Interperiod allocation of corporate income taxes; Accounting research study no. 09

Homer A., 1923 Black

American Institute of Certified Public Accountants. Accounting Research Division

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INTERPERIOD ALLOCATION OF CORPORATE INCOME TAXES

By Homer A. Black, Ph.D., CPA
Assisted by the
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Individuals and groups are invited to express their views with supporting reasons on the matters in this study. The Accounting Principles Board will consider these comments in forming its conclusions on the subject.
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OF CORPORATE
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By Homer A. Black, Ph.D., CPA
Florida State University

Assisted by the
Staff of the AICPA Accounting Research Division

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About twenty years ago the practice of allocating income taxes developed to cope with timing differences between pretax accounting income and taxable income. A number of these timing differences result from elections of the taxpayer, but others are caused by requirements in the income tax law.

Interperiod allocation of income taxes was stimulated by both the Accounting Research Bulletins of the American Institute of Certified Public Accountants and the policies and releases of the Securities and Exchange Commission. Allocation has been widely adopted, but without consensus regarding the circumstances that require allocation or the appropriate methods. The Accounting Principles Board authorized a research study on the subject of reporting of income taxes to resolve the accounting problems.

One of the most weighty decisions facing the Director of Accounting Research is whether or not an accounting research study is ready for publication. This study contains thorough descriptions, analyses, and evaluations of the various concepts of income tax allocation and their appropriateness in accounting for distinct types of tax timing differences. It also deals with the important question of the extent to which income tax allocation procedures should be applied.

The study does not answer fundamental questions about the nature of the income tax and the validity of the concept of interperiod income tax allocation. Whether income taxes are conceptually expenses or distributions of income has not really been resolved by the profession. Similarly, whether taxes should be allocated or whether the taxes currently payable should be the income tax expense for a period has never been adequately studied.

Developments in the United States, however, have gone beyond the fundamental questions. The factual situation is that income tax allocation has been accepted, and most accountants and businessmen now concede the need for income tax allocation in at least some instances.
The question is no longer allocation versus nonallocation but a little allocation versus a lot of allocation. In my opinion, this study treats those questions which are now most pressing—Under what conditions should allocation be applied? How should tax effects of timing differences be accounted for and presented? Which years should receive the benefit of loss carrybacks and carryforwards and when should carryforward benefits be recorded? The time and resources of the Accounting Research Division cannot be used now for study of the interesting but largely academic questions of the nature of income tax and the validity of the allocation concept. I sincerely hope that these fundamental questions will be studied by others.

Members of the project advisory committee have provided valuable assistance throughout the period of research and writing. They have reviewed several drafts of the manuscript and held a number of meetings to advise and help the author. The members of the committee, except Richard C. Gerstenberg, agree with my evaluation of the scope of the study and approve publication. The comments of Sidney Davidson and Mr. Gerstenberg are published following the last chapter, pages 117 to 120. Approval of publication by a committee member, with or without his published comments, should not be interpreted as concurrence with the contents and conclusions of the study.

Professor Black has been most cooperative and persevering, and I wish to express my appreciation to him. I also wish to recognize Cecilia Tierney, Beatrice Melcher, and the late Perry Mason of the staff of the Accounting Research Division for their contributions.

New York, N. Y., May 1966

Reed K. Storey

Director of Accounting Research
Author's Acknowledgments

A study of interperiod allocation of corporate income taxes is complicated by the many different concepts which are advanced and by the even greater variety of applications of these concepts. The methods of interperiod income tax allocation which have developed in accounting practice over the years are not always consistent with the purported underlying assumptions. Writings dealing with some of the concepts often are limited in coverage; they present a theory related to one or a few types of timing differences, but fail to relate the theory to other major types of timing differences. The financial statements of some corporations reflect the concurrent application of more than one concept. The present study states and analyzes unified alternative concepts of interperiod income tax allocation and relates them to accounting practice. The concluding recommendations are based on analysis of the nature of interperiod allocation of taxes and of the types of transactions which result in timing differences between pretax accounting income and taxable income.

Responsibility for the conclusions of the study is mine, but I am indebted to many for suggestions, guidance, and assistance in completing this research project. The staff of the Accounting Research Division of the American Institute of Certified Public Accountants participated extensively in preparing the text by editing my draft of the study, by some rearranging and rewording of the content, and by suggesting areas to be included. Reed K. Storey, Director of Accounting Research, prepared analyses of the various concepts and methods of tax allocation and of the nature of each of the four types of timing differences. I am grateful for the effort of the research staff to make the study complete and concise.

Former Directors of the Accounting Research Division, Maurice Moonitz and Paul Grady, assisted me greatly by guiding my research and criticizing drafts of the study. The authors of literature on the subject of income tax allocation were an important source of informa-
tion, and my debt to prior work, particularly to that of Thomas F. Keller of Duke University, is indicated by the extensive quotations in the study. Gibbes U. Miller, my colleague on the faculty of Florida State University, gave me valuable insights into some conceptual matters as well as perceptive criticism of drafts of the manuscript. Robert Steiner assisted by his extensive study of reporting practices.

The members of the project advisory committee contributed significantly to the progress of this study by their sound advice and their attitude of constructive, patient helpfulness. I am indebted to all the members: Ralph E. Kent, Chairman, Sidney Davidson, Richard C. Gerstenberg, Willard J. Graham, John K. McClare, Robert M. Trueblood, and John W. McEachren, former Chairman.

Lausanne, Switzerland, May 1966

Homer A. Black
Purpose and Scope of Study

Problem of Accounting for Income Taxes

The widespread impact of federal income taxes with high tax rates makes the reporting of income taxes in financial statements significant. Corporate income taxes have created accounting problems since the first United States income tax law was enacted. Many problems were solved but new ones continued to arise. Today accountants face unsolved problems from the past as well as new ones. The situation grows more complicated as the intricacy of the tax law increases and the relationship between income tax payments and the components of financial statements becomes more complex. The most important and difficult questions in accounting for income taxes today stem from differences in reporting for income tax purposes and for financial statement purposes.

Corporate pretax income reported in financial statements and taxable income reported in a federal tax return for the same year often diverge significantly. The purposes of measuring accounting and taxable income are not the same and differences between the two amounts are probably inevitable. Some differences are permanent but others are only a matter of timing.

If components of taxable and pretax accounting income differ only because certain revenues are never taxable and certain expenses are never deductible, the tax computed in the current year’s income tax return is the same as income tax expense. Likewise, if components of taxable and pretax accounting income fall in the same period, the income tax expense related to annual accounting income
is the same as the income tax calculated in the tax return for the year. The income tax payable for a year frequently, however, does not represent the ultimate tax consequences of the transactions recognized in the financial statements for that year.

**Differences in Taxable and Accounting Income.** The many and varied differences between pretax accounting income and taxable income of a year divide into two types, timing differences and permanent differences, and the former subdivides further into three categories:

*Timing Differences*

Tax timing of income components.

Revenues or expenses included in pretax accounting income are reported in an earlier or later year in computing taxable income.

Exclusions from pretax accounting income.

Items excluded from pretax accounting income are included in retained earnings or other equity accounts and reported in an earlier or later year in computing taxable income. Some exclusions from pretax accounting income are reported as components of taxable income in the same year and do not result in timing differences.

Operating losses.

Operating losses are applied in other years to compute income taxes payable. These are special differences in tax timing.

*Permanent Differences*

Revenues or expenses included in pretax accounting income are never reported in computing taxable income; income or deductions reported in computing taxable income are never included in financial statements.

*Tax timing of income components.* The years in which revenue and expense transactions are recognized for accounting purposes do not necessarily coincide with the years in which the same transactions are reported for tax purposes. The effects of transactions on income taxes
may occur either earlier or later than their effects on pretax accounting income because either mandatory or elective provisions of the income tax laws and regulations cause differences in timing. Tax timing differences may be classified as:

Reported for income taxes after recognized for accounting income

(A) Revenues or gains are taxed after accrued for accounting purposes. These differences usually result from voluntary elections of the taxpayer.

(B) Expenses or losses are deducted for tax purposes after accrued for accounting purposes. These differences usually result from requirements and interpretations of the tax laws.

Reported for income taxes before recognized for accounting income

(C) Revenues or gains are taxed before accrued for accounting purposes. These differences result from requirements and interpretations of the tax laws.

(D) Expenses or losses are deducted for tax purposes before accrued for accounting purposes. Some of these differences result from voluntary elections of the taxpayer; others may result from requirements and interpretations of the tax laws.

Exclusions from pretax accounting income. Taxable and pretax accounting income may differ because certain taxable transactions are included in retained earnings rather than net income. Tax timing differences are not involved. The assignment of income taxes or income tax reductions to components of income and retained earnings or other equity transactions of the same year is referred to as intra-period allocation of income taxes. Intraperiod allocation is outlined in the Accounting Research Bulletins and is not controversial.

Some transactions recorded in retained earnings or other equity accounts may involve tax timing differences if they are reported in tax returns for a different period. Even though the effects of tax timing differences are discussed in this study in terms of income transactions, the principles are equally applicable to tax timing differences in equity transactions because both types of timing differences are basically the same.
Operating losses. The present Internal Revenue Code provides that in general "net operating losses" may be carried back three years and then forward five years to offset taxable income in other periods. Transactions in a loss year may therefore reduce the total income taxes payable for a series of years. This type of timing difference affects tax expense and net income of the loss year and sometimes the years to which the loss is carried. The problems of accounting for the tax effects of operating losses are compounded if other differences in tax timing are involved in any of the years. This study gives special consideration to these problems.

Permanent differences. Some differences between taxable and pretax accounting income resulting from tax inclusions, exclusions, and deductions specified in tax laws are permanent. A current difference is not offset by corresponding differences in other periods unless the laws and their interpretations change. Generally, exempt revenues and nondeductible expenses do not affect taxes paid for any period. A few specified determinants of taxable income are not components of pretax accounting income or retained earnings in any period. This study is not concerned with permanent differences because they create no problems in the determination of periodic income or financial position.

Scope of Study

How best to account for and report the tax effect of differences in timing is a challenge of increasing concern. The purpose of this study is to analyze the accounting consequences of differences in tax timing and the merits of advocated procedures for accounting for timing differences.

Definitions and Premises. The term tax effect of timing differences is used in this study to refer to the amount of income tax applicable to differences in tax timing. Accounting recognition of the tax effect of timing differences is referred to as interperiod allocation of income taxes. "Interperiod income tax allocation" and "deferred tax accounting" are well established in accounting terminology. They are therefore used in this study even though neither is a completely accurate description of the process.

General acceptance of the allocation concept. A considerable body of opinion dealing with income tax allocation has evolved through the
years. Both intraperiod and interperiod tax allocation are accepted as general practices in the United States. The acknowledged purpose of interperiod allocation of taxes is to record the income tax effect in the same period in which the related tax-determining income components are recognized. It is not intended to remove fluctuations in accounting data, nor does it have this effect. Valid allocation is not "normalization," the artificial smoothing of the flow of income.

In the United States debate no longer centers on allocation as opposed to no allocation. Most accountants concede that interperiod allocation is often necessary to avoid distortion of periodic net income because the result is a better matching of expenses and revenues than would be obtained from a tax expense equal to the income tax reported in the return for the year. Much of the existing disagreement stems from a diversity of interpretations of some parts of the Accounting Research Bulletins. Opinions conflict as to whether or not interperiod tax allocation under current Bulletins applies to all or only some of the major causes of tax "deferment." Some pronouncements give or imply support for more than one method of allocating taxes. Recent changes in tax rates have focused attention on the effects of the choice of method. Another disagreement is whether or not and to what extent tax allocation applies to tax "prepayments." Disclosure in financial statements of material timing differences between taxable and accounting income and their treatment is often criticized as inadequate.

The study begins with two accounting assumptions which have long been accepted by the majority of the profession: (1) income taxes are expenses rather than distributions of income, and (2) income taxes are to be allocated to applicable periods (corollary—disclosure of tax timing differences in a note is not an acceptable substitute). These assumptions are an integral part of the position of the American Institute of Certified Public Accountants and have been since they were first expressed in 1944 by the committee on accounting procedure in Accounting Research Bulletin No. 23:

Income taxes are an expense which should be allocated, when necessary and practicable, to income and other accounts, as other expenses are allocated.

This statement forms the basis for present practice. The point of contention has not been the basic statement but the meaning of "when necessary and practicable." To reevaluate the basic statement now
would be largely an academic exercise because the allocation concept is widely accepted.

The major remaining problems are studied in this project:

- determining the circumstances that warrant or require allocation between periods, and
- isolating the most appropriate accounting procedures and statement presentation.

Other assumptions and considerations. Federal income taxes are expected to continue. The rates may change and the provisions for determining taxable income and deductions may change, but corporations will be subject to taxes of the same general character.

The practicability of any accounting procedure has several dimensions. Materiality is a practical limitation applicable to all recommendations in this study. The reliability of accounting measurements in a given situation and the ability to describe events or conditions within accepted accounting classifications are other important dimensions of practicability. These factors are given careful attention in the problems of measuring and classifying the effects of tax timing differences.

Accounting theory currently accepted by most of the profession is relevant to this study without qualification or change. Among the most salient concepts are consistently matching costs with the related revenues in measuring periodic income, expressing expense transactions at acquisition costs, assuming continuity of operations of an entity, and adequately disclosing pertinent information.

Exclusions From Study. This study includes only the basic principles and procedures for interperiod income tax allocation by corporations. Applications to special circumstances in certain industries and treatment of myriad other problems of accounting for income taxes have not been attempted.

The federal income tax laws contain unique provisions for computing taxes on certain components of income. Although many of these provisions may apply to any company, others relate to companies in specific industries, for example, the extractive,\(^1\) banking, savings, in-

\(^1\) The provisions of the tax laws and accounting for the tax effects of items such as exploration and development costs and intangible drilling and development costs will be included in a separate research study in progress on accounting for operations peculiar to the extractive industries.
surance, and regulated investment industries. Many of the accounting problems arising from these tax provisions are related to the specialized accounting for the items involved. The general principles discussed in this study should be applied to these specialized problems within the context of the situation.

Whether or not different principles of accounting for income taxes should apply to companies regulated for rate-making purposes is beyond the scope of this study. Some government agencies require reports for regulatory purposes to be based on a method of accounting for tax timing differences that does not conform with the preferred method for general financial reporting. One argument is that the special circumstances involved in rate-making warrant a special approach to accounting for income taxes. An addendum to *Accounting Principles Board Opinion No. 2* discusses accounting principles for regulated industries and states the appropriateness of generally accepted accounting principles. A subcommittee of the Accounting Principles Board has been designated to study disclosure by public utilities of deferred taxes relating to depreciation.

If the nature of a state income tax is the same as the federal income tax, the procedures recommended in this study may be presumed to apply. The extent of identity is not known because this study did not attempt to consider the numerous aspects of accounting for state income and franchise taxes. The name given to a state tax may not indicate its nature. The bases for assessing the many state taxes deviate significantly both from state to state and within a single state.

The problems of allocating consolidated income taxes among companies of an affiliated group, providing for taxes on undistributed earnings of affiliated companies, and other aspects of intercorporate investments are included in a separate AICPA research study.

The special considerations in accounting for the investment credit against taxes payable are not essential to the discussion of interperiod income tax allocation and are excluded from this study. The Accounting Principles Board issued two Opinions on accounting for the investment credit: *Opinion No. 2* in 1962 and *Opinion No. 4 (Amending No. 2)* in 1964.

Some advocates of income tax allocation argued in early years of its adoption that deferred taxes should be accounted for in income but presented as a part of the equity of a corporation. The argument is still heard occasionally. The practice was adopted but sparingly, is now prohibited by Accounting Research Bulletins, and is generally in disrepute. This research project therefore ignores it as a solution to interperiod tax allocation.
Accounting Procedures and Timing Differences

Differences in timing of revenues and expenses between the financial statements and the tax returns create problems to be solved by interperiod allocation of income taxes. Illustrations of the four categories of circumstances causing differences in tax timing are useful in understanding the proposed procedures of accounting for the related tax effects. The following describe many of the more common situations resulting in differences of tax timing, although the list is not exhaustive.

(A) Revenues or gains are taxed after accrued for accounting purposes:

Profits on installment sales are recorded in accounts at date of sale and reported in tax returns when later collected.

Revenues on long-term contracts are recorded in accounts on percentage-of-completion basis and reported in tax returns on a completed-contract basis.

Revenue from leasing activities is recorded in a lessor's accounts based on the financing method of accounting and exceeds rent less depreciation reported in tax returns in the early years of a lease.

Earnings of foreign subsidiary companies are recognized in accounts currently and included in tax returns when later remitted.

(B) Expenses or losses are deducted for tax purposes after accrued for accounting purposes:

Estimated costs of guarantees and product warranty contracts are recorded in accounts at date of sale and deducted in tax returns when later paid.

Expenses for deferred compensation, profit-sharing, bonuses, and vacation and severance pay are recorded in accounts when accrued for the applicable period and deducted in tax returns when later paid.

Expenses for pension costs are recorded in accounts when accrued for the applicable period and deducted
in tax returns for later periods when contributed to the pension fund.

Current expenses for self-insurance are recorded in accounts based on consistent computations for the plan and deducted in tax returns when losses are later incurred.

Estimated losses on inventories and purchase commitments are recorded in accounts when reasonably anticipated and deducted in tax returns when later realized.

Estimated losses on disposal of facilities and discontinuing or relocating operations are recorded in accounts when anticipated and determinable and deducted in tax returns when losses or costs are later incurred.

Estimated expenses of settling pending lawsuits and claims are recorded in accounts when reasonably ascertainable and deducted in tax returns when later paid.

Provisions for major repairs and maintenance are accrued in accounts on a systematic basis and deducted in tax returns when later paid.

Depreciation recorded in accounts exceeds that deducted in tax returns in early years because of:

- accelerated method of computation for accounting purposes
- shorter lives for accounting purposes.

Organization costs are written off in accounts as incurred and amortized in tax returns.

(C) Revenues or gains are taxed before accrued for accounting purposes:

Rent and royalties are taxed when collected and deferred in accounts to later periods when earned.

Fees, dues, and service contracts are taxed when collected and deferred in accounts to later periods when earned.
Profits on intercompany transactions are taxed when reported in separate returns, and those on assets remaining within the group are eliminated in consolidated financial statements.

Gains on sales of property leased back are taxed at date of sale and deferred in accounts and amortized during the term of lease.

Proceeds of sales of oil payments or ore payments are taxed at date of sale and deferred in accounts and recorded as revenue when produced.

(D) Expenses or losses are deducted for tax purposes before accrued for accounting purposes:

Depreciation deducted in tax returns exceeds that recorded in accounts in early years because of:

- accelerated method of computation for tax purposes
- shorter guideline lives for tax purposes
- amortization of emergency facilities under certificates of necessity.

Unamortized discount, issue cost and redemption premium on bonds refunded are deducted in tax returns and deferred and amortized in accounts.

Research and development costs are deducted in tax returns when incurred and deferred and amortized in accounts.

Interest and taxes during construction are deducted in tax returns when incurred and included in the cost of assets in accounts.

Preoperating expenses are deducted in tax returns when incurred and deferred and amortized in accounts.
Organization of Study

The following chapters discuss methods proposed and used to allocate income taxes among periods. The conceptual basis of each method and the arguments in favor of each are presented, and the relation of the methods to the various types of timing differences is analyzed. The concepts and methods are evaluated and the opposing positions as to the extent of allocation and the circumstances requiring allocation are weighed. Finally, the whole is brought together in recommendations regarding accounting for and presentation of allocated taxes and operating losses.
Concepts of Tax Effect Accounting

Concepts of Timing Differences

Interperiod income tax allocation is well established in accounting theory and practice, although applications are diverse. Three basic methods of accounting for the effect of tax timing differences have developed and been adopted over the years. Each method is based on a distinct concept of the nature of the differences in timing between financial statements and income tax returns.

Development of Tax Allocation. Many companies first developed interperiod income tax allocation procedures for significant expenses which were deducted in tax returns before being accrued in the accounts. The differences resulted in clear tax effects during known periods. For example, when the cost of emergency facilities was amortized for tax purposes over five years and depreciated for accounting purposes over, say, fifteen years, the lower taxes in the first five years were offset by increased taxes in the next ten years. The difference in timing was recognized in net income each year as if depreciation in the tax return were the same as in the accounts. Expenses representing future taxes or additional depreciation were recorded in the first five years and reversed in the remaining years to match expenses and their tax effects. The related balance sheet items were similarly recorded as deferred tax or accumulated depreciation. Many accountants took for granted that the deferred tax was a liability.
These alternative early procedures implied two different concepts of tax effect accounting: net of tax and liability. As tax allocation developed and was adapted and applied to an increasing range of situations, a third explanation, the deferred concept, was advanced.

**Liability Concept.** Briefly, the liability concept is: a liability for postponed taxes arises whenever (a) revenue is recognized in the financial statements before taxed or (b) an expense is deducted for tax purposes before recognized in the financial statements; an asset of prepaid taxes arises whenever (a) revenue is taxed before recognized in financial statements or (b) an expense is recognized in the financial statements before deducted for tax purposes. This concept that taxes are postponed or prepaid is often called for convenience the liability (or, sometimes, the accrual) concept.

The liability concept views tax allocation as accruing income tax expense as a function of pretax income, excluding permanent differences between accounting and taxable income. The tax on all elements of pretax accounting income may not, however, be computed at the same rate. The difference between the current tax expense and the tax currently payable is either a liability for taxes payable in the future or an asset for prepaid taxes. The estimated amounts of future tax liabilities and prepaid taxes are computed at the tax rate expected to be in effect in the future periods in which the timing differences are reversed.

**Deferred Concept.** Under the deferred concept each taxable revenue or gain and each deductible expense or loss is assumed to have an identifiable effect on income tax expense. If a revenue or gain is taxed before accrued for accounting purposes, or if an expense or loss is deducted earlier for accounting than for tax purposes, the related tax effect is recorded as a deferred charge to income tax expense of the future years in which the offset timing occurs. Conversely, if an expense or loss is deducted for tax purposes before accrued for accounting purposes, or if a revenue or gain is accrued for accounting purposes before taxed, the associated tax reduction or "benefit" is recorded as a deferred credit to future income tax expense when the offset timing occurs. The deferred concept emphasizes the effect of timing differences on income of the period in which they originate. The income tax expense is a function of pretax income (excluding permanent differences between accounting and taxable income) unless
the expense is affected by amounts deferred previously at other than
current rates. The primary purpose is to match the income tax expense
with the items which cause a tax effect. Advocates of the deferred
concept emphasize the effects on net income and are divided as to
whether or not the deferred credit to future income tax expense is a
liability and whether or not the expectation of future taxable income
is a prerequisite to recognition of the deferred charge or credit.

**Net of Tax Concept.** The net of tax concept is based on the
proposition that taxability and tax deductibility are factors in the
valuation of individual assets and liabilities. For example, depreciation
deducted for tax purposes is held to reduce the value of an asset
because of a loss of a portion of future tax deductibility. Accelerated
tax depreciation hastens this reduction. Therefore, the financial state­
ments include additional depreciation equal to the tax effect of the
excess of tax depreciation over book depreciation.

If the timing of a revenue or expense accrual differs for tax purposes
as compared with accounting purposes, the tax effect is an adjust­
ment of the specific revenue or expense and of the related asset or
liability. Direct adjustment of revenue, expense, asset, or liability
items is the customary practice, thereby showing net of tax amounts.
Sometimes the items in the balance sheet are adjusted by contra
accounts. The direct adjustment of an asset or liability is called the
net of tax concept in this study.

