the tax benefit.

STEP 3: Compute the tax impact of all gains and losses, other than income from continuing operations.

STEP 4: Compute the difference between STEP 1 and STEP 3, and ratably apportion the difference in each gain category.

Some gain and loss categories, such as extraordinary items, have two or more gains and losses within the individual category. When the individual items must be presented net of tax, you may wish to apply the four-step process, noted above, to the individual category.

One example is used to illustrate the technical application of intraperiod tax allocation. Assumptions for the example are as follows:

²¹ EITF No. D-32 indicates, in the application of intraperiod tax allocation, that the tax impact of income from continuing operations is calculated without regard to the tax impact of items excluded from continuing operations.

Example 1
Assumptions for Intraproduct Tax Allocation

1. The following income, gain and loss items were reported by Love Enterprises during 20X2.

Income from continuing operations	\$45,000
Loss from discontinued operations	(25,000)
Extraordinary gain—gain from expropriation of assets	40,000
Cumulative effect of change in accounting principle	(5,000)
	\$55,000
Total	\$55,000

2. The company had the following tax rates during 20X2.

\$ 0-\$ 50,000	15%
\$ 50,001-\$ 75,000	25%
Over \$75,000	34%
\$100,000-\$335,000	5% additional tax

The first step in applying the intraproduct tax allocation procedures is to compute the tax on income from continuing operations assuming no other income or expense items and tax on total income. These amounts are computed in the first part of Table 1. In addition, since graduated tax rates are used and since income is not at the highest margin tax rate, the incremental tax on items other than income from continuing operations will not equal the total incremental tax. Therefore, the formula basis is used in the allocation process. The incremental tax benefit of each loss item (Step 1) is also computed in Table 1.

Table 1
Computation of Tax for Continuing Operations and Incremental Tax

Tax on Continuing Operations and Total Incremental Tax:

Tax on Income from Continuing Operations		Tax on Total Income		Incremental Tax
\$45,000	× 15% = \$6,750	\$50,000	× 15% = \$7,500	
		5,000	× 25% = 1,250	
<u>\$45,000</u>	<u>\$6,750</u>	<u>\$55,000</u>	<u>\$8,750</u>	<u>\$2,000</u>

Incremental Tax for All Loss Categories:

	Discontinued Operations and Accounting Change	Discontinued Operations	Accounting Change
Total income	\$55,000	\$55,000	\$55,000
Losses from loss categories	30,000	25,000	5,000
Total income without each loss category	<u>\$85,000</u>	<u>\$80,000</u>	<u>\$60,000</u>
Income tax without losses (from below)	\$17,150	\$15,450	\$10,000
Total tax (from above)	<u>(8,750)</u>	<u>(8,750)</u>	<u>(8,750)</u>
Incremental tax expense	<u>\$8,400</u>	<u>\$6,700</u>	<u>\$1,250</u>

Computation of Tax on Loss Categories:

\$50,000 × 15%	\$7,500	
25,000 × 25%	6,250	
10,000 × 34%	3,400	
<u>\$85,000</u>	<u>\$17,150</u>	
\$50,000 × 15%	\$7,500	
25,000 × 25%	6,250	
5,000 × 34%	1,700	
<u>\$80,000</u>	<u>\$15,450</u>	
\$50,000 × 15%		\$7,500
10,000 × 25%		2,500
<u>\$60,000</u>		<u>\$10,000</u>

Next, the incremental tax benefit of all loss items is ratably apportioned to each loss item. The percentages required for the allocation are computed in Table 2, and the actual allocation to each loss item is illustrated in the Table.

Table 2
Allocation of Incremental Tax to Gains and Losses

Computation of Percentages for Allocation:

Incremental tax on discontinued operations	\$6,700	
Incremental tax on accounting change	1,250	
	\$7,950	
Total incremental tax on losses computed separately	\$7,950	
Incremental tax on discontinued operations	\$6,700	
	=	84.28%
Total incremental tax on losses computed separately	\$7,950	
Incremental tax on accounting change	\$1,250	
	=	15.72%
Total incremental tax on losses computed separately	\$7,950	

Allocation of Incremental Tax to Losses:

	Discontinued Operations	Accounting Change	Total
Incremental tax on losses computed together	\$8,400	\$8,400	
Percentages	84.28 %	15.72 %	
Allocation of incremental tax to losses	\$7,080	\$1,320	\$8,400

Allocation of Incremental Tax to Gains:

Total incremental tax for losses computed together	\$8,400	
Total incremental tax	2,000	
Incremental tax allocated to extraordinary item	\$10,400	

Since there is only one gain category, the extraordinary gain from expropriation, the amount of the tax allocated to the gain (\$10,400) is the tax benefit allocated to all losses plus the total incremental tax expense.

Table 3 provides a summary of the income and loss items, the amount of tax expense or benefit allocated to each category and the after-tax amounts.

Table 3
Presentation of Allocation to Each Income, Gain, and Loss Item

	Income/(Loss)	(Expense)/ Benefit	Amounts After Tax
Income from continuing operations	\$45,000	\$(6,750)	\$38,250
Discontinued operations	(25,000)	7,080	(17,920)
Extraordinary items	40,000	(10,400)	29,600
Accounting changes	(5,000)	1,320	(3,680)
Total income	\$55,000	\$(8,750)	\$46,250

Using the summary information from Table 3, a partial income statement for Love Enterprises can be prepared to show how the intraperiod tax allocation is presented in the income statement. Please note that this illustration did not include any balance sheet items requiring tax allocation.