**Illustration of Three Methods.** Four hypothetical cases set out
in a general way the basic procedures for measuring, classifying, and
reporting the effects of tax timing differences and highlight the
dissimilarities of the three concepts and their applications. The cases
show the major causes of differences in tax timing and contrast state­
ment presentation under the three concepts. To focus attention on
the concepts, the cases are simplified and each one assumes only one
cause of difference in tax timing. The presentation illustrated follows
the logic of the concept rather than the variations developed for each.¹
No evaluation of concepts or methods is attempted or intended at
this point; the cases only illustrate the various concepts.

¹ The concepts are rarely found in pure and literal form in practice.
Mixed presentation is the rule. For example, assets and liabilities are often
shown net of tax while the tax effect is included in income tax expense in
the income statement.
Assumed facts in all four cases are:

1. Annual revenues exceed expenses by $1,000 for both accounting and tax purposes, except for (a) items recognized in different years for accounting and tax purposes, and (b) income tax expense.

2. The income tax rate is 48% each year.

The similarities and differences in results of the four illustrative cases are significant. A comparison shows:

Net income is the same under all three methods when no changes in tax rates are anticipated and no current costs recorded on a net of tax basis are components of assets (for example, net income is affected by the net of tax method if depreciation is a product cost).

Income before taxes is the same under the liability and deferred methods but different under the net of tax method.

Income tax expense is a function of income before taxes under the liability and deferred methods; income tax expense equals the income tax payable for the year under the net of tax method.

The tax effect is presented dissimilarly in both the income statement and the balance sheet under each method. However, a deferred credit may be classified as a liability; a deferred charge and a prepaid tax may be classified alike.
Case A—Revenue Accrued Before Taxed

Profit of $100 on installment accounts receivable of $200 is deferred for tax purposes at the end of Year 1. All related expenses are reported in tax returns and recorded in the accounts in the same year. The accounts receivable are fully collected in Year 2 with no additional cost.

### Resulting Tax Returns

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Installment sales profit</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Taxable income</td>
<td>1,100</td>
<td>1,100</td>
</tr>
<tr>
<td>Income tax payable</td>
<td>480</td>
<td>528</td>
</tr>
</tbody>
</table>

### Income Statements

<table>
<thead>
<tr>
<th></th>
<th>Liability</th>
<th>Deferred</th>
<th>Net of Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 1</td>
</tr>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Installment sales profit</td>
<td>100</td>
<td>100</td>
<td>52</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>1,100</td>
<td>1,100</td>
<td>1,052</td>
</tr>
<tr>
<td>Income taxes</td>
<td>528</td>
<td>480</td>
<td>480</td>
</tr>
<tr>
<td>Payable for current year</td>
<td></td>
<td>480</td>
<td>528</td>
</tr>
<tr>
<td>Tax benefit deferred to future years</td>
<td></td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Tax benefit in prior years deferred to current year</td>
<td></td>
<td>(48)</td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>$ 572</td>
<td>$ 520</td>
<td>$ 572</td>
</tr>
</tbody>
</table>

### Balance Sheet Items, End of Year 1

<table>
<thead>
<tr>
<th></th>
<th>Liability</th>
<th>Deferred</th>
<th>Net of Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 1</td>
</tr>
<tr>
<td>Installment accounts receivable</td>
<td>$200</td>
<td>$200</td>
<td>$152*</td>
</tr>
<tr>
<td>Federal income taxes payable</td>
<td>480</td>
<td>480</td>
<td>480</td>
</tr>
<tr>
<td>Federal income taxes payable in future years</td>
<td></td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Reduction in federal income taxes</td>
<td></td>
<td></td>
<td>48</td>
</tr>
</tbody>
</table>

* The SEC *Accounting Series Release No. 102* states that the deduction of deferred income taxes from the related installment receivables is not considered an appropriate procedure. The illustration conforms to the assumptions underlying the concept.
Case B—Expense Accrued Before Deducted for Taxes

Estimated costs of fulfilling warranty contracts for products sold are recorded in the accounts at $100 in Year 1 and paid in Year 2.

<table>
<thead>
<tr>
<th>Resulting Tax Returns</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Warranty costs</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Taxable income</td>
<td>1,000</td>
<td>900</td>
</tr>
<tr>
<td>Income tax payable</td>
<td>480</td>
<td>432</td>
</tr>
</tbody>
</table>

**Income Statements**

<table>
<thead>
<tr>
<th>Method</th>
<th>Liability</th>
<th>Deferred</th>
<th>Net of Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Warranty expense</td>
<td>100</td>
<td>100</td>
<td>52</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>900</td>
<td>1,000</td>
<td>948</td>
</tr>
<tr>
<td>Income taxes</td>
<td>432</td>
<td>480</td>
<td>480</td>
</tr>
<tr>
<td>Payable for current year</td>
<td>480</td>
<td>432</td>
<td></td>
</tr>
<tr>
<td>Tax benefit of future years</td>
<td>(48)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax benefit applicable to current year deferred in prior years</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>$468</td>
<td>$520</td>
<td>$468</td>
</tr>
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**Balance Sheet Items, End of Year 1**

<table>
<thead>
<tr>
<th>Method</th>
<th>Liability</th>
<th>Deferred</th>
<th>Net of Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepaid income taxes of future years</td>
<td>$48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred charge, income taxes</td>
<td>$48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal income taxes payable</td>
<td>480</td>
<td>480</td>
<td>$480</td>
</tr>
<tr>
<td>Liabilities under warranties</td>
<td>100</td>
<td>100</td>
<td>52</td>
</tr>
</tbody>
</table>
Case C—Revenue Taxed Before Accrued

Rent of $100 is collected in Year 1 and earned in Year 2.

**Resulting Tax Returns**

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Rent collected</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Taxable income</td>
<td>1,100</td>
<td>1,000</td>
</tr>
<tr>
<td>Income tax payable</td>
<td>528</td>
<td>480</td>
</tr>
</tbody>
</table>

**Income Statements**

<table>
<thead>
<tr>
<th></th>
<th>Method</th>
<th>Liability</th>
<th>Deferred</th>
<th>Net of Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 1</td>
</tr>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Rent revenue</td>
<td>100</td>
<td>100</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>1,000</td>
<td>1,100</td>
<td>1,048</td>
<td>1,052</td>
</tr>
<tr>
<td>Income taxes</td>
<td>480</td>
<td>528</td>
<td>528</td>
<td>480</td>
</tr>
<tr>
<td>Payable for current year</td>
<td></td>
<td>528</td>
<td>480</td>
<td></td>
</tr>
<tr>
<td>Tax benefit of future years</td>
<td></td>
<td>(48)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax benefit applicable to current year deferred in prior year</td>
<td>48</td>
<td>480</td>
<td>528</td>
<td></td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td>$ 520</td>
<td>$ 572</td>
<td>$ 520</td>
<td>$ 572</td>
</tr>
</tbody>
</table>

**Balance Sheet Items, End of Year 1**

<table>
<thead>
<tr>
<th></th>
<th>Method</th>
<th>Liability</th>
<th>Deferred</th>
<th>Net of Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepaid income taxes of future years</td>
<td></td>
<td>$ 48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred charge, income taxes</td>
<td></td>
<td></td>
<td>$ 48</td>
<td></td>
</tr>
<tr>
<td>Liabilities:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal income taxes payable</td>
<td></td>
<td>528</td>
<td>528</td>
<td>$528</td>
</tr>
<tr>
<td>Rent collected in advance</td>
<td></td>
<td>100</td>
<td>100</td>
<td>52</td>
</tr>
</tbody>
</table>
Case D—Expense Deducted for Taxes Before Accrued

The cost of $600 for a machine with an estimated life of two years is depreciated on the straight-line basis in the accounts and the sum-of-years-digits basis in the tax returns. Depreciation is a period cost.

### Resulting Tax Returns

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Taxable income</td>
<td>600</td>
<td>800</td>
</tr>
<tr>
<td>Income tax payable</td>
<td>288</td>
<td>384</td>
</tr>
</tbody>
</table>

### Income Statements

<table>
<thead>
<tr>
<th></th>
<th>Liability</th>
<th>Deferred</th>
<th>Net of Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>700</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Income taxes</td>
<td>336</td>
<td>336</td>
<td>288</td>
</tr>
<tr>
<td>Payable for current year</td>
<td></td>
<td>288</td>
<td>384</td>
</tr>
<tr>
<td>Tax benefit deferred to future years</td>
<td></td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Tax benefit in prior years deferred to current year</td>
<td></td>
<td>(48)</td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>$364</td>
<td>$364</td>
<td>$364</td>
</tr>
</tbody>
</table>

### Balance Sheet Items, End of Year 1

<table>
<thead>
<tr>
<th></th>
<th>Liability</th>
<th>Deferred</th>
<th>Net of Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery, at cost</td>
<td>$600</td>
<td>$600</td>
<td>$600</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>300</td>
<td>300</td>
<td>348</td>
</tr>
<tr>
<td>Unexpired cost</td>
<td>300</td>
<td>300</td>
<td>252</td>
</tr>
<tr>
<td>Liabilities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal income taxes payable</td>
<td>288</td>
<td>288</td>
<td>288</td>
</tr>
<tr>
<td>Federal income taxes payable in future years</td>
<td></td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Deferred Credits:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction in federal income taxes</td>
<td></td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

* The sum-of-years-digits basis is not applicable to assets with two-year lives; it is used only to illustrate the concepts.
Three Concepts Contrasted

The four cases highlight the effects of the choice of concept on income and net assets and on the presentation in financial statements.

Effects on Income and Net Assets. In theory at least, all three methods of interperiod tax allocation may increase or decrease current net income and net assets. Both revenue and expense items are subject to differences in timing between income tax returns and financial statements. Both may be recognized first in either the tax return or the accounts. The results of Case A (revenue accrued before taxed) and Case D (expense deducted for taxes before accrued) are parallel. Accounting for the tax effect of the timing difference results in a decrease in current net income and net assets; the expected increased future tax payment offsets the current tax reduction. Similarly, the results of Case B (expense accrued before deducted for taxes) and Case C (revenue taxed before accrued) are parallel. Accounting for the tax effect of the timing difference results in an increase in current net income and net assets; the expected decreased future tax payment offsets the current tax increase.

Annual net income is the same in the illustrations under each of the three methods. It always will be unless affected by either or both of the following factors:

The tax rate changes or it is expected to change.

All or part of the tax effect of a timing difference is deferred as part of an asset.

The effects of changes in tax rates are discussed in the next section. Net income resulting from the net of tax method may vary from that under the other two methods if a cost recorded on a net of tax basis becomes part of the cost of an asset. For example, when depreciation is included in product costs, valuation of inventories is affected by interperiod tax allocation accomplished by the net of tax method. Similarly, plant or deferred research and development costs may include compensation or pension costs on a net of tax basis, perhaps resulting in an effect on net income for several years.
Presentation in Financial Statements. Presentation in financial statements is a distinguishing feature of each of the methods.

Under the liability concept, the income statement shows a current income tax expense as a single amount that is determined by applying the relevant tax rate or rates to pretax accounting income excluding permanent differences. Total future tax effects of timing differences are shown in the balance sheet as a liability for deferred taxes and an asset for prepaid taxes.

The deferred concept also results in an income tax expense which is a function of income before taxes, excluding permanent differences. Tax expense is, however, composed of three parts: (1) the tax payable for the current year, (2) the tax effect of differences in timing originating in the current year, and (3) amortization of tax effects of timing differences originating in earlier years (deferred credits or deferred charges) applicable to the current year. Published income statements often show one amount for income tax expense with the details disclosed in a note. A frequent alternative is to combine parts (2) and (3) as deferred tax expense. The deferred credit may be shown in the balance sheet with other liabilities, in a separate deferred credits section, or between liabilities and stockholders’ equity. Distinguishing a deferred credit from a liability for deferred taxes in statements is difficult and may be too subtle for all but the most sophisticated reader. A deferred charge for taxes may have a caption similar to that of a prepaid tax.

The income tax expense presented by the net of tax method is equal to the tax payable for the current year. The amount is not necessarily related mathematically to income before taxes. Amounts of individual revenue and expense items and pretax income differ from those under the other methods by the amounts of both current and applicable prior tax effects of timing differences. Amounts of individual assets and liabilities under the net of tax method are less than under the other two methods by the total future tax effects (intercompany profit in consolidated statements is an exception). The balance sheet description often includes phrases like “net of taxes,” “less related tax effect,” or “less deferred taxes.” The recorded tax effects may be shown separately as a deduction from related items; they are not presented as separate assets, liabilities, or deferred credits.
Change in Tax Rates

Changes in tax rates are the most significant source of divergence among the three concepts. Two kinds of changes may be important. Congressional action or expected congressional action affects the rates applicable to all companies and may schedule different rates for future years; e.g., The Revenue Act of 1964 set the corporate rate at 50% for 1964 and at 48% for 1965 and thereafter. Tax rates in effect for an individual company may change under existing rate schedules because taxable income fluctuates, and the surtax or perhaps even the entire tax may be eliminated. If income tax rates have changed or are expected to be different in future periods, the liability concept results in net income, net assets, and retained earnings that are unlike the amounts under the other two methods.

Liability Concept. Future tax rates are vital in the liability concept. This concept interprets tax allocation as a postponed tax in the usual sense of a liability—i.e., an obligation payable at some future time. Accounting for the tax effect of timing differences is essentially the accrual of an expense and a liability to match expenses and revenues. Estimating the tax to be paid in the future may be a problem. Ordinarily, the only reasonable assumption about future tax rates is that the current rate will continue. If a rate change is known or reasonably certain when the tax effect is first recorded, however, the anticipated rate is used. The tax effect varies from that recorded under the other two methods but requires no adjustment when the anticipated rate becomes effective.

The tax liability matures and is paid when the compensating event occurs. The liability is often replaced by another liability arising from similar additional timing differences.

Deferred Concept. Future tax rates and liabilities are disregarded under the deferred concept. This concept of interperiod income tax allocation revolves around the notion of current tax saving or benefit. Its purpose is to match expenses and revenues in the period when the difference originates. "Deferred taxes" is used in the sense of "matching" rather than "future obligation." An amount equal to the
reduction in taxes payable currently, resulting from costs deducted for tax purposes in excess of those in the financial statements, is recorded as a current tax expense and a deferred credit. In later years when the related costs in the income statement exceed the amount deducted for tax purposes, the deferred tax credit is deducted from the income tax payment to determine income tax expense for that year.

Net of Tax Concept. The net of tax concept assumes that the values of individual revenue, expense, asset, and liability items are affected directly by timing differences because taxability or tax deductibility are separable attributes. In theory, the concept depends on anticipating the future tax rates over the life of the asset at the time of its acquisition. The value of the asset is thus affected by the amount and time distribution of related tax payments expected over its life. In practice, however, the amortization of cost attributed to the loss of tax deductibility is recorded at the rate in effect when the timing difference originates. Therefore, although in theory the method would result in the same net income as would the liability method if tax rates were predicted accurately, in practice the periodic net income is the same as that of the deferred method.

In the remainder of this study the net of tax method is discussed as it is applied in practice. The theoretical aspects relating to anticipated tax rates are ignored except in evaluating the concept.

Effects of Rate Change. Tax effects and current net income are the same for all three methods unless a change in tax rates has occurred or is expected. When rates change, however, net income in all subsequent years in which a timing difference is reversed is not the same under the liability method as under the other methods. At the time of the rate change, or when the change is reasonably expected, the estimated liability for future income tax is recomputed and adjusted to the new expected rate. Under the other two methods, the amounts originally deferred are merely returned to income in later years.

Illustration of effects of rate change. The effects of a rate change are illustrated briefly. The assumed situation is probably the most common and involves the most problems—an unanticipated change in rates occurs between the year the timing difference originates and the years it is reversed. The liability and deferred methods are illustrated; the results of the net of tax and the deferred methods are generally the same even though presentation differs.
Accelerated depreciation for tax purposes and straight-line depreciation for financial statements is chosen for illustration. This is similar to Case D (page 19), except that the life of the asset is extended to six years, a different cost simplifies the calculation, and the tax rate changes. Assumed facts are:

1. Annual revenues exceed expenses by $1,000 for both accounting and tax purposes, except for (a) depreciation and (b) income tax expense.

2. The income tax rate is 50% in each of the first two years and changes to 30% in the third year.

3. The $2,100 cost of a machine with an estimated life of six years is depreciated on the straight-line basis in the accounts and the sum-of-years-digits basis in the tax returns. Depreciation is a period cost.

<table>
<thead>
<tr>
<th>Resulting Tax Returns</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>600</td>
<td>500</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Taxable income</td>
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<td>500</td>
<td>600</td>
<td>700</td>
<td>800</td>
<td>900</td>
</tr>
<tr>
<td>Tax rate</td>
<td>.50</td>
<td>.50</td>
<td>.30</td>
<td>.30</td>
<td>.30</td>
<td>.30</td>
</tr>
<tr>
<td>Income tax payable</td>
<td>$200</td>
<td>$250</td>
<td>$180</td>
<td>$210</td>
<td>$240</td>
<td>$270</td>
</tr>
</tbody>
</table>
## Chapter 2: Concepts of Tax Effect Accounting

### Liability Method

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Statements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>350</td>
<td>350</td>
<td>350</td>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>650</td>
<td>650</td>
<td>650</td>
<td>650</td>
<td>650</td>
</tr>
<tr>
<td>Income taxes</td>
<td>325</td>
<td>325</td>
<td>195</td>
<td>195</td>
<td>195</td>
</tr>
<tr>
<td>Nonrecurring adjustment of income tax payable in future years*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>Net Income</td>
<td>$325</td>
<td>$325</td>
<td>$535</td>
<td>$455</td>
<td>$455</td>
</tr>
</tbody>
</table>

### Deferred Method

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Statements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other revenues less expenses</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>350</td>
<td>350</td>
<td>350</td>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>Income before taxes</td>
<td>650</td>
<td>650</td>
<td>650</td>
<td>650</td>
<td>650</td>
</tr>
<tr>
<td>Income taxes:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payable for current year</td>
<td>200</td>
<td>250</td>
<td>180</td>
<td>210</td>
<td>240</td>
</tr>
<tr>
<td>Tax benefit deferred to future years</td>
<td>125</td>
<td>75</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax benefit in prior years deferred to current year**</td>
<td></td>
<td></td>
<td></td>
<td>(25)</td>
<td>(75)</td>
</tr>
<tr>
<td>Net Income</td>
<td>$325</td>
<td>$325</td>
<td>$455</td>
<td>$465</td>
<td>$485</td>
</tr>
</tbody>
</table>

### Analysis of Balance Sheet Items

#### Liability—Federal income taxes payable in future years

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning</td>
<td>$-0-</td>
<td>$125</td>
<td>$200</td>
<td>$135</td>
<td>$120</td>
<td>$75</td>
</tr>
<tr>
<td>Accrual of liability</td>
<td>125</td>
<td>75</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correction of estimate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments</td>
<td></td>
<td></td>
<td></td>
<td>(15)</td>
<td>(45)</td>
<td>(75)</td>
</tr>
<tr>
<td>Balance, end</td>
<td>$125</td>
<td>$200</td>
<td>$135</td>
<td>$120</td>
<td>$75</td>
<td>$-0-</td>
</tr>
</tbody>
</table>

#### Deferred Credit—Reduction in federal income taxes

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, beginning</td>
<td>$-0-</td>
<td>$125</td>
<td>$200</td>
<td>$215</td>
<td>$190</td>
<td>$115</td>
</tr>
<tr>
<td>Tax benefit deferred</td>
<td>125</td>
<td>75</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amortization**</td>
<td></td>
<td></td>
<td></td>
<td>(25)</td>
<td>(75)</td>
<td>(115)</td>
</tr>
<tr>
<td>Balance, end</td>
<td>$125</td>
<td>$200</td>
<td>$215</td>
<td>$190</td>
<td>$115</td>
<td>$-0-</td>
</tr>
</tbody>
</table>

* A nonrecurring item is included in net income or shown as a special item in accordance with ARB 43, Chapter 8.

** When tax rates change, a method of amortizing the deferred credit must be selected.

In this illustration, the amounts deferred at 50% were transferred to income first.
**Significant Divergence Among Methods.** Divergence between the liability and the other two methods appears when the tax rate changes and remains until the end of the life of the asset. The estimated tax liability is adjusted immediately under the liability method. All present and future accounting for income taxes is based on the new tax rate (30% in the illustration) until the rate changes again or a change becomes relatively certain.

Changes in tax rates are ignored under the deferred or net of tax methods and net assets are not adjusted. Present and future tax benefits are deferred at the current rate. Tax effects previously deferred are currently amortized at the rates at which they were deferred; the former rate (50% in the illustration) may influence net income for many years after tax rates change. This feature of the deferred and net of tax methods explains the differences in years 4, 5, and 6 of the illustration. The correction feature of the liability method explains the variation in the year of rate change, year 3 in the illustration.
Support and Acceptance of Concepts

Arguments and Interpretations

Support in Literature and Pronouncements. Each of the three distinct concepts of the nature of the tax effect of timing differences has its supporters. The literature abounds with the pro and con of the various interpretations and their related accounting procedures. Typical arguments in support of the liability, deferred and net of tax concepts are set forth briefly in this chapter.

Reliance on "Matching." All three concepts rely heavily on the notion of matching expenses with revenues. The aim of all is to record the tax effects of timing differences and to recognize tax-causing or tax-reducing elements of current net income without regard to when they are included in the income tax return. The fact that all three concepts depend on matching explains the identity of net income resulting from their applications illustrated in the preceding chapter. The fact that they disagree on how best to accomplish the matching and on the nature of balance sheet counterparts of tax allocations explains the differences in presentation and in resulting net income under certain conditions.

The arguments set out in this chapter for each of the three methods concern primarily the sources of divergence.

Liability Method. The liability method is based on the concept that accrual of income results in accrual of income tax expense. Only
revenues or gains that will never be taxed and expenses or losses that will never be deductible for tax purposes are excepted from this sweeping concept. The income tax expense of a period is therefore equal to the total of income tax already paid and that to be paid in the future (or tax paid less future reductions) as a result of income before taxes. Supporters of the liability concept emphasize that the timing differences between financial statements and tax returns result in postponing the payment of or prepaying income tax liabilities.

Maurice Moonitz, formerly AICPA Director of Accounting Research, summarized his position in favor of the liability concept as follows:

... we have treated income taxes on an accrual basis, and have let the tax follow the income—if revenue subject to tax in some period is recognized in the records, the corresponding tax liability is also recognized; if expense is permitted as a tax deduction in some period, the related "benefit" is reflected in the records. ... The income tax, then, is not treated differently from the other items accounted for; instead, it has been treated consistently with them.

"Let the tax follow the income" is the leading principle employed ... the principle finds application in two types of cases, namely, those cases in which a tax liability is recognized in excess of the amount declared in the tax returns prepared to date, and those cases in which the tax payable to date exceeds the amount applicable to the income recognized thus far in the accounts. In the former group of cases a "deferral" of tax liability emerges; in the latter group we find a "prepayment" of tax among the assets.1

Arguments for and against all methods were considered by G. Kenneth Carr and he concluded:

... the accrual method of income tax accounting, as illustrated above, provides a straightforward and logical method for dealing with situations where items of income or expense are reflected in the accounts in periods other than those in which they are reported or claimed for tax purposes.

Excerpts from his discussion of the illustration are:

... under accrual accounting, taxes are provided at current rates on the amount of accounting income reflected in the accounts, and all differences between this provision and the amount of taxes actually

1 "Income Taxes in Financial Statements," Accounting Review, April 1957, pp. 177 and 183.
payable for the period are categorized as either tax postponements or tax prepayments.

Thus a net credit balance on the balance sheet would represent an accrual for the tax payable in subsequent periods on accounting income that has been taken up in the accounts but not yet taxed. A net debit balance would represent a prepayment of tax on amounts that will not be reported as accounting income until subsequent periods. If it were possible to forecast what the tax rates would be in these subsequent periods then it would be the future rates that would be used in setting up the amount of the accrual or prepayment. However, in the absence of any such knowledge the calculation must perforce be based on rates currently in effect. If tax rates change, the balance sheet figures should logically be adjusted accordingly.²

Thomas F. Keller also espoused the liability concept:

It [the tax charge] is a deduction from the revenue of the period in which accrued. The credit balance which arises as a result of the accrual is a liability. It is not a restriction of the retained earnings or any other part of stock equity, nor is it a contra-asset. It is a liability to pay a certain sum of money to the federal government in the future. In the event that the tax is paid before the liability is accrued, an asset account, prepaid taxes or advances to the government, exists. . . .³

The arguments for the liability concept emphasize that a current reduction in taxes caused by differences in timing results in an increase in taxes in future periods. The proponents concentrate on the accrual of this increase, pointing out that the accrual of income tax is comparable in every way to the accrual of other expenses.

Deferred Method. The deferred method achieves the desired matching of income tax expense with the tax-causing and tax-reducing elements of current income through a series of deferrals and amortizations of prior tax additions and reductions. The income tax expense of a period equals the algebraic sum of: (1) tax payable currently, (2) tax additions or reductions deferred, and (3) amortizations of additions or reductions deferred in prior periods. An addition or reduction originates whenever a revenue or expense element is taxable or tax deductible in a period other than when it is recorded in the accounts.

³ Accounting for Corporate Income Taxes, 1961, p. 117.
**Canadian position.** One early exposition of the deferred method was by the Committee on Accounting and Auditing Research of The Canadian Institute of Chartered Accountants in 1954: 4

...a material reduction of current income taxes, resulting from claiming capital cost allowances in excess of recorded depreciation, should be treated as applicable to those future years in which depreciation corresponding to the excess is charged in the accounts rather than reflecting such reduction in the reported net profit of the current year. [Par. 10]

The treatment ... is a process of allocation of the tax reduction to the period in which the corresponding depreciation expense is recorded; accordingly, the resulting balance sheet item is a deferred credit to expense rather than a provision for a future tax liability. As such it need not be adjusted to reflect subsequent changes in tax rates or possible future changes in methods of making tax allowances for depreciable property. [Par. 12]

A transfer from the deferred credit account would be made to the income account in any year in which recorded depreciation exceeds the allowances claimed for tax purposes. ... [Par. 13.C]

Lawrence G. Macpherson, Director of Research of The Canadian Institute at that time, regarded the deferred credit as neither a liability nor a part of stockholders' equity.

If the amount by which the taxes are reduced ... is considered to be a benefit to be applied to income measurement only when the corresponding charge is made in the accounts as depreciation, then two tax elements will be reflected in the accounts in the year of tax reduction: (1) a charge for the tax actually payable for the year and (2) a charge for the amount by which taxes have been reduced. The total of these two charges will be the amount of taxes that would be payable if the claim for tax purpose had been the same as the depreciation charged in the accounts. The credit offsetting the charge for the tax reduction represents a benefit to be brought into income measurement in later years—if and when depreciation charged in the accounts exceeds the capital cost allowance for tax purposes. It is a deferred credit, not in the sense of deferred revenue, but rather as a deferred credit to a future expense charge, namely the charge for income taxes.

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The tax reduction effected in previous years is applicable when the depreciation is recorded, even if that is a year of loss, and may be brought into the income account as a credit.\(^5\)

The Canadian Bulletin and most discussions of the deferred method are in terms of depreciation aspects. The reasoning seems applicable to other tax timing differences as well.

**Other supporting arguments.** Arguments for allocation of income taxes by Ernest L. Hicks are based on the going concern and matching concepts and state his reasons for supporting the deferred method.

Another defect of income tax allocation, in the eyes of its opponents, lies in the fact that the resulting balance sheet entries do not qualify as true assets or true liabilities. But balance sheet items may properly represent amounts which have been temporarily diverted from the stream of a company’s transactions and are being held for use in determining net income in a subsequent year. This is true of amounts carried forward for inventories, for fixed assets, for deferred research and development expenditures, for items of unearned income. It is also true for the balance sheet amounts, be they charges or credits, resulting from income tax allocation.

Nor, as I see it, is tax allocation a process of recognizing currently a tax liability expected to be incurred, or a tax reduction expected to be achieved, in the future; instead, it is in most instances a process of deferring, to a future year or years, a current tax reduction or tax payment.\(^6\)

The proponents of the deferred method emphasize that the income statement is now the most important accounting report and the balance sheet is relegated to second place. Determining net income through matching expenses incurred with revenue for the period is the primary goal of financial accounting. Calculations of expenses and revenues partly determine what is recognized in the balance sheet. An important purpose of a balance sheet today is to produce a better statement of income.

Under this interpretation assets largely represent incurred costs that have not been matched against revenue. A deferred charge for income tax is of this nature and need not represent a receivable from the government. Deferred credits represent benefits received but


not recognized in income. Income tax allocation results in a special kind of deferred credit resulting from a cost that is a proper charge in determining net income, though the credit is not now a legal liability nor the amount of a future legal liability. Some supporters hold that payment of the tax is not crucial; their whole concern is the effect on net income for the current period. Other supporters of the deferred concept believe that while the emphasis is on the effect on income of the current period, no deferred charge or deferred credit should be recorded unless a future tax benefit or tax payment is likely.

Net of Tax Method. The net of tax method matches income tax expense with the tax-causing and tax-reducing elements of current income by adjusting the elements and related balance sheet items directly. Thus, the tax effect of accelerated depreciation in the tax return and straight-line depreciation in the financial statements, for example, is accounted for by increasing both current and accumulated depreciation. In the future, when the depreciation in the income statement for a specific asset exceeds its depreciation in the tax return, depreciation expense is decreased by the corresponding tax effect.

Discussions of the net of tax method are often in terms of depreciation, but the method is applied to numerous other timing differences. Items as diverse as intercompany profits in consolidation, warranty costs, deferred compensation, and others are shown net of tax in financial statements.7

Though he was not a proponent of the net of tax concept, Weldon Powell gave a good description of the argument underlying the concept:

Then there is the approach that attempts to find a basis of realism in both the income statement and the balance sheet. It has natural appeal since it attempts to find a rational basis within the framework of existing concepts. The argument proceeds this way. Tax deductibility gives value to an asset (or a service, for that matter). The fair value of an asset whose cost is not tax-deductible is less than the fair value of an otherwise identical asset whose cost is tax-deductible. Therefore, the using up of the deductibility should be recognized in matching costs and revenues for purposes

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7 The SEC stated in Accounting Series Release No. 102 that “The deduction of the deferred income taxes from the related installment receivables is not considered to be an appropriate procedure; the current value of the receivables is not affected by the amount of the tax deferral.”
of determining income. To be specific, when the same depreciation method is used for a given asset, for both book and tax-return purposes, there is appropriate matching of income taxes and revenue. When, as a result of using different methods, book depreciation is less than tax-return depreciation, allocation is necessary to charge against income, as a cost, that part of the tax deductibility attaching to the asset, which has expired. What is the measure of the cost? The tax differential. So goes the argument. According to it, the related tax deferral has balance-sheet standing because it is necessary to be considered in stating costs correctly in future periods.

A logical corollary of this proposition, it seems to me, is that the amounts equivalent to the tax differential should be carried through depreciation accounts, if a depreciable asset is affected. This makes a tax differential not a tax item at all, but simply a part of the measure of the cost of using an asset.8

Various authors have stated that an asset which will produce an additional tax when amortized or a liability which will produce a tax reduction when paid should be shown in the balance sheet at net valuations. One states further:

The rule against offsetting assets and liabilities is not violated here because the obligation to make future payment is contingent upon the conversion of the asset and the asset valuation is not independent of the future tax payment.9

Methods Accepted in AICPA Pronouncements

Accounting Research Bulletins. The Accounting Research Bulletins form the basis of most of the authoritative support for income tax allocation procedures. Existing Bulletins refer to interperiod allocation of taxes in a wide variety of situations. Allocation of taxes is recommended when the following cause taxable and accounting income to differ materially:

amortization of emergency facilities (ARB 43, Chapter 9C, Par. 11)

an item “is carried to or remains in a deferred-charge account” (ARB 43, Chapter 10B, Par. 12)

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an item "is charged to an estimated liability account" (ARB 43, Chapter 10B, Par. 13)

"profits on instalment sales or long-term contracts which are deferred for tax purposes" (ARB 43, Chapter 10B, Par. 18)

unrealized appreciation of securities "taken into the accounts by certain types of investment companies" (ARB 43, Chapter 10B, Par. 18)

renegotiation refunds (ARB 43, Chapter 11B, Par. 7)

unamortized discount, issue cost, and redemption premium on bonds refunded (ARB 43, Chapter 15, Par. 11)

accelerated methods of depreciation (ARB 44 Revised, Par. 4)

income taxes "paid on intercompany profits on assets remaining within" the consolidated group (ARB 51, Par. 17).

The recommendations relating to tax allocation are often qualified by other sections of the Bulletins and are interpreted variously. For example, ARB 43, Chapter 10B states that the recommendations do "not apply where there is a presumption that particular differences between the tax return and the income statement will recur regularly over a comparatively long period of time" (Par. 1). Some accountants believe that this statement was superseded by ARB 44 (Revised) which extended tax allocation to depreciation while others think it still applies except for depreciation. In addition, the amount of taxes estimated to be actually payable for the year may be shown in the income statement when "the treatments recommended . . . are considered to be not practicable" (Par. 14).

**APB Opinions.** Opinions of the Accounting Principles Board include further references to recognizing tax allocation when items differ for tax and financial accounting purposes:

- Depreciation determined on the basis of guideline lives for assets (APB 1, Pars. 5 and 6)

- Deferred gains or losses resulting from the sale of property leased back (APB 5, Par. 21).

These two Opinions and Opinion No. 6 refer to the Accounting Research Bulletins and continue the pattern set in the earlier Bulletins.
Preferences for Three Methods. The Bulletins shed little light on justifying the three concepts. The positions are incomplete and to some extent contradictory. Advocates of each tax allocation method find support for their varying positions in the Bulletins. This phenomenon is easily explained. First, the committee on accounting procedure considered only parts of the entire problem of income tax allocation or recommended procedures appropriate for a specific expense or revenue. Second, the individual Bulletins mentioning aspects of income tax allocation were separated in time, and the make-up of the committee changed in the interim. In addition, the nature of the timing differences was not an important issue when most Bulletins were prepared and the committee concentrated on the effects on net income.

Net of tax method. The net of tax method was accepted in 1944 in Accounting Research Bulletin No. 23 on accounting for income taxes. The procedure was described in the section for implementing the allocation principles for “Deferred-Charge and Reserve Accounts”:

The committee, therefore, recommends in such cases that a charge be made in the income statement of an amount equal to the tax reduction in the manner set forth above with respect to charges to surplus, that a corresponding credit be made in the deferred-charge account and that amortization charges thereafter be based on the net amount. . . .

Where an item resulting in a material reduction in income taxes is charged to a reserve account, the principle of allocation may be applied in the income statement in three ways: (a) the current provision for income taxes may be shown as if the item in question were not deductible . . . (b) a charge may be included for a portion of such item equal in amount to the tax reduction resulting therefrom, or (c) the item in question may be charged in the income statement and a portion of the reserve equal in amount to the excess of such item over the related tax reduction credited in the income statement. In the case of either (a) or (b) the amount of the tax reduction will be reflected in the reserve or other appropriate account.

Method (b) apparently conforms to the net of tax concept and method (a) to net of tax presentation in the balance sheet only. One dissent to the Bulletin included a statement referring to the net of tax method:

The consistent application of the bulletin to reserves would be difficult and confusing, requiring the use of charges or credits net of a tax, the amount of which was not known with any certainty.
The Bulletin not only permitted a choice for presentation in the income statement but also failed to specify any disposition of the credit for the additional tax expense. Carman Blough further explained the requirements of the Bulletin:

Accounting Research Bulletin No. 23 recommended allocation of taxes when items deductible for income-tax purposes are not reflected in the income statement. Amounts transferred from or charged against reserves would, under Bulletin No. 23, be only the amount of the expense or loss net of taxes. It seems clear that where a tax allocation situation may be anticipated, a reserve at its inception should be provided only to the extent of the net amount ultimately expected to be charged against such reserve, namely, the amount of the estimated expense or loss net of the attributable tax benefit. However, when computing the amount of a reserve provision, this procedure, which is implicit in Bulletin No. 23, has frequently been overlooked.10

Many companies adopted the net of tax method but practice varied. A major influence was SEC Accounting Series Release No. 53 in November 1945 which concluded that “the amount shown as provision for taxes should reflect only actual taxes believed to be payable under the applicable tax laws.”

The net of tax interpretation specified in ARB 23 was accepted as an appropriate alternative in ARB 44 (Revised) “Where it may reasonably be presumed that the accumulative difference between taxable income and financial income will continue for a long or indefinite period, it is alternatively appropriate, instead of crediting a deferred tax account, to recognize the related tax effect as additional amortization or depreciation applicable to such assets in recognition of the loss of future deductibility for income-tax purposes.”

Liability method. Statements in the Accounting Research Bulletins also support the position that the balance sheet credit recognized by interperiod income tax allocation is a liability for income taxes payable in the future.

... a charge should be made in the income statement to recognize the income tax to be paid in the future. ... based upon normal and surtax rates in effect during the period covered by the income statement with such changes therein as can be reasonably anticipated at the time the estimate is made. (ARB 43, Chapter 9C, Par. 11) [Emphasis added]

... if a tax is likely to be paid thereon, provision should be made on the basis of an estimate of the amount of such tax. (ARB 43, Chapter 10B, Par. 18)

The committee considered and accepted in Chapter 9C of ARB 43 both the liability concept and the net of tax concept but expressed a clear preference for the liability concept. The net of tax concept was accepted, in fact, because it resulted in the same net income as the preferable liability concept. The preference for the liability method is stronger than it appears from the wording above. The excess profits tax was in effect when the statement was issued and the committee specified that the charge for future taxes should be based on normal and surtax rates without allowance for excess profits tax. A reasonable expectation was that the excess profits tax would be eliminated from the tax structure by the time property was amortized under certificates of necessity.

**Deferred method.** Other passages in the Bulletins seem to favor the deferred interpretation. The committee issued a letter, dated April 15, 1959, for the purpose of clarifying the meaning of “a deferred tax account” in ARB 44 (Revised), and stated that it “used the phrase in its ordinary connotation of an account to be shown in the balance sheet as a liability or a deferred credit” [emphasis added]. In ARB 51 the committee apparently accepted any of the three interpretations to account for taxes paid on intercompany profits eliminated in consolidation.

Acceptance by the committee on accounting procedure of the liability and net of tax concepts was explicit; acceptance of the deferred interpretation was implicit. The Accounting Principles Board recognized this implicit acceptance and made it explicit by the following statements in Opinion No. 6, “Status of Accounting Research Bulletins”:

23. Provisions for deferred income taxes may be computed either (a) at the tax rate for the period in which the provision is made (the so-called “deferred credit” approach) or (b) at the tax rate which it is estimated will apply in the future (the so-called “liability” approach).

(a) Under the deferred credit method, the accumulated balance is not adjusted for changes in tax rates subsequent to the year of provision. Accordingly, the deferred amount is allocated to (drawn down in) the future periods based on the recorded tax benefit, which may be at a rate different from the then current rate.
(b) Under the liability method, the accumulated balance is adjusted for changes in tax rates subsequent to the year of provision. Accordingly, the deferred amount after adjustment is allocated to (drawn down in) the future periods based on the then current tax rates.

All provisions of Accounting Research Bulletins and Board Opinions in conflict with this paragraph are modified accordingly, including Chapter 9C and Chapter 10B of ARB 43 and ARB 44 (Revised).

The Opinion states also that the April 15, 1959 letter of interpretation is continued in force. (Par. 21)

Methods Accepted by SEC

In accounting for timing differences resulting from accelerated depreciation in tax returns, the United States Securities and Exchange Commission approves both the deferred and net of tax methods which are, of course, closely related in practice.

The amount of income tax payable for any period is affected by the amount of costs deducted in determining taxable income. In a year in which costs are deducted for tax purposes in amounts greater than those used for financial statement purposes, then, unless corrected, there is a failure properly to match costs and revenues in the financial statements by the amount of the tax effect of the cost differential. To correct the resultant distortion in periodic net income after taxes, it is therefore necessary to charge income in earlier years with an amount equal to the tax reduction and to return this amount to income in subsequent years when the amount charged for financial statement purposes exceeds the amount deducted for tax purposes.\(^3\) . . .

With specific reference to depreciation, since the total deduction allowed over the life of an asset is limited to its cost and hence is not affected by the method by which it is deducted from income, acceleration of tax deductions in earlier years results in deferring to later years the payment of taxes on an amount equivalent to the cost differential. Because of the interrelationship between income taxes and depreciation, the Commission is of the view that in the earlier years the charge equivalent to the tax reduction should be treated either (1) as a provision for future taxes in the income statement with a corresponding credit in the balance sheet to a non-equity caption such as a deferred tax credit, or (2) as additional depreciation in the income statement with a corresponding
addition to the accumulated provision for depreciation in the balance sheet.\(^7\)

\(^3\) Since the deferral is made for the purpose of allocating to future periods the effect on income of the current tax reduction, it is not contemplated that the portion returned to income will exactly offset the increased tax to be paid in future years. The amount of additional taxes payable in future years may vary from the reduction obtained earlier because of changes in the tax rates or because of failure to earn taxable income corresponding to the tax reduction previously taken.

\(^7\) In either case there should be an appropriate explanation with disclosure of the amounts involved.\(^{11}\)

In other releases and comments the Commission has shown a preference for the deferred method and encourages reporting property at cost less depreciation.

The SEC applies its position regarding depreciation (Release No. 85 quoted above) to other costs also. Therefore, accounting for a tax effect must be consistent as between the income statement and the balance sheet. An example of the presentation required by the SEC is explained for a company that defers research and development costs for financial accounting purposes and deducts them for tax purposes as incurred.

If the charge in the income statement is included in income taxes and described as such, then the corresponding item in the balance sheet must be shown under liabilities and may not be netted against the deferred charge.

On the other hand, if the charge for the tax effect in the income statement is included in the income tax section but described as a “charge equivalent to a related tax reduction” (described), there would be no objection to netting the credit in the balance sheet against the deferred charge in question. (If a charge so described is included along with the provision for income taxes in the income statement under a subheading such as “provision for income taxes,” the subheading should be expanded to include “and related charges.”) Similarly, if the charge in the income statement is described as “write-off of a portion of R&D expenses equivalent to the reduction in taxes, etc.,” there would be no objection to stating deferred R&D at the net amount.\(^{12}\)


Methods Related to Causes of Differences

Recent proposals for interperiod allocation of income taxes suggest that the method adopted should depend on the cause of the timing difference. The proposals vary in detail, but generally result in applying the liability approach in certain situations and the deferred or net of tax approach in others.

Long-Term and Repetition Features. Paul Grady in an interim statement of the AICPA Director of Accounting Research considered the impact of reduced tax rates on interperiod income tax allocation and distinguished five common situations. He concluded that the tax amounts involved in the first four should be carried as deferred items in the balance sheet and as an estimated liability in the fifth situation.

The more commonly encountered situations involving tax effect accounting between periods of time are summarized below:

1. Accelerated depreciation methods and depreciation guideline rates used for tax purposes which are in excess of rates used in the accounts.

2. Amounts capitalized or deferred on the books, expensed for tax purposes. Examples—Research and development expenses, interest and taxes during construction.

3. Income recognized on the books in advance of recognition for tax purposes. Examples—Installment sales of merchandise, contract income recorded on percentage of completion method for book purposes and completed contract basis for tax purposes, installment sales of assets.

4. Income reported for tax purposes before being recorded as income in the accounts. Examples—Intercompany profit in inventory, advance rentals and royalties, carved out oil or ore payments.

5. Expenses or losses provided for in the accounts in advance of their deductibility for tax purposes. Examples—Anticipated losses on disposition of facilities, pension costs, vacation pay, deferred compensation, severance pay, self-insurance, warranties.

Of the foregoing situations, those most frequently encountered and involving the largest amounts of money (Example—accelerated depreciation methods in a company having constant or increasing annual capital additions) have a long-term tax effect, involve repetitive as distinguished from isolated transactions, and are of such a nature that it is possible to establish a known amount
by which taxes for the year were reduced or increased because of accounting for the item one way on the books and another way in the tax return. Situations described in Nos. 1 to 4 above are generally of that kind. For these, the "deferred credit" approach seems appropriate.

Of a somewhat different nature are tax effect accounting situations involving an estimated loss or liability (No. 5 above), which may not cover long periods, do not necessarily involve repetitive transactions, may be susceptible of fairly accurate estimates and the tax effect represents an estimate of future effect rather than being currently determinable. For situations of this type, the "estimated liability" approach appears to be appropriate both for the estimated tax effect and for the account to which the tax effect relates.13

Analytically, situations 1 and 2 are the same; the resulting four situations conform to the four types of timing differences discussed in Chapters 1 and 2 and illustrated on pages 16 to 19. The net of tax concept was not discussed in this statement but presumably was considered an alternative to the deferred concept and included by implication.

**Tax Effect Known or Estimated.** Another solution that fits method of allocation with cause of difference was proposed by Raymond E. Perry.14 He distinguished four situations which correspond to the cases illustrated in the preceding chapter of this study:

<table>
<thead>
<tr>
<th>I</th>
<th>Prepaid income tax</th>
<th>Income item included in taxable income earlier than financial income. (Corresponds to illustration on p. 18.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>Deferred income tax credit</td>
<td>Expense item included in taxable income earlier than financial income. (Corresponds to illustration on p. 18.)</td>
</tr>
<tr>
<td>III</td>
<td>Deferred income tax liability</td>
<td>Income item included in financial income earlier than taxable income. (Corresponds to illustration on p. 19.)</td>
</tr>
<tr>
<td>IV</td>
<td>Future income tax benefit</td>
<td>Expense item included in financial income earlier than taxable income. (Corresponds to illustration on p. 17.)</td>
</tr>
</tbody>
</table>

The heart of his analysis is:

In the cases described as resulting in "prepaid income taxes" and "deferred income tax credits" (Cases I and II), the amount of the tax charge or tax credit entering into the computation of income taxes payable has been definitely determined since the item has already been reported in an income tax return. Therefore, such amounts should not be changed in the event that there is a general reduction or increase in income tax rates.

On the other hand, in the cases resulting in "deferred income tax liabilities" and "future income tax benefits" (Cases III and IV), the amount of income tax charge or credit has not actually been assessed. In order to make the computations in these cases it is necessary to estimate or forecast the rate that will be in effect when the items involved are recognized in an income tax return. In the absence of evidence to the contrary, it is normally assumed that the current tax rates (i.e., the rates in effect at the time the item enters into financial income) will be in effect when the item is recognized for tax purposes. As a result, an increase or decrease in income tax rates, generally, requires that deferred income tax liabilities and future income tax benefits be adjusted.\(^{15}\)

The recommended balance sheet presentations are:

*Prepaid income tax* . . . accounts should logically be shown as deductions from the related deferred income account. This is true because they are similar to valuation accounts. They are not receivables since the amount paid will not normally be recovered unless the income giving rise to the prepayment is for some reason returned.

*Deferred income tax credits* . . . should be shown as offsets to the related assets. This interpretation is consistent with the idea that deferred income tax credit is not a liability. . . . it does not represent an amount payable to the government, since the transaction giving rise to the deferred income tax credit has already appeared in an income tax return. In effect, the income tax credit is equivalent to a valuation account. It can be viewed as an amortization of an asset.

*Deferred income tax liabilities* . . . should be shown on the liability side of the balance sheet since, under the assumption underlying comprehensive income tax allocation, they are true

liabilities. They represent amounts payable on items to be reported in future income tax returns.