Love Enterprises		
Partial Income Statement		
For the Year Ended December 31, 20X2		
Income from continuing operations before tax		\$45,000
Income Tax Expense		6,750
		\$38,250
Income from continuing operations		\$38,250
Loss from operations of discontinued Component	\$(25,000)	
Income tax benefit	7,080	
		(17,920)
Loss on discontinued operations		(17,920)
Extraordinary Items:		
Gain from expropriation of assets, net of tax of \$10,400		29,600
Cumulative effect of a change in accounting principle, net of tax of \$1,320		(3,680)
		\$46,250
Net income		\$46,250

Disclosure Requirements

Paragraphs 41 through 49 and 52 of SFAS No. 109 specify the income statement, balance sheet and related footnote disclosure requirements for deferred taxes. Each of the disclosures is listed below.

1. For each accounting period presented, the amount of income tax expense or income tax benefit related to income from continuing operations divided into the following major categories should be disclosed (Paragraph 45):

- a. Amount of tax expense/benefit that is current.
- b. Amount of tax expense/benefit that is deferred. This excludes adjustments in c through h, below.
- c. Grants from the government, if used to reduce income tax expense.
- d. Investment tax credit.
- e. Changes in the deferred tax asset or deferred tax liability account that were caused by changes in the tax rate, tax status, and tax law.
- f. Changes in the valuation allowance account at the beginning of the accounting period that was caused by a change in estimate related to ability of the entity to realize the deferred tax asset.
- g. Benefit that an entity receives from an operating loss carryforward.
- h. Income tax expense impact from the allocation of selected income tax benefits to capital or to the reduction of intangible assets of an acquisition.

2. The total tax expense or tax benefit should be allocated among the following items on the income statement and balance sheet for each accounting period that the items are presented using intraperiod tax allocation procedures (Paragraph 46):

- a. Income from continuing operations.
- b. Gains and losses from discontinued operations.
- c. Extraordinary gains and losses.
- d. Cumulative effect of a change in accounting principle reported on the income statement.
- e. Stockholders' equity items.

3. Deferred tax assets and deferred tax liabilities should be classified into current and noncurrent parts. Within each tax jurisdiction, current deferred tax assets should be netted against current deferred tax liabilities, and noncurrent deferred tax assets should be netted against noncurrent deferred tax liabilities. Any valuation allowance account should be allocated between the net current and net noncurrent amounts (Paragraphs 41 and 42).

4. The following elements of deferred taxes and temporary differences must be disclosed (Paragraph 43):

- a. Total deferred tax assets, total deferred tax liabilities, and total valuation allowance account must be disclosed.
- b. Net change in the valuation allowance for the accounting period.
- c. Significant types of temporary differences and carryforwards that create the deferred tax assets and liabilities, and for public companies, the tax impact of each type.

5. The amount of tax operating loss carryforwards and tax credit carryforwards and the expiration dates of each. Also, the amount of the valuation allowance for which tax benefits will be allocated to intangible assets and/or capital (Paragraph 48).

6. The amount of tax expense reported for income from continuing operations must be reconciled with what tax expense would be for income from continuing operations if the domestic statutory tax rate (regular tax system) was used. Either percentages or dollars may be used in the reconciliation. The amount and nature of each significant item used in the reconciliation must be disclosed, unless the enterprise is a nonpublic company. Nonpublic companies do not have to present the numerical reconciliation, but must disclose significant items used in the reconciliation (Paragraph 47).

7. All significant items that impact interperiod comparability between or among the periods presented must be disclosed (Paragraph 47).

8. When a deferred tax liability is not reported for areas covered by the provisions of APB Opinion No. 23 or for U.S. steamship enterprise deposits in statutory reserve funds, the following selected disclosures are required (Paragraph 44).

- a. Description of the types of temporary differences and the events that would make these differences taxable.

- b. Deferred tax liability amount not recorded that relates to permanent duration investments in foreign joint ventures and subsidiaries, if practicable to determine. If not practicable, so state.
 - c. Each type of temporary difference disclosed in cumulative amounts.
 - d. Deferred tax liability amount (excluding items in b., above) not reported using the provisions of APB Opinion No. 23, as amended by Statement No. 109.
9. The following disclosures are required by an enterprise that is part of a group that files a consolidated tax return and issues separate financial statements (Paragraph 49).
- a. For each period that an income statement is presented, the current tax expense and the deferred tax expense.
 - b. For each period that a balance sheet is presented, the tax-related balances payable to or receivable from affiliates.
 - c. Provisions used to allocate current and deferred tax expense to members of the group and the impact of changes in methods on disclosures in a. and b.
10. Disclose when the owners of a public company are taxed directly on the income of the company, and the difference in book and tax bases of assets and liabilities (Paragraph 43).
11. The following disclosures are required in the year that Statement No. 109 is initially adopted (Paragraph 52).
- a. When years prior to the adoption of SFAS No. 109 are not restated, the impact on income from continuing operations, extraordinary items, net income, and related earnings per share must be disclosed for the adoption year.
 - b. When years prior to the adoption of SFAS No. 109 are restated, the impact on income from continuing operations, extraordinary items, net income, and related earnings per share must be disclosed for all accounting periods presented.

This completes the analysis of Statement No. 109.

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