Future income tax benefits should normally be shown as assets. Assuming continued profitable operation of the company, these amounts will be realized in the form of income tax credits in future years. . . . The frequently followed practice of offsetting the future tax benefit against the estimated liability account violates the prohibition against offsetting in the absence of a legal right of direct offset. On the other hand, future income tax benefits may logically be offset against accrued income taxes, assuming that current and noncurrent components are presented separately.16

This article therefore suggests that both the liability and net of tax concepts should be adopted. If an item which appears in the income statement has yet to be reported in the income tax return, a liability or asset for the future tax or tax reduction should be included in the balance sheet. If, however, the item has been reported in the tax return before it is included in net income, the tax effect is already determined. The amount of the tax effect should be deferred to appropriate future periods by adjusting the related asset or liability.

Comparison of Suggested Procedures. The two proposals agree on three of the four possible types of timing differences. They disagree only in situations typified by the installment sale basis for tax returns and sale basis for income statements—i.e., revenue reported in the financial statements before the tax returns. The first proposal (Grady) treats the tax effect as a deferral because the difference is of a repetitive nature and the current reduction in taxes is a known amount. The second analysis (Perry) calls the deferred tax amount a liability because its effect on taxable income is in the future. A further difference between the two solutions is that Mr. Perry would require prepaid income tax and deferred income tax credits to be deducted from the related asset or liability—he follows the net of tax method on the balance sheet in two of the four kinds of timing differences. He would not recognize the alternative presentation of those deferred items as assets and liabilities. Mr. Grady did not specify how a deferred tax should be presented in the balance sheet but designated the method to transfer the deferred amount to income. Either the deferred or net of tax method satisfies the requirement.

16 Ibid., pp. 29-30.
Evaluation of Concepts

Purpose of Evaluation

The three methods of interperiod income tax allocation do not always yield the same results. They must therefore be evaluated singly, with relation to each other, and with regard to specific situations. The preceding chapter showed how the differences between the methods stem principally from differing interpretations of the nature of tax timing differences. Analysis of the theories supporting each concept as well as the methods themselves and the results produced is needed to assess their relative merits.

Comparison and evaluation of the concepts hinge on answers to questions such as: Do timing differences result in tax postponement, tax reduction, tax benefit, or tax saving? Do the effects of timing differences between the financial statements and the tax returns involve income tax expense or some other specific expense or revenue? Are the tax effects of timing differences liabilities? What is the nature of a deferred tax credit? Is matching best achieved by accruing an expense and liability, by deferring and amortizing tax effects, or by adjusting revenue or expense and related asset or liability amounts?

These questions indicate that most discussions of the relative merits of the methods are in the context of tax allocation resulting in credits in the balance sheet, the situation in which most problems arise. Tax allocation resulting in assets must, of course, also be studied, but evaluation of the methods of accounting for a “prepayment” is postponed in this chapter until after analysis of the more common situation.
CHAPTER 4: EVALUATION OF CONCEPTS

Criticism of Liability Concept

Can a Liability Result? One important argument used against interperiod allocation of income taxes has been that deferred taxes are not liabilities. This argument remains the most serious criticism leveled at the liability interpretation. For example:

But there is no such liability. There is no creditor. Certainly, the federal government recognizes no claim against the taxpayer, and the taxpayer would react strongly if he thought it did.¹

The so-called “liability” held to result from a current “under payment” of the period income tax does not fit the common definition of a creditor claim. This is not a matter of the degree of certainty surrounding the amount of the supposed debt. It is simply that no one owes anyone anything in the presently accepted sense of the word “liability.” The amount shown under this caption represents, not what the firm is liable for, but what the firm expects to be liable for at some future time.²

Recording liabilities in practice. The quotations emphasize the debtor-creditor aspect which is the basis in the law for the concept of liability. Undeniably, a liability recognized by allocation of income taxes is not a legal liability. Just as clearly, however, accounting is not tied to a narrow legal concept of a creditor’s claim. Adhering to a strict legal view of liabilities would seriously inhibit fair presentation of results of operations and financial position. Among the items now recognized as liabilities in accounting but which do not qualify as legal liabilities when recorded are: accrued interest and bonuses not yet payable, provisions for guarantees and warranties, property taxes accrued but not levied, and obligations for leased property which are in substance installment purchases.³

Accountants acknowledge the need to go beyond legal requirements in recording liabilities. The reasoning was explained in Accounting Research Studies Nos. 1 and 7 and in an article by Maurice Moonitz.

³ Accounting Principles Board Opinion No. 5, “Reporting of Leases in Financial Statements of Lessee,” states in paragraph 9 that “the substance of the arrangement, rather than its legal form, should determine the accounting treatment” of leases essentially equivalent to installment purchases of property.
The "going concern" concept has been useful in broadening the scope of accounting beyond the limitations of liquidation value and of strictly construed legal rights and obligations. Some specific cases are presented below:

5. **Liabilities.** The case of estimated liabilities for guaranties, for collection costs, etc., comes to mind. In this area, accounting has shown a tendency to follow through on the going-concern concept, whereas the courts and the taxing authorities have usually insisted on the existence of a legally enforceable obligation before permitting recognition of the liability and the related expense. For accounting at its present stage of development, the existence of probable future outlays, arising from or related to past transactions, is sufficient in most cases to warrant the recognition of a liability; for legal purposes (including income taxation) a further condition is usually necessary; namely, the identification of a specific legal person to whom the obligation runs, and who has the right to sue for payment, if necessary.4

Based upon experience, accountants for the most part assume "normal" developments in the future in assessing the presence and magnitude of debts. For example, accountants assume ordinarily that contracts entered into will be honored by the participants, as in fact they are in most cases. . . . Lawyers, in the nature of their profession, must be concerned primarily with what happens if participants do not live up to their agreements. . . . As a consequence, the law . . . tends to recognize debts only when a rather rigorous set of conditions has been satisfied.5

*Tax allocation passes liability test.* The absence of a debtor-creditor relationship is not fatal to the liability concept. A postponed tax meets the test of an estimated liability because future payments are expected to arise from current and past transactions. The fact that implementing the liability method requires estimates is likewise not a bar. The need for estimates is characteristic of many liabilities, and difficulties in the case of taxes are no more insurmountable than in others.

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CHAPTER 4: EVALUATION OF CONCEPTS

Matching Results. An important consideration in evaluating the liability method is its effect on the determination of periodic net income. When the tax effect of a timing difference is a balance sheet credit, the liability method measures up well. It consistently follows the idea that "the income tax follows the income." The income tax expense accrued represents the taxes on income components at the rates expected to apply when the tax is paid. The income tax expense is therefore directly related to the pretax accounting income.

Nature of Allocated Tax. The remaining question of whether interperiod income tax allocation involves the accrual of an expense and a liability or something else is considered in evaluating the deferred concept.

Assessment of the Liability Method. When income tax allocation results in a balance sheet credit, the liability concept is consistent with the theory underlying interperiod allocation and results in excellent matching of costs and revenues. Components of both the income statement and the balance sheet are presented in conformity with recognized classifications. Furthermore, the method has the added advantages of being straightforward, relatively easy to understand without elaborate explanations, and applied without excessive complications.

Perhaps the greatest hurdle before the liability method is that it is unpopular. Businessmen and accountants seem to have an inherent dislike for estimated liabilities, especially if they are designated "future taxes." Uneasiness regarding the liability solution is magnified because the amounts are often large. This attitude explains at least in part why its critics seek other interpretations of the tax effects of timing differences.

Criticism of Deferred Concept

Terminology. One criticism of the deferred concept is terminological. Proponents of this concept refer to "tax benefit," "tax reduction," or "tax saving" from deducting an expense (e.g., depreciation) earlier for tax than for accounting purposes. The resulting credit amount is thus deemed to be a deferred credit necessary to determine periodic income rather than a liability.

Taxes are neither reduced nor saved as long as tax rates are the same. They are merely shifted between periods by timing differences.
The inevitable result of a higher current tax deduction is a lower deduction later because total deductions are limited to cost. The Committee on Ways and Means made this abundantly clear in reporting on the Internal Revenue Code of 1954.6 "The changes made by your committee's bill merely affect the timing and not the ultimate amount of depreciation deductions with respect to a property."

The unqualified terms "reduction" and "saving" should therefore be eliminated in referring to allocation of the tax effect of timing differences. If the terms are used at all, they should invariably be accompanied by the qualification used consistently by only a few proponents of the deferred concept, temporary tax reduction or temporary tax saving. The latter, however, is self-contradictory and is better abandoned.

Nature of Deferred Credit. A second criticism of the deferred concept is that the nature of a resulting credit differs significantly from that of other deferred credits. Three questions need to be answered: (1) What is deferred, a tax benefit or a tax payment? (2) Is the "deferral" of tax benefits a valid application of deferral accounting procedure? and (3) Is recognizing tax benefits in income consistent with the reasons for interperiod income tax allocation?

Tax benefit deferred or payment postponed. The first question—whether a tax benefit or a tax payment is deferred—is usually answered by assertion. Proponents of the deferred concept insist that the amount by which a current tax payment is reduced (i.e., the benefit) must be deferred and applied in future periods to reduce the charge to income when the timing difference is reversed and the higher tax is payable. Proponents of the liability concept argue just as insistently that the effect of current tax deductions is to postpone payment of the tax. Although the answer to this question is important in evaluating the various concepts, a conclusive answer really rests on the answers to the two other more basic questions of the nature of a deferred credit.

Deferral and accrual accounting. Periodic income determination would be impossible without deferrals and accruals because the periods to which expenses and revenues relate often do not coincide with those when the related cash transactions occur. Accrual is necessary whenever the cash outlay or receipt follows the expense or revenue—

e.g., wages accrued, interest or rent revenue or expense accrued, and sales on account. Deferral is necessary whenever the cash outlay or receipt precedes the expense or revenue—e.g., purchase of property, advance payment for insurance, and collection of fees or subscriptions in advance.

“Deferral” of a tax effect credit is, at the very least, a novel kind of deferral. Of course, the suggested deferral of tax benefit is not automatically ruled out because it is novel. But before it is admitted to full standing, there is need to demonstrate that it belongs among the concepts of accounting.

The peculiarity of a deferred credit for taxes amid other deferrals is that its basis is neither a past nor an expected cash outlay or receipt. The deferred credit concept depends instead on the absence of a cash transaction. The internal logic of the deferred concept is that a future period is benefited because a company is not obligated to pay a given amount of income tax currently. An amount not paid is shifted from one period to another to attain a matching of expenses and revenue and an appropriate net income.

Analysis of a deferred credit for taxes leads to the conclusion that it is an anomaly in the balance sheet. Deferred credits from tax allocation have the characteristics of accruals but not of deferrals. The amount payable in a future period is not an expense of that period and must increase current expense. The increase in current expense anticipates a future cash outlay for taxes; it is not an allocation of past cash outlays to future periods.

Purpose for allocating taxes. The final consideration of the nature of a deferred tax credit is whether the concept is consistent with the reasons for interperiod income tax allocation. Allocation of income taxes to future periods is justified by the expectation that future tax payments result from a current timing difference. A current reduction in tax payments is ignored unless it will be offset later by an increase. For example, if a company collects interest on tax-exempt bonds, current taxes are less than if the interest were taxable. This reduction is not the result of a timing difference; taxes are not later correspondingly increased. Interperiod allocation of income taxes is therefore not applicable. Likewise, amortization of goodwill is of no consequence in tax effect accounting.

Many (but not all) proponents of the deferred concept, however, do not claim that it is based on anticipated taxes. Instead they emphasize the current tax reduction. Some argue that whether or
not a tax is eventually paid is irrelevant—the deferral and amortization of the deferral depend only on the timing difference and its reversal. Therefore, although the deferred concept may be somewhat related to the basis for interperiod income tax allocation, the allocation process is described less accurately than by the accrual of a liability.

Matching Results. The matching of the deferred concept is difficult to criticize if it is conceded that current effects on income are the sole consideration and that the future may be ignored. The period of the timing difference and the period of its reversal are assumed to be essentially unrelated. If this interpretation is accepted, the question of why defer at all remains.

If the relation between the current temporary tax reduction and the future tax payment is recognized, the result is not always good matching though its proponents stress matching. Mismatching occurs not in the period when the timing difference originates but in future periods if tax rates change. The argument is that it is necessary to defer the current temporary tax reduction to offset the higher charge to income for the greater tax payment when the timing difference is reversed. A change in the tax rate makes the higher tax payment different in amount from the deferred credit intended to offset it. The periods of reversal bear the full effect of the rate change, and the income tax expense for those periods has no functional relationship with pretax accounting income. Remedying the situation by an adjustment of the deferred credit either (1) denies that the amount of the tax reduction was the proper amount to be deferred (i.e., represents a shift to the liability concept) or (2) results in a gain or loss from a change in the tax rate in a period having no relation to either the timing difference or its reversal.

Illustration. The example in Chapter 2 of the effects of changes in tax rates may be expanded to illustrate matching results. Briefly, the cost of $2,100 for an asset is depreciated over a six-year life on a straight-line basis in the accounts and on the sum-of-years-digits basis in the tax returns. Annual income (taxable and accounting) before depreciation and taxes is $1,000. Annual accounting income before taxes equals $650, $1,000 less $350 straight-line depreciation. The tax rate changes in the third year from 50% to 30%. The large change in rates and details of income tax expense highlight the matching achieved by the deferred method.
### Income Statements

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income before taxes</td>
<td>$ 650</td>
<td>$ 650</td>
<td>$ 650</td>
<td>$ 650</td>
<td>$ 650</td>
<td>$ 650</td>
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<tr>
<td>Income taxes:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Payable for current year</td>
<td>200</td>
<td>250</td>
<td>180</td>
<td>210</td>
<td>240</td>
<td>270</td>
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<tr>
<td>Tax benefit deferred to future years—*</td>
<td>125</td>
<td>75</td>
<td></td>
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<tr>
<td>at 50%</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>at 30%</td>
<td></td>
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</tr>
<tr>
<td>Tax benefit in prior years deferred to current year—*</td>
<td></td>
<td></td>
<td></td>
<td>(25)</td>
<td>(75)</td>
<td>(100)</td>
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<tr>
<td>returned at 50%**</td>
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<td></td>
</tr>
<tr>
<td>returned at 30%**</td>
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<td></td>
<td>325</td>
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<td>195</td>
<td>185</td>
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<td>Net Income</td>
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<td>$ 455</td>
<td>$ 465</td>
<td>$ 485</td>
<td>$ 495</td>
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<tr>
<td>Income tax rate in effect</td>
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<td>50.0%</td>
<td>30.0%</td>
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<td>30.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Actual income tax rate</td>
<td>50.0%</td>
<td>50.0%</td>
<td>30.0%</td>
<td>28.5%</td>
<td>25.4%</td>
<td>23.8%</td>
</tr>
</tbody>
</table>

*Depreciation:
- income tax return | $ 600  | $ 500  | $ 400  | $ 300  | $ 200  | $ 100  |
- income statement  | 350    | 350    | 350    | 350    | 350    | 350    |

Excess of deduction over expense | $ 250  | $ 150  | $ 50   | $ (50) | $ (150) | $ (250) |

** Amounts deferred at 50% were transferred first. Other possible assumptions do not affect the results significantly.

**Effects of change in rate.** A decreasing actual tax rate materializes in the last three years because the deferred method is based on an oversimplification—that the tax effect of a timing difference is determined finally in the year it originates. The current reduction in tax payments is deferred to future years and the same amount is later returned to income by using the same (or perhaps the average) tax rate. Deferred taxes are not adjusted when rates change. As long as tax rates are stable, tax expense is “matched” in the income statement. The deferred method produces peculiar and sometimes absurd results, however, in years after the rate changes. The direct relationship between pretax income and income tax expense is destroyed by the “flow-back” at rates which no longer apply. The deferred credit method distorts net income because the effects of a single event—a change in tax rates—are spread over future years which should be unaffected by the event.

**Assessment of Deferred Concept.** The deferred method is found wanting when allocating income taxes results in balance sheet credits.
The ideas of tax reduction or tax saving fail to support the method because tax payments are merely postponed; there is no saving and any reduction is temporary. The concept of deferring a tax benefit is plausible but does not come within the bounds of deferral accounting. On the contrary, it has the characteristics of accrual accounting, pointing to the liability method. The matching results in years following changes in tax rates are questionable.

The deferred concept is a rationalization that satisfies bookkeeping requirements. It is an attempt to achieve desired matching in the income statement without recording a liability in the balance sheet.

**An Alternative Explanation of the Deferred Method.** Some proponents justify the deferred method on the basis that tax effects of timing differences represent unallocated credits (or debits) that apply in theory to individual assets and liabilities. Presumably, the income tax expense adjustment is an unallocated adjustment of individual revenue and expense items. The gist of this position is that the net of tax concept is preferable but since accounting for the tax effect on individual items is complicated, the total of individual adjustments is recorded as a single amount. Proponents imply that because net income is the same under the two methods, no one is misled if the nature of deferred taxes is disclosed. This contention is not the same as supporting the deferred concept; it is a practical application of the net of tax method. Merits of the procedure depend on the evaluation of net of tax concept.

**Criticism of Net of Tax Concept**

**Underlying Assumption.** The main thrust of the elaborate explanation developed to justify the net of tax concept is that it is really valuation and not income tax allocation. The underlying assumption is that taxability and tax deductibility are factors in the valuation of assets and liabilities and the amount is measured by the tax effect. If the tax status of a given asset or liability changes, its value is affected, with a concurrent effect on net income. The assumption leads logically to the conclusion that accounting for the tax effect of a timing difference is not accounting for income taxes at all but depreciation accounting, installment sales accounting, or accounting for some other specific item.

In evaluating the net of tax concept, the primary questions therefore relate to the validity of the underlying premise and whether the results produced are consistent with the rationale of the concept.
That is, (1) do differences in timing involve income taxes or other expense and revenue items? and (2) does the method accomplish its purpose?

The net of tax method normally results in the same amount of net income and net assets as the deferred method, although amounts of their components are not alike. In spite of this similarity, the two methods are based on contrary assumptions and must be judged accordingly. The distinct assumptions underlying the net of tax method are essential in assessing its merits.

Matching Results and Statement Presentation. If the method is in fact accounting for depreciation, installment sales, or some other revenue or expense, it needs to be considered in that context. Whether adequate matching emerges depends in part on the extent to which some fine points of matching are resolved. The result is probably acceptable matching, for example, if (1) the net of tax method is depreciation accounting rather than income tax accounting and (2) the procedure for accumulating and amortizing the tax effect of timing differences in depreciation is "systematic and rational."

If, on the other hand, the net of tax method falls within the bounds of income tax allocation, it should be judged as a tax allocation method. When so evaluated, the method has two important weaknesses. First, the net of tax technique is subject to the same mismatching as the deferred method; net income is normally the same under either method, even when tax rates change. Second, the tax effects are scattered and buried throughout the income statement and balance sheet as part of individual revenue, expense, asset, and liability items, possibly with improper and undisclosed offsetting. Assessing a company's tax status may be difficult or impossible. For example, if the affected asset is a deferred charge

\[ \ldots \text{the "income tax payable in the future" is not shown; instead it is subtracted from the gross amount of the deferred charge. In view of the generally accepted rule against the set-off of debts and assets, this treatment is at least curious. It is not a question of not knowing the estimated tax payable in the future, because we need to know that amount in order to subtract it from the deferred charge. Apparently the specific dislike of showing an estimated future tax overcomes the general objection to a subtraction of a debt from an asset. The amount of the future tax is, of course, still in the statements; it is simply buried, and not disclosed.} \]

\[ \text{7 Maurice Moonitz, "Income Taxes in Financial Statements," Accounting Review, April 1957, p. 180.} \]
The net of tax method may improperly affect working capital and other pertinent ratios if current assets and current liabilities are involved. For example:

... let us assume a nondeductible asset valuation account in the current asset section of the balance sheet, such as an unusually large allowance against inventories or accounts receivable expected to become tax deductible in a subsequent year. . . . [Applying the net of tax procedure to reduce] the allowance of, let us say, $100,000 by the tax effect and deducting only $48,000 from the asset in the balance sheet does not seem the correct presentation. It seems clear that this presentation overstates the asset as well as working capital by $52,000, the income tax effect.8

The net of tax method runs a poor third when results of matching and statement presentation are judged as an attempt to allocate income taxes. In consequence, the answer to the question of whether the method involves accounting for income taxes or accounting for other expenses and revenues determines the acceptability or nonacceptability of the method.

Valuation or Tax Allocation? The strongest case for the net of tax concept is in accounting for property and depreciation, and its supporters almost invariably use this example in their arguments. The argument is that tax deductibility is one of the factors giving value to an asset, and loss of deductibility should be recognized as additional depreciation. In practice, the additional depreciation is determined by applying the current tax rate to the difference between tax and book depreciation.

The principal counterargument to the valuation position is that depreciation and income taxes are essentially separate accounting problems:

Each of the procedures which suggest a revision in the depreciation charge and accumulated allowance is in effect a revised method of depreciation. None of them reflects a revised method of accounting for the periodic tax charge. Each is a scheme which produces the same effect on net income as other tax allocation proposals by the manipulation of some revenue deduction other than the tax charge. . . . even though the effect on income is the same, the two procedures, depreciation methods and tax allocation, should not be compared with each other. One may feel that

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there is a definite need for a review of depreciation policies, but this will not substitute for the proper treatment of the tax charge.

This is an extension of the question of depreciation, however, and in no way solves the problem of accounting for the periodic income tax charge. That is, it does not solve the problem unless the cause of the difficulty, the difference in timing the determinant of net income, is eliminated by the procedure. If the timing difference is not eliminated, the problem at hand still exists even though a change is made in the method of depreciation.9

The fact that the net of tax method produces the same net income as methods specifically intended to allocate income taxes among periods casts doubt on the argument that it is not really a tax allocation method. If the solution were really accounting for depreciation, tax allocation methods would produce the same results only by coincidence.

The result corresponds to tax allocation, at least in part, because the net of tax method grossly oversimplifies the relationship between depreciation, taxes, and the valuation of fixed assets. One assumed cause of depreciation is singled out and a precise amount (the tax effect) is assigned to it. This procedure implies a more direct relationship between taxes and asset valuations than is warranted. The relationship between the value of an asset and the portion of cost applicable to any period is so uncertain, even without the added complication of tax deductibility, that accountants make no claim that depreciation accounting measures either value or expense except in a conventional way.

The net of tax method assigns a disproportionately heavy weight to potential tax deductibility relative to other value-giving factors of property. When the tax rate is 50%, half of the value of property is attributed to the deductibility of its cost for tax purposes with a concomitant effect on depreciation. The distortion caused by this oversimplification is most easily seen by pushing the method to one of its limits. For example, suppose the entire cost of an asset with a twenty-year useful life is deductible for tax purposes in the year acquired. Financial statements prepared by the net of tax method would show 52.5% of the cost of the asset as depreciation in the first year and only 2.5% in each of the remaining 19 years.

Use of the current tax rate in applying the net of tax concept in practice implies that the result is tax allocation and not asset valuation.

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Under this concept depreciation expense in the financial statements is composed of two factors: cost of use and cost of loss of tax deductibility. Whenever depreciation is computed differently for tax and accounting purposes, accounting depreciation is adjusted to reflect the additional loss of tax deductibility. Tax deductibility is lost through the acceleration of tax depreciation because amounts that otherwise would be deductible in future periods are made unavailable in the future by the current depreciation deduction. Value is lost by the inability to reduce future taxes and the amount of the loss depends on future tax rates. Therefore, using the current rate to calculate the adjustment of depreciation is not consistent with the argument underlying the net of tax method. The current additional depreciation should be measured by the rate expected to apply when future accounting expenses are unavailable as tax deductions.

Applying the net of tax method in conformity with its theoretical explanation has not, however, been seriously attempted. If tax rates change, adding the tax effect computed at the current tax rate to the accounting depreciation is unlikely to approximate the correct total depreciation under the theory of the net of tax concept. The complexity of applying the theory may be one explanation of why theory and practice conflict. A more probable explanation is that the theory was developed to justify the practice after the method was adopted.

Situations Other Than Depreciation. Although the net of tax concept has some credibility in accounting for property and depreciation, the method breaks down completely when applied to other tax timing differences. Installment sales and warranties serve as examples. Assume that gross profit of $100 on installment accounts receivable of $200 is taxed when collected, and that estimated costs of $100 under product warranties are deducted when paid. The tax rate is 48%, as in Cases A and B in Chapter 2. In both cases items are included in the income statement before being reported in the tax return. The items included in the balance sheet under the net of tax methods are:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installment accounts receivable</td>
<td>$200</td>
</tr>
<tr>
<td>Less related income tax effect</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>$152</td>
</tr>
<tr>
<td>Liabilities under product warranties</td>
<td>$100</td>
</tr>
<tr>
<td>Less related income tax effect</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>$ 52</td>
</tr>
</tbody>
</table>
Valuations of the assets and liabilities are not presented in an accepted manner. The problem is clear when one attempts to describe the income tax effect segment so that it (1) is not misleading and (2) fits the assumption that the objective is to value receivables and payables instead of to allocate income taxes. Descriptions of the net valuations are impossible without reference to the tax that remains to be paid on installment sales and the tax that in effect has been paid for estimated warranties. Possible descriptions coincide with the liability and deferred concepts, not with the net of tax concept.

If the net of tax method is applied to rent collected in advance, the result is even more curious. When rent applicable to year two is collected and taxed in year one, income of year one includes rent revenue even though all of the revenue is earned in the second year (illustrated in Case C in Chapter 2, page 18). The net of tax method was often adopted for the balance sheet only and the tax effect included as part of current income tax expense. This combination of the deferred method and the net of tax method avoids misleading presentation in the income statement but denies the basic assumption of the net of tax method.

**Unacceptability of the Method.** The preceding evaluation shows that attempts to identify the net of tax method with asset and liability valuation are not convincing. Although some assumptions underlying the method may have merit, efforts to implement them result in dilemmas. In view of the rudimentary state of the art of valuation of depreciable assets, assigning a precise amount equal to half of the asset’s value to the effect of tax deductibility is arbitrary and unsupported. Furthermore, tax accounting and depreciation accounting are essentially separate, and the tax allocation problem remains unless the additional depreciation equals the amount of the tax effect of the timing difference in depreciation. If the problem is depreciation and not tax allocation, the net of tax method does not solve it. The method is also without merit in situations other than depreciation.

If the method is tax allocation rather than accounting for depreciation or some other item, it is the poorest of the three allocation methods. Its matching is sometimes unsatisfactory. Its presentation is always less informative than the other two methods and is potentially misleading.

The net of tax method is either a naive measurement of a highly complex and unknown relationship between values and their causes or tax allocation in disguise. In neither form is it an acceptable accounting procedure.
Timing Differences Resulting in Assets

Almost all discussions of interperiod allocation of income taxes are in the context of tax effects which are credit amounts in the balance sheet. Analysis of the opposite situation is nearly nonexistent. Accountants apparently assume that the latter is a mirror image of the former and that the analysis developed to explain a "liability" also explains an "asset." Thus, the few writers who discuss accounting for income tax allocation "prepayments" seem to take for granted that expected tax rates are recognized under the liability method and tax rates of the period when the timing difference originates are used exclusively under the deferred method. No analysis is given to show that the two cases are mirror images of each other or that applying the two methods in this manner produces reasonable results. Inasmuch as this interpretation is common, it is weighed in this section.

Assume, for example, that $100 of rent revenue is received and taxed in year one when the tax rate is 50% but is earned in year two when the tax rate decreases to 40%. The tax paid in year one is $50, but if no timing difference had occurred it would have been $40 in year two. The deferred method treats the $50 as the amount of benefit applicable to year two. Two interpretations of the liability method are possible:

1. Future tax rates are recognized in year one and only $40 of expected benefit is recorded; the other $10 is tax expense of year one. The prepayment is recorded as an asset of $40, either by anticipating the new tax rate or by correcting retroactively.

2. The tax on revenue is paid in advance by in essence a nonrefundable tax payment. A change in tax rates produces a windfall loss (or gain) because the tax liability which accrues at the new rate when the revenue is earned is satisfied by the payment at the old rate.\(^\text{10}\)

The results of applying the two liability interpretations and the deferred method to this illustration compare as follows (both the asset

\(^{10}\) The most detailed discussion and analysis of this type of situation is found in Thomas F. Keller, *Accounting for Corporate Income Taxes*, 1961, pp. 121-124. It leads to the windfall gain or loss solution.
and accrued taxes in year two are shown to highlight the important differences):

<table>
<thead>
<tr>
<th></th>
<th>Liability Method</th>
<th>Deferred Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correction</td>
<td>Windfall</td>
</tr>
<tr>
<td><strong>Balance Sheet</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepaid income tax</td>
<td>$ 40</td>
<td>$ 50</td>
</tr>
<tr>
<td>Less income tax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>expense accrued</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Unearned rent revenue</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

| Income Statement     |                  |                 |        |        |        |        |
| Rent revenue         | 100              | 100             | 100    |        |
| Income tax expense   | 10*              | 40              | 40     | 50     |
| Loss                 |                  | 10              |        |        |

* Recorded in Year 1 as an expense or in Year 2 as a correction of Year 1.

The deferred method describes the facts accurately. The tax paid in year one is attributable to the revenue of year two. Fifty dollars has been paid. The subsequent change in rates does not alter the fact that the tax on this particular revenue is $50 and both the tax expense and revenue should be recognized in the same period.

Both proposed solutions under the liability method are somewhat artificial. In one solution, a tax expense is shown in year one when no revenue is recognized. In the other, total tax expense is less than was actually paid on the transaction and the difference is shown as a loss from holding an asset which decreased in value. Under the correction interpretation, writing assets up or down because of changes in tax rates shifts expenses among periods. Under the windfall interpretation, the shift is among income or expense items for the same period.

An increase in tax rates under the windfall interpretation produces a gain. If, for example, the tax rate in the illustration were 60% in year two, the tax expense for year two would be shown as $60 whereas only $50 tax has been paid or will ever be paid. The increased tax expense is offset by a windfall gain of $10. The fallacy in this interpretation lies in the assumption that income tax expense accrues on all components of income at the rates of that period. This
assumption conforms with neither the general concept of income tax allocation nor the liability concept. It forces accrual of taxes on certain components of income at a rate different from that at which they are actually taxed. The only significance of the rate is that it applies to other components of the same period.

**Combination of Methods**

Two proposals for combining allocation methods were discussed briefly in Chapter 3. Whether or not the suggested combinations of procedures remedy the defects of applying one method to all situations is considered in this evaluation of methods.

One proposal\(^{11}\) suggested that the deferred method be applied to situations that “have a long-term tax effect, involve repetitive as distinguished from isolated transactions, and are of such a nature that it is possible to establish a known amount by which taxes for the year were reduced or increased because of accounting for the item one way on the books and another way in the tax return.” According to the analysis accompanying the proposal, these characteristics describe all causes of tax timing differences except an estimated loss or expense. The liability method should be applied to that one type of timing difference.

This proposal is contradicted for the most part by the analysis in this chapter. The deferred method would be applied by the proposal to situations which are better described by the liability interpretation. The liability method would apply only to conditions in which the tax effect is a “prepayment” and using an estimated future tax rate does not achieve suitable matching of periodic income tax expense.

The other combination proposal\(^{12}\) selected the net of tax method for items that appear in the tax return before they appear in the financial statements. The current rate was applied to these items because “the amount of the tax charge or tax credit entering into the computation of income taxes payable has been definitely determined since the item has already been reported in an income tax return.” The liability method was applied to items that appear first in the financial statements because “the amount of income tax charge or

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credit has not actually been assessed.” The essence of the proposal is that the former (which includes rent collected in advance, accelerated depreciation for taxes, and similar situations) should be accounted for at the current tax rate, and the latter (which includes installment sales, estimated liabilities and losses, and the like) should be accounted for at the expected future tax rate.

The particular combination proposed is based on a fallacy—the proposition that because an item has been reported in a tax return, the tax effect has been definitely determined. Some timing differences result from a deduction that first reduces the taxes paid and later its absence increases the taxes paid. The argument overlooks this “see-saw” effect. Although the proposition may be true for an item like rent collected in advance, it is not necessarily true for an item like accelerated depreciation. The tax is paid when the rent is collected, and subsequent developments cannot change the fact that a certain amount has been paid. Accelerated depreciation, however, reduces the tax paid currently because the deduction for tax purposes exceeds the expense in the income statement. At a later date, the reverse occurs, and tax payments increase. The reversal is as much a part of the tax effect as the original tax reduction. If they are not completely compensatory, the precedence of one or the other must be settled on the basis of considerations discussed earlier in this chapter and not merely on the basis of which event occurred first.

Tentative Conclusion on Applicable Methods

The analysis in this chapter points to the conclusion that each of the three methods—the liability, the deferred, and the net of tax—fails to provide a complete answer to income tax allocation among accounting periods. The liability method seems to apply in some circumstances and the deferred method in others. Though a combination of methods is indicated, neither of the combination proposals considered in this chapter provides the answer. This tentative conclusion will be explored further in a later chapter.
Extent of Interperiod Allocation of Income Taxes

Alternative Applications

Is interperiod income tax allocation required for all material timing differences between tax returns and financial statements? Is interperiod income tax allocation to be used sparingly in restricted situations to avoid distortions of income? Should interperiod income tax allocation apply equally to "prepayments" and deferrals of income tax? Accountants do not agree on answers to these questions, and recommendations in official pronouncements give only limited guidance.

Applied for All Material Differences. Some argue that interperiod income tax allocation should be applied for any difference between the tax return and income statement that is at some time pertinent to taxes payable. For example:

My concept of income tax allocation . . . is simply to charge the current accounting period with all income taxes arising from the current accounting income, regardless of the time of payment of taxes.¹

. . . I believe that, as a general rule, income tax allocation is required in order to state net income properly whenever differences between the accounting methods applied in financial statements and those applied in income tax returns result in significant variations between book income and taxable income.²

Limited Application. An opposing view is set forth in excerpts from a 1959 article:

I would start with the presumption that the tax paid or payable for a given period should be shown as a charge in the period for which it is paid. I would depart from the presumption only to correct an obvious distortion of income or to avoid an income presentation which might be misleading.

There obviously is greater necessity for accounting recognition of a tax effect which clearly is material in relation to income than of one which clearly is insignificant. I think that allocation should be confined to items which are clearly material.

Some differences between the books and the tax returns never reverse themselves. . . . Other differences reverse themselves gradually over extended periods of time, or at some indefinite time in the distant future. Still others reverse themselves in the near future, possibly in the succeeding year. As to all of these, there possibly is greater need for adjusting income when the future effect is expected to be soon, is reasonably certain, and can be determined accurately, than when the future effect is not expected for a long time, may be uncertain, and cannot be estimated precisely.

. . . the necessity for allocation is greatest in respect of differences between one year and the succeeding year, and . . . it diminishes as the period of time lengthens between the original difference and its reversal. Allocation between this year and next year can be made with reasonable assurance. Allocation between the present and the last year of existence of a flourishing business is hazardous.3

Other conclusions in the article were: (1) tax allocation should not be required when accumulated tax reductions or additions increase over a period of years, and (2) accounting for the tax effect of timing differences when book income is more than taxable income is more important than when book income is less than taxable income.

Significant Areas of Disagreement. The preceding viewpoints overlap to some extent. Accountants generally agree that income tax need be allocated only when amounts are material. Tax allocation for a nonrecurring difference resulting in a credit for deferred tax which is reversed over a relatively short period is also widely accepted. Major areas of disagreement on the extent of the application of tax

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allocation are (1) differences between taxable and accounting income recur over a relatively long period, and (2) deferred tax effects are debits rather than credits. The remainder of this chapter is devoted to these two areas.

Timing Differences Recurring Over Long Period

AICPA Position. The AICPA first recognized interperiod income tax allocation for nonrecurring timing differences involving costs of refunding bonds and depreciation of emergency facilities. Accounting Research Bulletin No. 23 stated:

Neither allocation nor disclosure is necessary, however, in the case of differences between the tax return and the income statement where there is a presumption that they will recur regularly over a comparatively long period of time.

A similar statement is contained in the 1953 restatement and revision of the Bulletins.

The position of the committee on accounting procedure was essentially the same in 1954. Accounting Research Bulletin No. 44 dealt with the most significant timing difference which recurs regularly over relatively long periods—accelerated depreciation in the tax return only. The committee's statement regarding long-term and near-term differences was not clear to all accountants and was interpreted by the AICPA Director of Research:

When the committee indicated that tax allocation would be unnecessary unless there is "merely a deferment of income taxes until a relatively few years later," it had in mind the typical industrial enterprise where replacements of depreciable assets take place with considerable regularity or where there is gradual expansion of physical facilities. In such cases, if deferred income taxes were recognized in the accounts, a liability balance would be built up which would be reduced only during a period of contraction or liquidation. . . .

The committee did not mean to imply that income taxes deferred for only a few years need not be considered, but just the reverse. In other words, though stated somewhat negatively, the effect of what it said is that, if the amounts are clearly material, and if it is reasonably certain that the reduction in taxes during the earlier years will be quickly followed by a period during which the taxes will exceed what they would have been if the book depreciation
had been taken for tax purposes, accounting recognition should be given to deferred income taxes.4

The committee’s position on tax effects of accelerated depreciation therefore agreed with the earlier one on emergency facilities.

The committee reversed its position in 1958 in Accounting Research Bulletin No. 44 (Revised). The explanation given for changing the recommendation to apply interperiod tax allocation to recurring differences with long reversal periods was in Paragraph 7:

Studies of published reports and other source material have indicated that, where material amounts are involved, recognition of deferred income taxes in the general accounts is needed to obtain an equitable matching of costs and revenues and to avoid income distortion, even in those cases in which the payment of taxes is deferred for a relatively long period. This conclusion is borne out by the committee’s studies which indicate that where accelerated depreciation methods are used for income-tax purposes only, most companies do give recognition to the resultant deferment of income taxes. . . .

Accountants may continue to argue whether the Bulletin was intended to apply only to depreciation or to other recurring differences as well, but in fact interperiod tax allocation is now applied for many varied recurring timing differences of both short and long duration.

**Indefinite Postponement.** The most frequent argument against interperiod income tax allocation when timing differences recur regularly is that the recurring nature of the transaction results in a permanent or indefinite postponement of tax payments. The major points are illustrated in a simple example with these assumed facts:

1. The cost of a machine purchased at the beginning of each year is $1,000.
2. Each machine has an estimated life of four years and no salvage value.
3. The machines are depreciated on the straight-line basis in the accounts and the sum-of-years-digits basis in the tax returns.

4. Depreciation is the only difference between revenue and expenses in the accounts and tax returns.

5. The income tax rate is 48% each year.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Machines</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance Sheet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine No. 1</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Machine No. 2</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Machine No. 3</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Machine No. 4</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine No. 5</td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,000</td>
<td>2,000</td>
<td>3,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>250</td>
<td>750</td>
<td>1,500</td>
<td>2,500</td>
</tr>
<tr>
<td>Undepreciated cost</td>
<td>$ 750</td>
<td>$1,250</td>
<td>$1,500</td>
<td>$1,500</td>
</tr>
</tbody>
</table>

| **Depreciation** |
| Tax Return |
| Machine No. 1 | $ 400 | $ 300 | $ 200 | $ 100 |
| Machine No. 2 | 400 | 300 | 200 | $ 100 |
| Machine No. 3 | 400 | 300 | 200 |
| Machine No. 4 | 400 | 300 |
| Machine No. 5 | |
| Total | 400 | 700 | 900 | 1,000 | 1,000 |

| Income Statement |
| Machine No. 1 | 250 | 250 | 250 | 250 |
| Machine No. 2 | 250 | 250 | 250 | 250 |
| Machine No. 3 | 250 | 250 | 250 |
| Machine No. 4 | 250 | 250 |
| Machine No. 5 | |
| Total | 250 | 500 | 750 | 1,000 | 1,000 |

| Excess of pretax accounting income over taxable income | 150 | 200 | 150 | —0— | —0— |
| Tax effect of timing difference | 72 | 96 | 72 | —0— | —0— |
| Accumulated tax effect | $ 72 | $ 168 | $ 240 | $ 240 | $ 240 |
The total cost of machines in use increases each year until the fourth year after which it remains constant at $4,000. A new machine acquired replaces each one retired beginning in the fifth year. The accumulated tax effect tends to follow the total cost of machines. As long as the total cost grows, the accumulated tax effect also grows. It levels off when the total cost is stabilized in the fourth year. It decreases if the total cost of machines decreases. Thus, if a replacement machine is not acquired in the sixth year in the illustration, depreciation in the accounts exceeds depreciation in the tax return by $150, the tax effect is a reverse $72, and the accumulated tax effect decreases to $168.

The relationship between the accumulated tax effect and the total cost of assets is complex, however, and not the simple linear relationship implied in the illustration and in the preceding paragraph. The magnitude and timing of the effect on the accumulated tax effect caused by changes in the cost of assets depends, among other things, on the relation of current transactions to past transactions. The accumulated tax effect is directly related to the difference at a point of time between the accumulated depreciation for tax purposes and the accumulated depreciation for accounting purposes. The magnitude of this difference and the timing pattern and rate at which it developed determine the interaction of changes in the total cost of assets and changes in the accumulated tax effect.

Only broad generalizations about the relation between the total cost of assets and the accumulated tax effect are possible. For example, if the cost of assets has been stable for some time (replacements equal retirements, as illustrated), a decrease in the assets tends to reduce the accumulated tax effect immediately and in full force. If the cost of assets has grown over a long period, however, a failure to maintain the previous rate of increase tends to reduce the accumulated tax effect, but the reduction may lag a year or several years and is likely to be proportionately smaller than the change in assets. If this lag combines with a resumption of an upward trend in the rate of investment, the accumulated tax effect may not decrease.

Postponement argument. The likelihood that the accumulated tax effect will not decrease is used to support the proposition that taxes should not be allocated in these circumstances. For example, Sidney Davidson argued that if the answers to the two following questions are affirmative, no future tax liability exists.

Are tax rules for depreciation methods expected to remain as generous as they now are? and

Will a policy of regular investment in assets subject to depreciation be maintained?

He pointed out that income is earned by employing all assets of the business, and income tax is based on total taxable income of the entity. Individual transactions are not taxable or deductible and attempts to associate segments of the income tax with individual transactions are artificial. Liability for future tax exists only if the income tax payable for some future period is increased because the tax was not paid currently. Unless Congress withdraws existing rights for deducting depreciation, a company need only maintain or increase its investment in depreciable assets to postpone indefinitely the payment of tax effects related to accelerated depreciation.

After appraising the outlook under these conditions for companies using an accelerated depreciation method for tax purposes only, Mr. Davidson concluded:

... attention must be centered on the taxpaying entity, the firm as a whole. For a static or growing firm, current tax savings from this source will not adversely affect income tax charges of future years. In fact, the growing firm can look forward to an ever-increasing annual tax saving continuing year after year. Only a moribund firm with declining investment in capital assets is likely to be faced by a substantial deferred tax liability, and then only if its dying years are profitable ones.6

The permanent postponement idea was an important consideration in qualified assents to Accounting Research Bulletin No. 44 (Revised):

Messrs. Jennings and Powell dissent from the conclusion (expressed in paragraph 4 and implied in the related discussion) that where the declining-balance method is adopted for income-tax purposes but other appropriate methods are used for financial accounting purposes, there should be accounting recognition of deferred income taxes, except for certain rare cases. They believe this calls for more extensive allocation of income taxes among periods of time than is necessary or desirable, especially where the situation is such that the so-called tax deferment is in effect a permanent tax reduction.

A variation of this argument is that the current tax reduction provides a source of interest-free funds and that the "loan" need never

be repaid so long as the company maintains or increases its investment in depreciable assets.

Proponents of tax allocation for all material timing differences between taxable and accounting income, of course, deny the validity of the indefinite postponement argument.

*Accumulated tax effects fluctuate.* First, proponents of comprehensive tax allocation challenge the assumption of a regular and continuing rate of investment in depreciable assets:

It is, moreover, most unusual for corporations to have a stable or steadily increasing level of fixed asset expenditures year after year. Bunchings are bound to occur in certain years, e.g. in the case of a major plant addition or the acquisition of all the assets of another company, etc. The new depreciation incentives . . . serve to emphasize the untenability of the "permanent deferment" approach.7

Willard J. Graham8 concluded that "hardly any business is free of all . . . hazards, any one of which would cause segments of this liability to 'mature' and require payment of deferred taxes in such an amount that the total of accumulated tax deferrals would be reduced." Among the thirteen "hazards" mentioned were: a "shift in policy from owning to leasing," the "sale or other taxable transfer of large amounts of partly depreciated property—at a price substantially above tax-depreciated value," and "a recession, or the contraction of the industry, or any event leading to a 'lean' period for the taxpayer and a severe restriction on replacements and additions."

*Similarity to other balance sheet items.* Second, the proponents of comprehensive tax allocation point to the "revolving" or "turnover" nature of accumulated tax effects whether or not amounts diminish:

How true is it to say that the "loan" of interest-free tax money need never be repaid? In fact, repayment begins in the following year when the depreciation charged in arriving at the company's income for the year includes some depreciation which is to be added back in arriving at the taxable income. The extra tax which results does not relate to the income of that year, but to the year when the special depreciation was claimed for tax purposes. The statement has the condition "unless the investment declines". In other words, so long as expenditure continues at equal or higher rates on depreciating assets, and so long as accelerated depreciation

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is allowed as a tax deduction, and advantage is taken of this, then the balance of deferred tax involved in the accelerated depreciation process will not grow less. In this sense, it need never be repaid. Would accountants apply the same rule to trade creditors in an expanding business, or to the short-term debenture “capital” of a finance company? Would we suggest that these liabilities be omitted from the balance sheet because, if the scale of operations is maintained or increased, then we would always have at least the present sums unpaid, so that in effect we may never need to pay them? 9

Vigorous objection is voiced to the idea that because the net balance will not be reduced in the foreseeable future the tax is permanently reduced or indefinitely postponed:

Just when do we stop (if we start at all) in accepting the principle that the incurrence of a liability (and the attendant expense) may be ignored if there is a probability that when the liability matures —and is paid—the cash for the payment will be provided by the incurrence of another liability—which in turn—and so on, ad infinitum? 10

The similarities of the accumulated tax effect and other amounts in the balance sheet are often emphasized.

But no one suggests that as a consequence the accounts payable, or the increase therein, need not be recorded. On the contrary, it is universally recognized that, while the total remains substantially the same, the liability “turns over”: Amounts due to individual creditors are continually paid and replaced by amounts due to other creditors. So it is with deferred income taxes. While the total may remain substantially the same, the amounts deferred with respect to particular items of business property are continually being replaced by amounts related to other items of business property.

Thus, under the permanent-deferral theory the income tax effects of some of the items entering into the determination of a company’s reported pretax income are overlooked merely because these effects are camouflaged by the effects of other items. Viewed in this light, the permanent-deferral theory fails. 11

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Conclusions Regarding Recurring Differences. This study rejects the indefinite postponement idea because both its premises and its results are foreign to present concepts and practices in accounting for assets, liabilities, revenues, and expenses. The measurement of both accounting and taxable income is based on the "revolving account" idea. Each revenue accrual and consequent collection and each expense accrual and consequent payment is recorded in the accounts. The fact that total receivables and payables may remain unchanged from the beginning to the end of the year is irrelevant. The observation that a given revenue or expense transaction has a known effect on income is not invalidated by the fact that income results from the combination of all resources. The effects of particular transactions on total income can be traced convincingly and usefully because analyzing and recording individual transactions is the basis of accounting.

The proponents of indefinite postponement deny the analogy between accumulated deferred taxes and accounts payable and other balance sheet items which undeniably are based on the individual transaction or "revolving account" concept, but they have not demonstrated that the analogy is invalid. On the contrary, the assumption that no liability exists because anticipated future transactions will nullify the effect of past transactions should be questioned. Assets and liabilities result from current or past transactions not from future transactions. The offsetting effects of future independent transactions are recorded only in the future. The offsetting of past and future independent transactions is, however, inherent in the position that no liability need be recorded if the following question is answered affirmatively: "Will a policy of regular investment in assets subject to depreciation be maintained?" (page 68). This question is legitimate for financial management or financial analysis but not for accounting. For purposes of cash planning or analysis it may be pertinent that funds will not be required to pay some or all of the deferred tax liability because new timing differences will more than offset those being reversed, just as it may be pertinent that funds will not be required to liquidate bonds outstanding because refunding is planned. Normally accountants reject this kind of reasoning and record and report the effect of past and current transactions even though assets and liabilities will be changed when later transactions occur.

Finally, accumulated amounts of deferred tax credits do in fact decline, meaning that amounts which might be presumed to be deferred indefinitely are paid. Depreciation for accounting purposes
exceeds depreciation for tax purposes, recurring accrued expenses previously deducted for tax purposes are less than those currently deductible, installment sales are less than in previous periods and installment receivables decrease, and so forth.\textsuperscript{12} Deferred taxes of a number of companies have declined recently even though the business economy was in a period of general expansion. These examples hardly fit the description of "a moribund firm . . . [in] its dying years": Associated Dry Goods Corporation (January 30, 1965), H. C. Bohack Co. Inc. (February 1, 1964), Broadway-Hale Stores, Inc. (February 1, 1964 and January 30, 1965), Calumet & Hecla, Inc. (1964), Federal Pacific Electric Company (June 30, 1963), and Pittsburgh Plate Glass Company (1964). All six decreases in the accumulated deferred taxes were related to timing differences considered to be "regularly recurring."

Interperiod income tax allocation should, therefore, be applied comprehensively to material timing differences. That is, no exception should be made for regularly recurring differences even though they extend over a relatively long period of time.

\textbf{Recognizing Assets Through Tax Allocation}\textsuperscript{13}

\textbf{Allocation Recognizing Assets.} In theory, balance sheet debits may result from interperiod income tax allocation as readily as credits. The illustrations in Chapter 2 include this situation. The discussion throughout the study, although dealing more specifically with situations resulting in credits, recognizes the possibility of assets in tax effect accounting. Tax allocation procedures result in recording assets whenever revenue is taxed before it is recognized in the income statement or expense is deducted for taxes after it is recognized in the income statement (Cases B and C in Chapter 2).

The accounting profession has largely avoided the issue of the propriety of recognizing assets in connection with tax allocation procedures. Interperiod allocation of income taxes began with timing differences involving only balance sheet credits and gradually expanded to those involving debits as well. Accounting Research Bul-

\textsuperscript{12} Mr. Davidson's article and the preceding discussion are in terms of accelerated depreciation for tax but not book purposes. This is the most common frame of reference for the indefinite postponement v. revolving account discussion, but proponents of indefinite postponement apply the argument to other recurring differences.

\textsuperscript{13} The effects of loss carryovers are discussed in Chapter 7.
letins specifically refer to assets of this kind only in relation to consolidated financial statements. Few financial statements show a separate asset for “prepaid” income tax. “Prepaid” tax is usually offset against the related item. Thus, when estimated expenses are not tax deductible until paid—product warranties and deferred compensation are common examples—the affected expenses are usually shown net of taxes, and the related liability is reduced by the tax “asset.” Likewise, affected consolidated inventories are normally adjusted for intercompany profit reduced by the tax effect, and the inventory classification includes the tax “asset.”

Need to Recognize Assets. In measuring periodic income recognizing “prepaid” income tax is equally as important as recognizing accrued income tax. If “prepaid” taxes are ignored, periodic income is first understated and later correspondingly overstated. If the existence and value of the asset are reasonably determinable, neglecting to record the asset unnecessarily shifts expenses between periods and mismatches revenues and expenses in at least two accounting periods. Failure to report favorable current results of interperiod income tax allocation, even in the face of convincing evidence of the value of the asset, therefore introduces a conscious bias far beyond the requirements of conservatism. The major problem is to resolve whether or not an asset exists for which a value can reasonably be determined.

Criterion for Recording Tax Effect Assets. An asset exists and should be recognized whenever the nature, cause, and circumstances of a “prepayment” reasonably indicate that some future period will benefit. The fact that the government does not treat the item as a liability is of no consequence. Recognition of an asset or liability does not depend on the accounting treatment by some other entity.

Two general situations can be distinguished. In one—rent or royalties collected in advance are good examples—the tax is truly prepaid because the revenue is taxed when collected. The “benefit” relates to the period in which the revenue is earned and recognized in computing net income. The only important contingency which can invalidate this “benefit” is the failure to earn the revenue in the subsequent period. In that event, however, the collection must be returned, and normally the tax paid is in effect refunded. An asset for the “prepaid” tax always arises and should be recorded in this situation, even though the revenue is earned in a period of no accounting or taxable income.
The other situation—estimated expenses are a good example—is somewhat different. The tax is “prepaid” indirectly or constructively through the absence of a deduction for an expense which is recognized in the financial statements. No future “benefit” exists unless the expense reduces taxes in the future. An expense may fail to reduce future taxes for either of two reasons: (1) the liability accrued for the expense is not paid, or (2) the taxable income in the period in which it is paid is insufficient to produce any tax benefit. The first reason is the result of an unavoidable estimating error and should be treated as any other correction of estimates.

If payment of the accrued expense is not reasonably expected to reduce income tax because taxable income is insufficient in the period of payment, no asset exists at the time the tax is “prepaid.” The appropriateness of recording an asset depends therefore on whether or not taxable income, excluding the timing difference, in the subsequent period is expected to at least equal the amount of the timing difference. This presumption is reasonable for the customarily profitable company with a history of profitable operations and expectation of continuing profits. For an expense never to reduce taxes under the current loss carryover provisions, losses must be relatively large or must recur over several periods. If results of operations have been losses or spotty performance, however, an asset should not be recognized unless the evidence is convincing that the company will be sufficiently profitable in the relevant future periods.

14 The loss carryover provisions introduce a complicating factor, which is discussed in Chapter 7, but do not affect the theory involved in this situation.
Applications of Interperiod Allocation of Income Taxes

Applying Prior Analyses

The earlier analyses and conclusions of this study are applied in this chapter to determine solutions for tax timing differences which may require interperiod allocation. Four distinct types of tax timing differences are explained in Chapter 1:

Revenues or gains are taxed after accrued for accounting purposes.

Expenses or losses are deducted for tax purposes after accrued for accounting purposes.

Revenues or gains are taxed before accrued for accounting purposes.

Expenses or losses are deducted for tax purposes before accrued for accounting purposes.

Three concepts and methods of allocating income taxes among periods are described and illustrated in Chapter 2. Support for each of the three concepts is set forth in Chapter 3. The only conclusion in these chapters is that differences among the three methods stem from and are explained by differences in the assumptions underlying each concept.
The three proposed methods of allocating income taxes and two proposals for combining the methods are evaluated in Chapter 4. The tentative conclusion is that no one of the three methods provides a satisfactory basis of interperiod allocation of income taxes for all four kinds of timing differences. The analysis points to some combination of methods, but those evaluated are found unacceptable.

Arguments regarding the extent of allocation are presented in Chapter 5 and lead to the conclusion that interperiod tax allocation procedures should be applied to all material timing differences. Allocation is recommended regardless of whether or not the differences recur regularly over relatively long periods and whether assets or liabilities are recognized.

Applications for Types of Timing Differences

The four types of timing differences rather than any one allocation method or combination of methods provide the basis for the following analysis. The principles of accrual and deferral accounting are applied to each class. An important consideration in applying these principles to income tax allocation is that cash moves in one direction—from a company to the government. No cash receipts are involved except in special situations. The amount and the timing of tax payments are the factors which determine the proper accounting. An asset arises if the cash payment precedes recognition of the tax expense. A liability arises if recognition of the tax expense precedes the payment. The two types of timing differences involving revenues and gains are straightforward when analyzed in this manner. The two involving expenses and losses are more complicated because deductions have an inverse effect on tax payments. Therefore, the differences involving revenue are discussed first, a departure from the organization in other parts of the study. The effects of operating losses and their relationship to timing differences are considered in Chapter 7.

Revenues or Gains Taxed After Accrual. Using the installment sales method for tax but not accounting purposes (Case A in Chapter 2) and using the completed-contract basis for tax purposes but percentage-of-completion in the financial statements typify revenue taxed after it is recognized in the income statement.

Income tax allocation in this case is clearly the accrual of an expense and a liability. Revenue is recognized in the financial statements and at some future time the related tax is payable. By taking
advantage of provisions of the tax laws, current revenue is not reported as taxable income and payment of taxes on the amount is postponed. The amount of income tax expense and liability is determined by the payment when the tax is assessed; the period to which it is allocated depends on when the related revenue is recognized in accounting income determination. The tax to be paid depends on future tax rates and future taxable income. Normally the most reasonable estimate is that current rates will continue but sometimes changes in rates may be anticipated. If tax rates subsequently change, the recorded liability should be revised by adjusting prior years' income. If losses or other factors are likely to nullify the future tax payment, the amount of the estimated expense and liability is zero.

**Revenues or Gains Taxed Before Earned.** Rents and royalties collected before being earned (Case C in Chapter 2), proceeds of sales of carved-out oil payments, profits on intercompany transactions, and gains on sales of property leased by the seller are examples of revenues which may be reported in a tax return before recognized for accounting income.

Tax allocation for this kind of timing difference is clearly the deferral and subsequent amortization of prepaid income tax. Even though this revenue is unearned, the total cash collected is included in taxable income. A portion of the taxes paid relates to revenue not recognized for accounting purposes, but the cash is disbursed and is not recoverable. The total tax paid is not an expense relating to income of the current period because a part is allocable to periods in which the related revenue is recognized. The asset is a "prepaid expense" or a "deferred charge to expense."  

The amount of tax paid determines the amount to be deferred to future periods. No event can occur between the time the tax is paid and the time the revenue or gain is recognized to change the fact that the revenue or gain has been reported as taxable income and the related tax paid. Introducing tax rates expected in future periods results in an artificial and unwarranted shifting of expense among periods. This is illustrated and discussed in Chapter 4, pages 58 to 60.

**Tax Deduction Before Recording Expenses.** Using accelerated depreciation methods for tax purposes only (Case D in Chapter 2) is the most frequent instance of deducting costs in the tax return.

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1 Prepaid expenses and deferred charges are conceptually the same and are accounted for in the same way.
first. Other examples include: depreciation guideline lives shorter for tax than for accounting purposes and immediate tax deduction of research and development costs which are capitalized in the accounts.

The deduction first reduces the amount of taxes paid; its subsequent absence increases taxes paid. This "seesaw" effect inherent in differences in timing of deductions complicates finding a solution. In this situation, the effect of the seesaw is postponement of the tax payment. Attempts to treat the initial reduction of taxes paid as a deferred credit without considering the subsequent increase except as an indicator of when the deferred credit should be amortized results in a procedure which does not conform to accrual and deferral accounting (discussed and evaluated in Chapter 4, pages 48 and 49).

Tax allocation for items deducted for tax purposes earlier than recorded for accounting purposes recognizes a tax expense before the tax is paid. Recognizing an expense before it is paid involves accrual of a liability.

The income tax accrued in any period is the amount of tax which will be paid in either current or future periods as a result of the components of accounting income. The basis for determining the amount and period to be charged for the accrued tax liability is the same as that discussed for revenues taxed after accrued. The liability is recorded at anticipated tax rates and revised for any later changes in rates.

**Expenses Accrued Before Tax Deductible.** The most frequent instances of expenses accrued before being tax deductible are those estimated expenses and losses which are not deductible for tax purposes until paid. Among them are guarantees and product warranties (Case B in Chapter 2), deferred compensation and profit-sharing, pension costs, losses on inventories and purchase commitments, and provisions for repairs or self-insurance. Using shorter lives for depreciation accounting than for tax purposes creates the same type of timing difference.

An income tax is "paid" when an expense is accrued but cannot be reported as a deduction to reduce current tax payments. Accounting questions to be resolved relate to both the timing and the amount of the tax expense: (1) should the expense be included in the period for which the tax is "paid" or in the future period in which the item becomes deductible? and (2) should the amount of the expense be determined by the "payment" of taxes or by the effect on taxes payable for the period in which the item becomes deductible, if the two differ? The fact that the tax "payment" results from the absence of a current
deduction for an expense and the later deduction results in the absence of a tax payment complicates the solution.

The timing of the expense charge depends on the anticipation of taxable income. The entire amount of tax paid is an expense of the period of payment unless a portion applies to future periods. Applicability of the tax effect of the timing difference to future periods depends on whether tax payments are likely to be reduced because the item is deductible when paid, which, in turn, depends primarily on the existence of sufficient taxable income in the later period.

The amount of the expense depends on the tax already paid. The analysis developed at the beginning of this chapter and applied to the other three types of timing difference shows that interperiod income tax allocation is a process of matching tax payments with the periods to which they apply rather than with the periods in which they are paid. The tax payments set the limit on tax expenses; over the life of a business the tax expenses can be neither more nor less than tax payments.

The tax payment in this situation is a prepaid expense rather than a receivable or an inventory, and subsequent changes in tax rates have no effect on its amortization. It is comparable to other prepaid expenses, such as prepaid insurance or prepaid rent. The amount of prepaid taxes is measured by cost in the same way that prepaid insurance or prepaid rent is measured by cost, and the amount paid is amortized to expense even though subsequent tax rates, subsequent insurance rates, or subsequent rental rates change during the period of amortization.

**Amounts of Tax Effects**

**Tax Rates to Measure Amounts.** Tax rates to measure effects of timing differences have been discussed in the study as though a single rate were pertinent to any year. The discussion has ignored the fact that several rates may be relevant in both the original and reversal years. Appropriate measuring rates must be selected even when there are no changes in statutory tax rates from year to year.

Normal, surtax, and capital gains rates determine the income tax of most companies. How do these rates affect tax allocation? Should tax effects of timing differences of ordinary income items be recorded at the normal tax rate, the combined normal and surtax rates, or a weighted average of the normal and surtax rates? Should tax effects of timing differences involving capital gains be treated separately and
recorded at the alternative capital gains rate or at a weighted average rate for all taxable income?

The normal tax rate alone could apply under present tax laws only to amounts less than $25,000. The discussion of principles for ordinary income timing differences is limited therefore to two possibilities of recording the tax effect: (1) combined normal and surtax rates or (2) a weighted average of normal and surtax rates.

Illustration of rates. Calculations of tax effects for ordinary income transactions are illustrated for the two possibilities using the amounts for year two of Case A in Chapter 2, with 00’s added.

<table>
<thead>
<tr>
<th>Description</th>
<th>Without Item of Timing Difference</th>
<th>Tax Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other revenues less expenses</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Installment sales profit</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Taxable income</td>
<td>$110,000</td>
<td></td>
</tr>
<tr>
<td>Income tax payable:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$25,000 at 22%</td>
<td>$5,500</td>
<td>$5,500</td>
</tr>
<tr>
<td>remainder at 48%</td>
<td>40,800</td>
<td>36,000</td>
</tr>
<tr>
<td></td>
<td>$46,300</td>
<td>$41,500</td>
</tr>
</tbody>
</table>

Average income tax rate

42.1% 41.5%

Rates to measure tax effect:

Combined normal and surtax rate—computed as 48% of $10,000

Tax per return $46,300

Tax without item of timing difference 41,500

Differential in tax $4,800

Average rate—computed as 42.1% of $10,000 $4,210

Applying the combined normal and surtax rate to the timing difference produces the same amount as computing the differential in taxes payable because of the timing difference. The average rate is, of course, affected by the proportions of taxable income taxed at the various rates. The tax effect is recorded in year one, the year the
difference originates, at $4,800 or $4,210 depending on the choice of the combined rate or average rate.

**Average income tax effect or differential effect.** The disparity between a tax effect as an average and as a differential diminishes as taxable income increases. The gap is insignificant when taxable income is large, and the choice of rates is an academic problem for many companies. This study deals with the principle involved.

Averaging is based on the assumptions that all items included in taxable ordinary income are essentially similar and that the average represents the group. Income tax allocation based on an average implies that each dollar of ordinary income has an equal effect on the income tax payable for a year. Averaging conflicts with the basic premise on which allocating income tax is based, namely, that tax timing differences of revenue and expense transactions have a determinable effect on taxable income and on taxes payable.

Applying the combined normal and surtax rate to the timing difference supplies the answer to: How much are taxes payable changed by the timing difference? This interpretation is consistent with the conclusion that tax effects of individual transactions are identifiable. The computation isolates and accounts for the tax effects of specific timing differences. The tax differential computation applies whether the tax effect is classified as an asset or a liability.

The income tax assessed on nearly every company varies from the statutory normal and surtax rates. The income tax for a period may be reduced because of tax credits, such as investment credit or foreign tax credit, or other reductions, such as those for dividends received. Regardless of the actual rate, the tax effects of timing differences should be computed as the differential in tax.

The use of a weighted average of the normal and surtax rates may be the only practical solution for a company with taxable income which varies above and below the $25,000 line at which surtax rates begin to apply. Otherwise the anticipation of applicable rates when deferred tax liabilities mature may be impossible.

**Capital gains.** Similar reasoning applies to choosing a rate applicable to capital gains transactions. Capital gains should not be averaged with ordinary income. The tax effects of transactions taxable at alternative capital gains rates should be measured at those rates. This method of computation is recognized in Paragraph 8, Chapter 10B of *ARB 43.*
Problem of Discounting Liabilities. The advantage from electing to postpone tax payments and the incentive for investment emanating from the deferral provisions of the law both result from the fact that a dollar now is worth more than a dollar at some time in the future. Accounting for liabilities for postponed tax payments therefore embraces the question of discounting.

The question of discounting is most important for tax liabilities arising from timing differences extending over many years, especially those related to depreciation. Many timing differences requiring interperiod income tax allocation are of relatively short duration. For example, those involving installment sales, long-term construction contracts, deferred research costs, deferred preoperating costs, and many others are reversed in two or three years. Introducing an interest factor through discounting the related liabilities would reduce these amounts, but only slightly. Likewise, most prepaid taxes recognized by interperiod tax allocation are relatively short-lived. Although in theory the discounting question is relevant to all assets and liabilities recognized by tax allocation procedures, as a practical matter discounting is most likely to be applied to long-term liabilities.

Arguments put forth against discounting tax liabilities fall into three broad categories: (1) the general argument that accountants are not and should not be concerned with present values, (2) the practical argument that discounting is an undesirable and unnecessary complication in accounting for income tax liabilities and (3) the theoretical argument that discounting is appropriate but the discount rate in the transaction is zero.

Present values in accounting. The first argument is refuted by the facts. Accountants do account for present values of long-term liabilities (and assets), because discounting is inherent in the bargaining process which establishes the values accounted for. Discounting is common practice for a number of noncurrent liabilities in addition to those requiring the creditor to pay interest currently, for example, accrued costs of pension plans, liabilities for payments under deferred compensation contracts, and long-term contract obligations related to discontinued operations. Present values are usually ignored in those instances in which payments are expected within a relatively short period or in which the dates of payments are so indefinite that discounting is not feasible, for example, the estimated costs of settling pending lawsuits or costs of disposing of an unprofitable division.
Practicability of discounting. The second argument regarding the complications caused by discounting must be considered in relation to the significance of differences between discounted and undiscounted values. That is, complications in and of themselves are never a reason for failure to do something that is correct. A tax liability is of the same nature as any other liability expected to be paid at some specific future date or periodically over a specific future period. The dates of payments are readily determinable because they are related to the reversal of specific timing differences.

Practical problems will undoubtedly be encountered in discounting tax liabilities in many situations, but these are likely to be less difficult than most accountants anticipate. Timing differences to be reversed in one period may be grouped for discounting computations. Once the schedule of maturities of payments is established, computing present values is a relatively simple, though perhaps time-consuming, task. Discounting tax liabilities is feasible; the real question is whether the effect of discounting is significant.

Generalizations about the significance of discounting income tax liabilities are not based on experience because none exists. Numerous inferences can be and have been made, but all are based on assumptions, intuition, models, or analogy with other situations presumed to be similar rather than on empirical evidence. That the difference between discounting and not discounting long-term tax liabilities is likely to be significant, however, can be seen in any present value table. The present value is only one-half to two-thirds of an amount postponed for ten, fifteen, or twenty years, even at the relatively low discount rate of 4%. If the rate is higher the gap is even more pronounced. More knowledge than is presently available should be obtained before the significance for all corporations can be assessed realistically.

The evidence available indicates that discounting of long-term tax liabilities is required whenever the interest factor is significant. To do otherwise grossly overstates liabilities and may significantly misstate periodic net income. The best way to develop the experience necessary to find the circumstances in which discounting is and is not significant is for a large number of companies in varying situations to use the discounting procedure.

Discount rate. The third argument—the discount rate is zero—is not an argument against discounting, but the effect is the same.
basic proposition is that because the same amount will satisfy the tax liability whether it is paid currently or delayed far into the future, the interest rate is zero. The argument goes that the government in essence makes an interest-free loan to a company to stimulate buying depreciable assets, and when the market demands no interest accountants should impute none.

The idea of an interest-free loan is a fiction which may or may not be useful. No fiction is needed to explain deferral of tax payments. The government does not require immediate payment of taxes otherwise due and allows a company to continue using its own funds, if the company elects to take advantage of certain provisions of the law. Postponing payment is of value to the company because the retained funds can be invested profitably. If the taxes were paid currently, this return would be lost. The loss of return would be a cost of paying taxes now, and theoretically a current payment would be partly taxes and partly interest. Interest is implicit in postponing tax payments.

If the discount rate is not zero, what rate should be used? The foregoing analysis points to the internal earning rate of the company. Undoubtedly arguments can support the use of other rates, for example, the external rate for borrowing. Different rates may apply in different situations. Adoption of discounting should not be delayed by quibbles over rates. Experience with other discounting problems—for example, pensions and leases—indicates that an appropriate rate can be selected once it is decided to discount.

Presentation of Income Taxes

Disclosure of Practices and Effects. Currently, the variety of accepted practice requires extensive disclosure. Existing tax allocation practices follow each of the three basic methods or combinations of them. The results of operations and net assets often differ significantly depending on the practice adopted. Furthermore, recognizing all timing differences or only selected ones are both acceptable practices at present. Current accounting treatments and their effects on the financial statements can be understood and appraised only if the most important facts are disclosed: (1) the major causes of income tax allocation—primarily a description of the nature of the timing differences accounted for, (2) an indication of the method applied, (3) the amounts of tax effects which are recognized in the balance sheet, and (4) timing differences for which tax effects have not been recognized.
This extensive disclosure will no longer be necessary if the accounting practices recommended in this study are adopted by all companies. Income tax expense and assets and liabilities recognized by tax effect accounting will represent appropriate amounts which need no supplementary explanations. In the year that methods of allocating taxes are changed and tax effects of additional timing differences are recognized, an explanation of the changes and of their effects on net income should be included in a note.

**Income Statement.** Income tax expense should ordinarily be shown in the income statement as a single amount. Disclosure of the book-keeping and derivation of the resulting tax expense is no more essential than for other expenses because the income tax allocation procedures recommended in this study fit the normal pattern of accounting for expenses. The amount of the expense for a period is the sum of the applicable portions of (1) amounts paid currently, (2) accruals of unpaid amounts, and (3) amortizations of prepaid amounts, determined exactly the same as expenses for wages or insurance.

Current emphasis on the estimated tax payable for a period makes it advisable to disclose this amount, at least for the time being. This may be accomplished by (1) stating parenthetically in the expense caption the amount of estimated income taxes payable for the period or the effect on the expense of the allocation procedure or (2) stating in a note the components of income tax expense for the period. An alternative, but less desirable, presentation is to show separately in the income statement the estimated income tax payable currently and the portion of the expense resulting from allocation.

**Terminology.** A clear indication of the characteristics of the tax allocation, that is, whether an asset or liability is recognized and whether a tax effect is accrued or amortized in the period aids readers. Descriptions should fit individual circumstances and timing differences. The explanations of tax effect accounting should avoid references to tax reduction, tax saving, and tax benefit. Examples of suitable phrases in the period that a timing difference originates are: $______ accrued federal income taxes payable in later years and $______ federal income taxes paid deferred to later years. When a tax timing difference is reversed the difference between the income tax expense and income tax payable for the period may be explained in phrases such as payment of federal taxes accrued in prior years and amortization of federal income taxes deferred in prior years.
Correction of taxes for prior years. Liabilities for income taxes payable in the future may be adjusted to new or expected rates when the timing differences result from an expense deducted for tax purposes before it is accrued or revenue earned before it is reported for tax purposes. The decrease or increase in the liability is a correction of income tax expense for the years when originally accrued. The adjustment should be explained, preferably in a note.


Terminology. The most common designation of liability amounts recognized in tax effect accounting is probably "Deferred federal income taxes." This designation more appropriately describes assets recognized by allocation procedures, but its use for liabilities also is not objectionable.

Current or noncurrent classification. The customary criteria for determining current and noncurrent classifications of assets and liabilities (Chapter 3A of Accounting Research Bulletin No. 43) apply to assets and liabilities recognized by tax allocation procedures. The classification depends on whether the related timing differences are reversed within a year or the operating cycle. Basically, assets for deferred income taxes are current if they are applicable to net income of the next year or to the operating cycle when it is more than a year. Likewise, liabilities are current if they will be paid (the timing difference is reversed) within the year or operating cycle. Other assets and liabilities for allocated taxes should ordinarily be classified as noncurrent assets or liabilities.

Tax assets and liabilities which relate to items presented as current assets or liabilities are normally current under Chapter 3A, Paragraph 7.2 The same criteria, year or operating cycle, apply to both current assets and current liabilities in any given situation. For example, if the tax liability represents the tax effects of timing differences for installment sales or long-term construction contracts which result in current assets, it should be shown as a current liability.3 If fees or rent collected in advance are shown as current liabilities, the related

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3 SEC Accounting Series Release No. 102 specifically requires this treatment of deferred taxes related to installment receivables classified as current assets.
taxes deferred should be presented as a current prepaid expense. Any other classifications would affect working capital and other ratios, perhaps significantly.

The acceleration of corporate tax payments to a current basis, as provided in the Tax Adjustment Act of 1966, introduces a new dimension to the distinction between current and noncurrent liabilities. Beginning three and one-half months after December 31, 1966, installments of the estimated 1967 tax must be paid. The entire tax over $100,000 is required to be paid within the taxable year, subject to the provision that without penalty the estimated tax may deviate from the actual tax by as much as 30%. As a practical matter, therefore, the acceleration of installment payments means that by the end of the year 1967 a corporation’s maximum unpaid liability for taxes for the current period will be 30% of the total tax for the period (unless under $100,000). A portion of each otherwise noncurrent accrued tax amount is likely to be current because of the timing of payments of estimated taxes. The amount applicable to the following year may be computed readily and classified as a current liability for statement presentation. The current liability portion may be combined in the statements with the liability for taxes payable for the current and prior periods.

Separate or combined presentation. Assets and liabilities recognized by tax allocation are different in nature—prepaid expenses or deferred charges v. estimated future payments. Therefore, the amounts should be shown separately and not as a net amount. The balance sheet of a typical profitable company is likely to show three separate items for federal income taxes:

Current liability—the unpaid portion of federal income taxes payable for the current and prior years and the portion of accrued income taxes payable in the next year or operating cycle

Noncurrent liability—the portion of accrued federal income taxes payable after one year or operating cycle

Noncurrent asset—the portion of deferred federal income taxes to be amortized after one year or operating cycle

(The current portion of a deferred tax asset may be combined with other prepaid expenses unless the item is exceptionally large.)
**Unrecorded Tax Effects.** Not all companies will be justified in recording assets for prepaid taxes. The discussion of recording assets for prepaid taxes in Chapter 5 emphasizes that the usual profitable company should normally record an asset for the tax effect of timing differences. The earnings prospects of many companies, however, will not justify allocating to the future part of the tax paid for the current period in anticipation of deductions for expenses. A potential reduction in future income taxes nevertheless exists, even though uncertainty precludes its current recognition. Both the existence and amount of an unrecorded tax effect should be disclosed. Often an explanation may be included conveniently in a note pertaining to the expense or loss involved rather than a note on federal income taxes. The note should be limited to explaining the facts and circumstances without attempting to indicate the likelihood of receiving a future benefit.

**Procedures to Implement Recommendations**

**Areas of Difference.** Earlier parts of this study explain that current accounting practice is based on various opinions and interpretations of the nature of interperiod income tax allocation and of the extent to which the procedures should apply. Adopting the recommendations of this study will therefore require some changes in present practice. Some companies will be affected only slightly while others will find that necessary retroactive adjustments are material.

Current practices which differ from the recommendations may be generally grouped into three types:

Material effects of tax timing differences are not recognized in the accounts and statements.

Amounts of tax effects accounted for are computed at other than recommended rates.

Classifications in income statements and balance sheets do not conform to recommendations.

Each corporation should determine what, if any, changes in accounting for allocated income taxes are needed by reviewing its procedures and present status of deferred taxes. The effects of changes on earnings and financial position will be understood more readily if all companies implement changes in the same manner.
CHAPTER 6: APPLICATIONS OF INTERPERIOD ALLOCATION OF INCOME TAXES

The objective in implementing the recommendations is to determine financial position and results of operations in future periods in accordance with principles of accrual and deferral accounting as they apply to income taxes. Balance sheet amounts should be restated, and tax effects relating to the past should be treated as corrections of income of prior periods.

**Tax Effects to Be Recognized.** Adjustments will be necessary to account for tax effects of past timing differences previously ignored. Some companies adopted tax allocation procedures in 1958 with the issuance of Accounting Research Bulletin No. 44 (Revised) but did not adjust retroactively for the tax effects originating in prior periods. Others accounted for the effects of prior timing differences at the time of adopting tax allocation by accumulating the amount over a reasonable period. As a result, accumulated allocated taxes may not reflect the entire effects of all existing timing differences. A number of companies interpreted the Bulletin to apply only to timing differences caused by accelerated depreciation. Many companies did not record assets resulting from the tax effect of timing differences.

The amount of prepaid taxes or liability for taxes at the end of the preceding year should be computed for all material differences in tax timing related to the remaining assets and liabilities and unreported revenues and deductions. The tax asset or liability accounts should be restated with an accompanying adjustment of income of prior years.

Numerous companies have recorded the tax effects of most or all material timing differences. Their problems of implementation are primarily those of adopting recommended tax rates and statement presentation.

**Amounts of Deferred Tax Assets and Liabilities.** Prepaid taxes, when recognized, have usually been computed at tax rates in effect when the timing difference originated. Inasmuch as this procedure conforms to the recommendations of the study, few adjustments are anticipated.

Tax rates in effect when the timing difference originated have also been used widely under the deferred and net of tax methods when tax payments are postponed. Rates of 52% or 50% have been used in some years whereas the tax rate is now 48%, and the current rate may be the best estimate of future rates. To conform to the recommendations of the study, the liability would be stated at the amount expected to be paid by adjusting income of prior years. The ad-
visability of an adjustment may be influenced by practical considerations.

Liabilities resulting from timing differences which will be reversed in the near future—for example, those related to installment sales, completed contracts, and accelerated depreciation of assets nearing the ends of their useful lives—should be restated to the expected rate. Liabilities resulting from timing differences which will not be reversed for several years may be restated. If tax rates considerably in the future must be estimated, the original rates (now 52% or 50%) may be as reasonable an estimate as the current rate (now 48%). It may be prudent to avoid reducing a liability only to increase it if tax rates are increased later.

Classification of Deferred Taxes. Many companies have applied the net of tax method for some or all differences in tax timing. Tax assets and tax liabilities should now be set out separately to eliminate this presentation. Income statements and balance sheets of prior years included in current reports should be reclassified to the recommended presentation.
Operating Losses

Current Accounting for Operating Losses

Carryback and Carryforward of Losses. The Internal Revenue Code provides that a "net operating loss" for a year may be applied to reduce taxable income in other years. The total income tax of a series of years may thus be less than if a tax were assessed for each year independently. The current law prescribes that a net operating loss be carried back to the third year before the loss and applied until exhausted against taxable income in successive years through the fifth year after the loss.

Permitting the deduction of expenses of the loss year either in the loss year or in designated profitable years creates a special kind of tax timing difference. The carryback of losses results in the refund of taxes previously paid for past profitable years; the carryforward of losses results in the elimination or reduction of taxes otherwise payable for future profitable years. This chapter explores the major problems of accounting for loss carrybacks and carryforwards and their impact on accounting for other timing differences.

AICPA Recommendations. Loss carrybacks normally are accounted for as results of the loss year; loss carryforwards normally are accounted for as results of the years in which they offset taxable income. The tax effects of about 98% of the loss carryforwards of about 50 companies in the five years from 1959 to 1963 were accounted for as a part of current net income according to statistics.
in Accounting Trends and Techniques. Nearly one-third of the loss carryforwards in the sample eliminated federal income tax expense in profitable years. The tax effects obviously were often material.

Present practice is based on recommendations of the committee on accounting procedure in Chapter 10B of Accounting Research Bulletin No. 43:

16. ... amounts of income taxes paid in prior years which are refundable to the taxpayer as the result of the carry-back of losses or unused excess-profits credits ordinarily should be included in the income statement of the year in which the loss occurs. . . .

17. Where taxpayers are permitted to carry forward losses or unused excess-profits credits, the committee believes that, as a practical matter, in the preparation of annual income statements the resulting tax reduction should be reflected in the year to which such losses or unused credits are carried. . . . However, where it is believed that misleading inferences would be drawn from such inclusion, the tax reduction should be credited to surplus.

Illustration. Assume that an otherwise profitable company incurs a large loss in the fifth year of its existence. The following tabulation shows the results of present practice in accounting for income taxes and net income assuming a 50% tax rate, pretax accounting income equal to taxable income except for a carryback and carryforward of a loss, and a tax operating loss equal to the accounting loss:

<table>
<thead>
<tr>
<th>Year</th>
<th>Pretax Income (Loss)</th>
<th>Application of Loss</th>
<th>Income Tax Paid (Refund)</th>
<th>Income Tax Expense</th>
<th>Net Income (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$15,000</td>
<td>$7,500</td>
<td>$7,500</td>
<td>$7,500</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>25,000</td>
<td>$25,000</td>
<td>12,500</td>
<td>12,500</td>
<td>12,500</td>
</tr>
<tr>
<td>3</td>
<td>20,000</td>
<td>20,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>4</td>
<td>15,000</td>
<td>15,000</td>
<td>7,500</td>
<td>7,500</td>
<td>7,500</td>
</tr>
<tr>
<td>5</td>
<td>(100,000)</td>
<td>60,000</td>
<td>(30,000)</td>
<td>(30,000)</td>
<td>(70,000)</td>
</tr>
<tr>
<td>6</td>
<td>20,000</td>
<td>$20,000</td>
<td>0</td>
<td>-0</td>
<td>20,000</td>
</tr>
<tr>
<td>7</td>
<td>25,000</td>
<td>20,000</td>
<td>2,500</td>
<td>2,500</td>
<td>22,500</td>
</tr>
<tr>
<td>8</td>
<td>30,000</td>
<td></td>
<td>15,000</td>
<td>15,000</td>
<td>15,000</td>
</tr>
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<td></td>
<td>$50,000</td>
<td>$60,000</td>
<td>$40,000</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
</tbody>
</table>

Present Practice Pro and Con. Many accountants believe that present practice is correct. They contend that any value of a tax carryforward is created by the earnings which it offsets. Unless a
company produces profits within the five years following a loss, a loss carryforward is worthless. The earnings which produce the value of the carryforward should therefore benefit by its tax effect.

The opposing view is that all tax effects of an operating loss are attributable to the loss year and no part is includable in future earnings. A qualified assent to Chapter 10B of ARB 43 dealt with this point:

Mr. Wellington objects to paragraph 17, as he believes that the amount of the reduction in tax of the later year is due to the operations of the prior year, is in effect an adjustment of the net income or net loss previously reported, and, unless it is relatively not significant, should not be included in the income of the current year but should be credited to surplus. In an income statement for several years, he would show this credit to surplus as an addition to the income previously reported for the prior year, with suitable explanation.

A more emphatic criticism of present practice was:

In our opinion, the inclusion in current-year income of a material tax benefit resulting from a prior-year loss will always result in "misleading inferences."¹

Critics of present practice hold that it misstates income because the loss of one year (the fifth in the illustration) reduces income tax expense for later years (sixth and seventh). If the final tax effects were attributed to the loss year, net income or loss for each of the years in the illustration would be:

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Income (Loss)</th>
<th>Year</th>
<th>Net Income (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$ 7,500</td>
<td>5</td>
<td>($50,000)</td>
</tr>
<tr>
<td>2</td>
<td>12,500</td>
<td>6</td>
<td>10,000</td>
</tr>
<tr>
<td>3</td>
<td>10,000</td>
<td>7</td>
<td>12,500</td>
</tr>
<tr>
<td>4</td>
<td>7,500</td>
<td>8</td>
<td>15,000</td>
</tr>
</tbody>
</table>

Comparison of these results with the illustration of present practice shows that the difference of opinion relates only to the treatment of effects of loss carryforwards. Net income of each of the carryback years (second, third, and fourth) is the same under either method.

The total refund of taxes paid in prior years is ascribed to the loss year which produced the refund. Reported results for six years may be affected by the choice of method because losses may be carried forward as many as five years.

**Alternatives to Present Practice**

**Theoretical Considerations.** Allocation of the total tax effect of a loss to the loss year is preferable for two reasons. First, it is consistent with the assumption underlying interperiod income tax allocation, that the income tax follows the income. Allocating a future tax reduction to the carryforward years ignores that the loss causes the reduction; only the value of the carryforward depends on taxable profits in later years.

Second, if future tax reductions are allocated to carryforward years because these earnings give value to the carryforward, allocating tax reductions to carryback years is equally appropriate because these earnings produce the tax refund. Either the tax effect relates to the loss or it relates to the earnings to which the loss is carried. Current practice is not based on an argument that past and future earnings are distinct in nature. It is more likely an attempt to cope with uncertainty of the future than an attempt to match the tax effect with earnings. The committee on accounting procedure implies as much in Chapter 10B when it prescribes the present procedure “as a practical matter.”

From a theoretical standpoint, the entire tax effect of a loss should be allocated to the loss year. Current practice therefore overstates net income in carryforward years and overstates the loss in a loss year if a carryforward later reduces taxes.

**Preferable Alternatives.** Overstating net income for years in which an operating loss carryforward reduces taxes can be avoided in either of two ways: (1) recognize the possible tax benefit of the carryforward as an asset in the loss year or (2) recognize the tax reduction in the carryforward year as a correction of the previous loss. The first alternative is clearly preferable whenever a tax benefit is realized from a loss carryforward. It results in correctly stating a loss in the loss year and net income of the carryforward years. The main problem is practical—determining in a loss year whether the tax effect of the loss carryforward qualifies as a valid asset because a benefit results.
The other alternative, recording the benefit of a carryforward as a correction of a previous loss, is less satisfactory. The loss is misstated when originally reported if the carryforward benefit is ultimately realized. Correcting a prior loss is superior to present practice, however, because income for the years in which the carryforward reduces taxes is not overstated. In essence, this stop-gap solution relies on hindsight, but it may be the only practical way for most companies to avoid overstating income in years following a loss.

**Recommended Recognition of Benefits.** A practical solution is a judicious combination of the two alternatives. The uncertainties surrounding loss carryforwards suggest that the usual approach should be to delay recognizing the future tax effects of a loss until benefits are realized in profitable years. Prospects of income are always somewhat uncertain, and when a company operates at a loss the outlook is even more clouded. A loss year is always a danger signal, and the “counsel of caution” underlying conservative accounting is essential. Reasonable doubt exists that many, perhaps most, loss carryforwards will reduce future taxes. Companies which have suffered sizable losses cannot automatically presume that immediate future prospects are bright. A succession of loss years or cumulative losses that exceed cumulative taxable income for a number of years cast additional doubt that the benefits of a tax loss will be realized. Until a new company produces significant earnings, anticipating a value for a loss carryforward is too optimistic. Most companies should not record in a loss year a resulting potential tax reduction.

But best practice for most companies is not necessarily the best for all. The described uncertainties do not fit every situation because losses may be caused by identifiable, isolated events with only a remote possibility of recurrence. A company may be virtually certain that a loss carryforward will be a benefit:

... consider a well-established company with a long history of steadily increasing earnings and with excellent future prospects. Such a company may incur a loss (to be carried forward) because of some identifiable circumstance which is not expected to recur—a loss, for example, resulting from an unprofitable venture into a new field. For such a company the uncertainty as to the future recovery of the related carryforward benefit is minimal—and may indeed be considerably less significant than other uncertainties which have been resolved in arriving at amounts shown in the financial statements. Under these circumstances, financial state-
ments recognizing the anticipated carryforward benefit may well be more useful than statements prepared under the present method of reporting the carryforward benefit only when it is realized.2

A few other situations are essentially similar to the single unprofitable venture used as an illustration in the quoted statement. For example, abandoning an unprofitable product line by an otherwise profitable company probably means higher future profits. Any one of the following might likewise affect a large proportion of a company's operations and cause temporary but large losses: unusually high costs related to a strike settled in the year, a disastrous crop failure, or government restrictions on imports, exports, or production that had existed temporarily during the year. Other circumstances may have comparable characteristics and a similar effect.

Few companies, however, meet the restrictive conditions that the tax benefits of carryforward losses "would be recorded in the year of loss, but only to the extent that earnings during the carryforward period were expected, beyond reasonable doubt in the light of the information at hand, to be sufficient to permit realization of the benefits."3 Situations which qualify will have all or most of these characteristics: (1) the loss results from an identifiable, isolated, and nonrecurring cause, (2) the company has been continuously profitable over a long period or if occasional losses have occurred they were easily and fully offset against taxable income with margin to spare, and (3) the probability is high that future earnings will be large enough to cover the carryforward benefit to be recognized and soon enough to begin realization of the benefit in the year after the loss.

Whether or not to recognize an asset for a potential carryforward benefit is probably an infrequent question. Loss carryforwards are unusual for previously profitable companies. Most companies realize the tax benefits of sizable nonrecurring losses through the carryback provisions of the law. In other words, the reason for most carryforward losses is the absence of past profits.

A loss carryforward pertaining to a company that is a part of a business combination is a special case and the certainty of realizing the potential benefit needs to be reconsidered in the light of the new situation.

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3 Ibid., p. 50.
In summary, the proposed solution represents the best combination of the need for matching in both the loss year and in subsequent years and the need for caution in the loss year. A few companies should meet the rigid conditions necessary to warrant current recognition. The benefits of most loss carryforwards should not be recognized until realized and should then be treated as corrections of the loss year rather than as reductions of tax expense of the carryforward year.

Operating Losses and Interperiod Allocation

Interperiod allocation of income taxes presumes that current tax timing differences will be reversed in years in which there is taxable income. In contrast, the carryback and carryforward of losses result from provisions of the Internal Revenue Code for offsetting taxable income and losses during a period of years. Nevertheless, common factors often affect the accounting for each, and when the situations become intertwined the accounting becomes interdependent. For example, an asset for future benefits of an operating loss is not recorded because future profitable operations are not reasonably certain. The same uncertainty precludes recording a prepaid tax because of a timing difference for expenses which are not deductible in the current year. Similarly, a liability for allocated taxes will not be paid if taxable income in future years does not materialize or is offset by the carryforward of an operating loss. The effects of an operating loss must be evaluated in relation to other tax timing differences that either originate or are reversed in each of the periods—the loss period, prior periods, and future periods.

An operating loss may result in any one of three situations: (1) the entire loss is carried back and the refund is recognized currently, (2) part of the loss remains to be carried forward and both the refund and the probable future benefit are recognized currently or (3) part of the loss remains to be carried forward and only the refund is recognized currently. If a timing difference originating or reversing in a loss year affects the amount of a tax refund or a recorded carryforward asset, it has a tax effect in the loss year and may be considered in the same way as if it had increased or decreased the amount of a tax payment.

The possible combinations of circumstances and of amounts are nearly limitless. The discussion of some common situations in this section provides some general guides, but the facts of individual cases need to be considered in applying the general principles.
Timing Differences Originating in Nine-Year Span of Loss. The interdependence of accounting treatment of tax effects of loss carryforwards and that of tax effects of other timing differences has already been noted. Two situations affecting the accounting may be distinguished: (1) all tax effects of an operating loss are recognized in the loss year and (2) future tax effects of an operating loss are not recognized until the carryforward reduces taxes.

**Loss carryforward recognized currently.** When all tax effects of an operating loss are recorded in the loss year, the recommendations in Chapter 6 are applicable to tax timing differences that originate in any of the nine years covered by the carryover provisions of the tax law. Recording assets for carryforward benefits is premised on the expectation of taxable income during the carryforward period and perhaps beyond. As long as taxable income is anticipated for these future periods, accounting for assets and liabilities resulting from tax timing differences is not changed by the loss. The same principles apply to the tax effects of a loss carryforward and to those of other timing differences. The loss in the loss year and net income in each of the preceding and following years include the tax effects of the taxable components of periodic operating results.

**Loss carryforward not recognized currently.** The failure to record potential benefits of a loss carryforward complicates accounting for other timing differences. The practical solution of not recording a benefit in a loss year unless its realization is assured may create conflicts with the accounting for other timing differences. Theoretically, both interperiod allocation of taxes for timing differences and recognition of a loss carryforward depend on the expectation of future taxable income. Not recognizing a carryforward benefit should preclude recognizing assets and liabilities related to current timing differences and should require writing off existing tax allocation assets and liabilities. The practical solution may, however, conflict with this theory. The expectation of uncertain future taxable income is the basis for not recording a carryforward benefit. This is not the same expectation as that of no future taxable income.

If timing differences originate in a loss year, the same expectations do apply to all factors, and the theoretical and practical solutions do not clash. Failing to recognize the carryforward benefit and at the same time recognizing liabilities for timing differences which originate in a loss year and reverse in a carryforward year is too conservative. Theory is applied consistently if not recording the carryforward benefit
leads to not recording assets and liabilities for other timing differences. If the benefit is subsequently realized, the effects of timing differences should be recognized as adjustments of the loss year. The same accounting generally applies to timing differences which originate in a loss year and reverse well beyond the five carryforward years, say ten or fifteen years later. The uncertainties regarding taxable income of the next five years cast doubt on anticipating income in later years. Ordinarily these uncertainties indicate that the tax effects of timing differences should be recognized only when taxable income materializes. Adjustments of prior years at that time are corrections of the loss in the loss year.

Likewise no prepaid tax should be recognized if a potential carryforward benefit is not recognized. Prepaid tax can only result from taxes paid. No tax is prepaid in a loss year unless a refund or recognized carryforward benefit is affected by the timing difference. An unrecorded "prepayment" reduces an unrecorded carryforward benefit.

The discord in expectations—uncertain income v. no income—requires extra care in accounting for assets and liabilities existing because timing differences originated prior to the loss year. The failure to recognize a carryforward benefit does not necessarily require the write-off of a liability existing in a loss year as a consequence of past tax allocation. Caution in recognizing a carryforward benefit does not imply that no future taxable income is expected, and adjusting a recorded liability may be premature. Ultimate realization of a carryforward benefit may be probable, even though recording it as an asset is not justified, and adjusting a tax liability in a loss year may require a subsequent readjustment. If no future payment is expected, however, and a tax liability is adjusted, either in the loss year or subsequently, the write-off should be a correction of the period in which it was accrued. The accrual was in error because of the failure to anticipate the losses which eventuated.

Prepaid taxes recorded because a timing difference originated in a carryback year present still a different situation. The tax was paid and deferred to a future period. The full amount prepaid is refunded as a result of the carryback of the loss—all taxes paid in the carryback period are refunded whenever part of the loss remains to be carried forward. The claim for refund is partly a reduction of prepaid taxes and the remainder is a tax credit of the loss year.

*Timing difference increasing refund and carryforward.* The practical solution for carryforward benefits creates a complex problem when
a timing difference that originates in a loss year increases both the amount of refund and the unrecorded tax carryforward benefit. The problem occurs if (1) the timing difference is a type which ordinarily results in a future tax liability, (2) the tax loss without the timing difference would have been less than the taxable income in the carryback period, and (3) the tax loss including the timing difference exceeds taxable income in the carryback period causing part of the loss to be available as a carryforward. The tax effect of the timing difference increases both the refund of prior taxes and the potential carryforward benefit.

Once it is decided not to record the potential carryforward benefit in the described situation, alternatives for handling the effects of a timing difference are: (1) include the full effect of the timing difference on the refund as part of the tax credit of the loss period by ignoring the liability as well as the carryforward benefit or (2) eliminate the effect of the timing difference on the refund by accruing a liability for future taxes to the extent that the increased carryback results in a refund of taxes. The choice affects not only the loss year but results of operations of later years as well. The alternatives are illustrated for the loss year and the first year of the carryforward period. The illustration uses these facts:

1. Pretax accounting loss is $50,000 in Year 1 and $20,000 in Year 2.

2. Taxable income in the three preceding (carryback) years totals $60,000.

3. Pretax accounting income and taxable income are the same except that an item of $50,000 is deductible in Year 1 and recorded in the accounts as an expense in Year 2.

4. The income tax rate is 50% in each year.

<table>
<thead>
<tr>
<th>Resulting Tax Computations</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretax accounting loss</td>
<td>($ 50,000)</td>
<td>($ 20,000)</td>
</tr>
<tr>
<td>Item deductible in Year 1</td>
<td>(50,000)</td>
<td>50,000</td>
</tr>
<tr>
<td>Taxable income (loss)</td>
<td>(100,000)</td>
<td>30,000</td>
</tr>
<tr>
<td>Carryback (carryforward) of loss</td>
<td>60,000</td>
<td>(40,000)</td>
</tr>
<tr>
<td>Unrecorded carryforward of loss</td>
<td>($40,000)</td>
<td>($10,000)</td>
</tr>
<tr>
<td>Maximum future tax benefit</td>
<td>$20,000</td>
<td>$5,000</td>
</tr>
</tbody>
</table>
CHAPTER 7: OPERATING LOSSES

Results of Operations

<table>
<thead>
<tr>
<th></th>
<th>No Tax Liability Recorded</th>
<th>Tax Liability Recorded to Extent</th>
<th>Timing Difference Results in Refund of Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 1</td>
</tr>
<tr>
<td><strong>Pretax accounting loss</strong></td>
<td>$50,000</td>
<td>$20,000</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>Tax expense:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax refund</td>
<td>(30,000)</td>
<td>(30,000)</td>
<td></td>
</tr>
<tr>
<td>Tax accrued</td>
<td>5,000</td>
<td>(5,000)</td>
<td>(25,000)</td>
</tr>
<tr>
<td><strong>Loss for the year</strong></td>
<td>$20,000</td>
<td>$20,000</td>
<td>$25,000</td>
</tr>
</tbody>
</table>

Few authors have analyzed this situation. In the words of one of them, it is “ground which is, for the most part, uncharted.”4 Those who have expressed views have generally recognized that the problem is caused by the inconsistent treatment of the refund and the carryforward benefit which is, and must continue to be, characteristic of practice. The solutions proposed generally recommend that the possible, though highly uncertain, liability for future taxes should be accrued in the loss year to the extent that the carryback of the timing difference results in a refund of taxes. Supporters of this solution believe that partial accrual is necessary to avoid misstating the loss.

The other alternative, not recording the liability, would be chosen as a result of consistent application of the theory that if there is no asset for the carryforward benefit there can be no liability for the effects of timing differences.

At the time the loss occurs, there is no way of knowing which solution is better. Only the results of future years will tell. The problem arises because the timing difference increases the refund and at the same time creates the possibility that the additional refund will in effect be repaid as taxes in a later period if taxable income materializes. Allowing the entire refund to apply to the loss in the loss year is consistent with the decision that the carryforward should not be recorded currently. If there is no future taxable income, the loss year benefits from the entire refund. Recording a liability equal to the current tax effects of the timing difference shows a suspicion that assuming no future taxable income is unrealistic. As a practical

matter, either method is likely to require a later correction of the loss when final results are known.

**Timing Differences Reversing in Nine-Year Span of Loss.** The reversal of a timing difference during the nine years which may be affected by an operating loss differs in some respects from the situation discussed in the previous section in which a timing difference originates during that period.

*Differences reversing in loss year.* If the reversal occurs in the loss year, taxes prepaid because of timing differences in some year prior to the carryback period are amortized in the loss year. The expense is appropriately included in the current statement of operations, thereby reducing the effect of the claim for refund of prior years' taxes.

The reversal in the loss year of a timing difference for which a liability was recorded previously means that the liability is payable in the loss year. The liability is not paid in cash, of course, because no taxes are paid for the year. But the liability is satisfied because the refund of prior taxes is reduced by an amount equal to the tax effect of the timing difference reversed. The tax credit for the loss year should include not only the refund of taxes previously paid but also the amount of the liability satisfied in the loss year.

The effects on accounting results of a deferred tax liability which is payable in a loss year are illustrated using these facts:

1. Pretax accounting income is $100,000 in Year 2 and $50,000 income tax is paid for the year. Pretax accounting loss is $90,000 in Year 5.
2. Pretax accounting income and taxable income are the same each year except that an item of $50,000 is deductible in Year 1 and recorded in the accounts as an expense in Year 5.
3. A deferred tax liability of $25,000 is accrued in Year 1.
4. The income tax rate is 50% in each year.

| Year 5 |
| Pretax accounting loss | $90,000 |
| Expense of Year 5 deductible in Year 1 | 50,000 |
| Tax loss | $40,000 |
| Claim for refund of taxes for Year 2 | $20,000 |
CHAPTER 7: OPERATING LOSSES

Results of Operations

<table>
<thead>
<tr>
<th>Description</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretax accounting loss</td>
<td>$90,000</td>
</tr>
<tr>
<td>Tax credit</td>
<td>45,000*</td>
</tr>
<tr>
<td>Loss for the year</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

* Components of tax credit:
  - Claim for refund: $20,000
  - Accrued liability for taxes satisfied in Year 5: 25,000

The refund of taxes paid in year two would have been $45,000 except that the timing difference reversed in year five reduced the loss carried back to year two to $40,000 and the refund to $20,000. In effect $25,000 of a potential refund paid the tax liability.

Differences reversing in carryback and carryforward years. Timing differences reversing during the carryback period affect only the taxable income of that period and may thus indirectly affect the amount of a refund in the loss year. No accounting adjustments are required.

Accounting for timing differences reversing in years following a loss is the same as that for timing differences originating in a carryback year. A prepaid tax or a liability for future taxes resulting from a timing difference was recorded when the difference originated. If all of an operating loss is carried back to prior years, no special treatment is required. If part of an operating loss remains to be carried forward, accounting for timing differences depends on the recognition of future benefits of the loss carryforward. If future benefits of a loss carryforward are recorded in a loss year, a prepaid tax remains to be amortized and a liability for future taxes remains to be paid. If future benefits of a loss carryforward are not recorded in a loss year, tax effect assets and liabilities may or may not be adjusted in the loss year depending on the certainty or uncertainty of realizing the potential benefits. The advisability of each treatment is discussed for a timing difference originating in carryback years on pages 98 and 99.

Opposite Results for Accounting and Tax Purposes. Tax timing differences sometimes create a situation in which the income statement shows income while the tax return reflects a loss and vice versa. Tax timing differences in any period result in income reported in financial statements that is greater or less than that reported in the tax return. When the line of zero income falls in the interval between the two reported figures, one is income while the other is a loss. The combination of a tax loss and accounting earnings in the same year can
be caused by tax timing differences in which tax liabilities are accrued or prepaid taxes are amortized. Both of these general types of timing differences cause income reported in the financial statements to exceed that in the tax return. Conversely, the combination of an accounting loss and taxable income is the result of allocation for tax timing differences in which prepaid expenses are recorded or previously recorded liabilities are paid.

Although the peculiar situations described in the preceding paragraph may seem to introduce singular problems, they are merely spectacular instances of circumstances already discussed. When the tax return shows a loss, the carryback and carryforward provisions of the tax law apply, and the accounting follows the principles outlined in this chapter. Income in the financial statements may be increased rather than losses reduced, but the same principles apply. If a tax must be paid even though results of operations are a loss, the usual problems of interperiod tax allocation are involved. In this situation, the tax paid for the current year represents either a prepaid tax or the satisfaction of a previously accrued tax liability.

**Presentation of Tax Effects of Losses**

Operating losses introduce unusual items into financial statements. Further, if the recommendations of this study are adopted, the benefits of loss carryforwards will appear in the statements of some companies in the year of loss. The complexities of the tax effects of an operating loss and the possible future effects on tax payments warrant informative explanations in captions in the statements or in notes.

The description of a recognized benefit of a loss carryforward should include the amounts of losses to be carried forward and the years to which they may be carried. Similar information for unrecorded potential tax benefits of loss carryforwards should be disclosed in the statements for a loss year and the following years.

An estimated refund of prior taxes and an estimated reduction in future taxes because of an operating loss are alike in theory and their effects on a reported loss are the same. This study recommends significantly different accounting for the two because of the uncertainty of future benefits. A few companies may recognize an estimated reduction of future tax payments, but it is doubtful that the majority will meet the stringent tests for recognition. This important variance in reporting should be readily apparent in the financial statements.
The statement of operations for a loss year (or explanatory notes) should show separately the effects of an estimated refund of taxes paid for prior years and the recorded effects of an estimated reduction of future tax payments. Tax credits in a loss year should include the tax effects of any other timing differences as discussed in this chapter.

When the benefits of a loss carryforward are not recognized until tax payments are reduced, income tax expense for that period should be based on the components of pretax accounting income. A reduction in taxes payable resulting from the loss carryforward should be a correction of the prior loss. Current tax effects and any remaining potential benefits should be explained.

Estimated refunds of income taxes based on the carryback of a loss and estimated future reductions of taxes based on a remaining loss carryforward, if recorded, should be classified separately in a balance sheet. Estimated refunds may be shown as current assets except when possible delays in approval and settlement may postpone collection for more than a year. All or part of an estimated future tax reduction may be classified as a current asset because an asset should not be recorded unless at least a significant part of the carryforward is expected to reduce taxes in the following year. An estimated future reduction in taxes as well as an estimated refund may usually be explained conveniently, at least in the year of loss, by reference to the same note which describes the tax credits in the income statement.

Presenting an asset for an estimated future tax reduction and a liability for estimated taxes payable in the future may often be simplified. Each amount may be analyzed by years and the asset and liability amounts applying to the same years may be classified as a net asset or liability.

**Procedures to Implement Recommendations on Losses**

The recommendations of this study relating to tax effects of operating losses can be adopted without initial restatement of accounts. Companies have not recognized future tax benefits of operating losses in loss years. A practical method of implementation is to correct the prior loss when the benefit is realized rather than to correct prior losses now by recording a future benefit even though realization is reasonably certain.

The tax effects of losses incurred in future years should be recognized according to the recommendations of the study. The future
benefits of loss carryforwards should be recorded in the loss year, if the certainty of realization and circumstances warrant.

Prepaid taxes and liabilities for future taxes resulting from tax timing differences may require adjustment either initially or in a future loss year to conform with the accounting described in this chapter.
**Summary**

**Allocation of Corporate Income Taxes**

Tax rates were relatively low in the early days of United States income taxation and, for the most part, taxable income was based on the accounting income of a taxpayer. Subsequent changes in the income tax laws and in accounting practices introduced numerous differences between taxable and pretax accounting income. The consequences of accounting for these differences grew as tax rates increased until income taxes now approximately equal corporate net income.

Four general types of differences between pretax accounting income and taxable income are easily identified:

*Tax timing of income components*—The most important differences between pretax accounting income and taxable income are probably those of timing. Some revenue and expense items are reported in both the financial statements and the tax return but not in the same period. Thus items may be taxable or tax deductible before they are included in net income. Likewise items may be taxable or tax deductible after they are included in net income.

*Exclusions from pretax accounting income*—Some taxable and tax deductible items are excluded from pretax accounting income but are included in other equity components, for example, in retained earnings or contributed capital. Some of these items may be recorded in an earlier or later year than reported for tax purposes.
Operating losses—The Internal Revenue Code allows operating losses to be carried back three years and forward five years to reduce tax payments for periods other than the one in which an operating loss is incurred.

Permanent differences—Some revenue and expense items included in financial statements are never taxable or tax deductible and conversely some items reported in tax returns are never included in financial statements.

Over twenty years ago the committee on accounting procedure of the American Institute of Certified Public Accountants recognized the need to account for differences between taxable and pretax accounting income. The committee developed the procedure known as intra-period income tax allocation to account for the tax effect of exclusions from pretax accounting income. The committee also recommended procedures known as interperiod income tax allocation to account for the tax effects of timing differences of income components.

The concept of interperiod allocation of income taxes is widely accepted and generally adopted, but accountants disagree on the extent to which the procedures should apply. Some believe that interperiod income tax allocation should be limited—only when periodic net income would otherwise be distorted. Others believe that interperiod income tax allocation should be comprehensive—whenever timing differences between taxable and pretax accounting income are material. Further, several theories and methods of applying interperiod income tax allocation concepts have developed, and some practices represent a combination of several concepts not always applied consistently.

This accounting research study considers these problems in the light of the general principle of interperiod allocation of income taxes. It also deals with the carryback and carryforward of operating losses, which constitutes a special kind of timing difference, and the interaction between operating losses and other timing differences.

Timing Differences and Methods of Allocation

Types of timing differences between taxable and pretax accounting income are four in number:

(A) Revenues or gains are taxed after accrued for accounting purposes. Common examples of this type of timing difference are profits on installment sales which are
recorded in the accounts on the date of sale but reported in tax returns when later collected and revenues on long-term contracts which are recorded in the accounts on percentage-of-completion basis but reported in tax returns on a completed-contract basis.

(B) Expenses or losses are deducted for tax purposes after accrued for accounting purposes. Estimated costs of guarantees and product warranty contracts which are recorded in the accounts on the date of sale and deducted in tax returns when later paid are examples of this type of timing difference. Other examples are expenses for deferred compensation, profit sharing, vacation and severance pay, pension costs, and self-insurance.

(C) Revenues or gains are taxed before accrued for accounting purposes. This type of timing difference includes receipts which are taxed when collected but recognized as revenue in later periods. Included in this category are rents and royalties collected in advance, profits on intercompany transactions, and proceeds of sales of oil payments.

(D) Expenses or losses are deducted for tax purposes before accrued for accounting purposes. The most common example of this type of timing difference is accelerated depreciation in the tax return but not in the financial statements. Other examples are unamortized discount, issue cost and redemption premium on bonds refunded and deferred research and development costs.

Three distinguishable procedures for allocating income taxes among periods have developed. All significant variations in present practice are explained by three underlying concepts—the liability concept, the deferred concept, and the net of tax concept. Practice often combines the methods resulting from the three concepts. The impact of each of the three concepts on each of the four types of timing differences is illustrated on pages 16 to 19.

Liability Concept. The concept that taxes are postponed or prepaid is often called the liability (or, sometimes, the accrual) concept. Briefly this concept is: a liability for postponed taxes arises whenever (a)
revenue is recognized in the financial statements before taxed or (b) an expense is deducted for tax purposes before recognized in the financial statements; an asset of prepaid taxes arises whenever (a) revenue is taxed before recognized in financial statements or (b) an expense is recognized in the financial statements before deducted for tax purposes.

The liability concept views tax allocation as accruing income tax expense as a function of pretax income, excluding permanent differences between accounting and taxable income. The difference between the current tax expense and the tax currently payable is either a liability for taxes payable in the future or an asset for prepaid taxes. The estimated amounts of future tax liabilities and prepaid taxes are computed at the tax rate expected to be in effect in the future periods when the timing differences reverse.

Proponents of the liability concept emphasize that the accrual of income tax expense is the same as the accrual of any other expense. They argue that the effect of timing differences of types A and D is to postpone the payment of the tax. A current accrual of tax expense is required to match expense with revenue and to recognize the liability for taxes payable in the future. Similarly, timing differences of types B and C result in the prepayment of taxes which must be recognized to avoid understating income in the period in which timing differences originate and overstating income in the period in which the differences reverse.

**Deferred Concept.** The deferred concept assumes that each taxable revenue or gain and each deductible expense or loss has an identifiable effect on income tax expense. If a revenue or gain is taxed before it is accrued for accounting purposes, or if an expense or loss is deducted earlier for accounting than for tax purposes, the related tax effect is recorded as a deferred charge to income tax expense of the future years in which the reverse timing difference occurs. Conversely, if an expense or loss is deducted for tax purposes before accrued for accounting purposes, or if a revenue or gain is accrued for accounting purposes before taxed, the associated tax reduction is recorded as a deferred credit to future income tax expense when the reverse timing difference occurs. The deferred concept emphasizes the effect of timing differences on income of the period in which they originate. The income tax expense is a function of pretax income (excluding permanent differences between accounting and taxable income) unless the expense is affected by amounts deferred previously at other than
current rates. The primary purpose is to match the income tax expense with the items which cause a tax effect by deferring taxes assumed to relate to a future period.

Proponents of the deferred concept emphasize the current reduction or increase in tax payments caused by the timing difference. They argue that the tax effect must be deferred to the future period in which the timing difference is reversed to match revenue and expense in the current and future periods. The amount of the tax effect is determined by the reduction or increase in taxes when the timing differences originate.

Net of Tax Concept. The direct adjustment of an asset or liability is called the net of tax concept. If the timing of a revenue or expense accrual differs for tax purposes as compared with accounting purposes, the tax effect is an adjustment of the specific revenue or expense and of the related asset or liability. The net of tax concept is based on the proposition that taxability and tax deductibility are factors in the valuation of individual assets and liabilities. For example, depreciation deducted for tax purposes is held to reduce the value of an asset because of a loss of a portion of future tax deductibility. Additional depreciation equal to the tax effect of the excess of accelerated tax depreciation over financial statement depreciation is recognized currently.

Comparison of Concepts. Differences between the three concepts fall generally into two categories: (1) effects on net assets and periodic income and (2) presentation in the financial statements. Generally results of operations and net assets are the same under the three concepts as long as tax rates do not change or are not expected to change. If tax rates change or are expected to change, both periodic income and net assets determined under the liability concept differ from those determined under the other two concepts. Applying the liability concept involves accruing taxes payable in the future and current expenses are recorded at tax rates expected to prevail when the liability is paid. Procedures under the deferred and net of tax concepts recognize the tax rate in effect when timing differences originate.

Distinctions in statement presentation are major between the net of tax and the other two methods and minor between the liability and deferred methods. Income tax expense under the net of tax method equals the amount of tax payable for the current period. The
current tax effects of timing differences are included in the individual revenue and expense items. Income tax expense shown by the other two methods is normally related functionally to pretax accounting income. Under the liability method income tax expense is a single amount—the expense accrual for the period. Income tax expense under the deferred concept is composed of three parts—taxes payable for the current period, the tax effect arising in the current period deferred to future periods, and the current amortization of tax effects deferred in earlier periods—although the financial statements may show tax expense as a single amount or as two items, current taxes payable and the effect of tax allocation. The effect of interperiod income tax allocation under the net of tax concept is included in a balance sheet in the related individual assets and liabilities rather than in liability for future taxes or prepaid tax, as under the liability method, or in deferred credits or deferred charges to future income tax, as under the deferred concept.

**Conclusions on Methods and Extent**

Each of the three concepts has been supported in the literature and to some extent in AICPA pronouncements and SEC Accounting Series Releases. The Accounting Research Bulletins imply support for all three concepts and do not select one to the exclusion of others.

The study analyzes the concepts underlying the liability, the deferred, and the net of tax interpretations and evaluates the matching results obtained under each method in Chapter 4, pages 44 to 60. This brief summary does not present the analysis but the main conclusions are:

All three concepts emphasize the matching of expenses and revenues. When the balance sheet item related to income tax allocation is a credit (Types A and D) the matching under the liability concept is superior. The liability method is based on tax rates expected to apply when the tax is paid, and the income tax expense is functionally related to the pretax accounting income. The deferred and net of tax concepts tend to mismatch tax expense with pretax accounting income in periods following a change in tax rates. The deferred concept results in superior matching if timing differences normally result in a debit in the balance sheet (Types B and C).
Credit balances of deferred taxes do meet the tests for liabilities in current accounting practice.

Credit balances of deferred taxes cannot be "deferred credits."

The net of tax method is the poorest of the three as an income tax allocation procedure. It holds up better as a method of valuing assets and liabilities in theory, but not as applied in practice.

The study also examines the two major questions on the extent of interperiod allocation of taxes: (1) whether or not it should be applied to timing differences recurring over a long period, and (2) whether tax allocation assets should be recognized. This analysis is the subject of Chapter 5 and again details are not repeated. The conclusions are briefly:

Interperiod income tax allocation procedures should be applied comprehensively, that is, to all material timing differences between pretax accounting income and taxable income, including those of a recurring nature over relatively long periods of time.

Matching of expense and revenues requires the recognition through income tax allocation of assets as well as deferred liabilities. Criteria for recognizing tax effect assets are recommended.

**Recommended Accounting for Timing Differences**

The major conclusion on the choice of procedure for interperiod allocation of income taxes is that the answer lies not in the three methods studied—the liability method, the deferred method, or the net of tax method—but in the application of the principles of accrual and deferral accounting to each of the four types of timing differences. Briefly, an asset for a prepaid expense or deferred charge results if the tax payment precedes recognition of the tax expense (deferral) and a liability for taxes payable results if recognition of the tax expense precedes the tax payment (accrual). Timing differences involving revenue are simpler than those involving expenses because deductions have an inverse effect on taxes. Types B and D have a
"seesaw" effect: in one the presence of an extra deduction results in a decreased tax payment and subsequently the absence of the deduction results in an increased tax payment, and in the other the absence of a deduction results in a tax payment and later its presence results in a decreased tax payment.

Accounting recommended for each type of timing difference is:

(A) **Revenues or gains taxed after accrued.** Interperiod income tax allocation in this situation is the accrual of an expense and a liability. Revenue is recognized currently and when reported later for tax purposes the related tax will be paid. The current expense and estimated liability are accrued at the tax rate expected to apply when the revenue is taxable.

(B) **Expenses or losses deducted after accrued.** In this circumstance a tax prepayment results when an expense is accrued but cannot be reported as a deduction to reduce current tax payments. The amount of the prepaid tax depends on the tax paid in the period in which the timing difference originates. Ordinarily, the prepayment is amortized in the later period when the expense accrual is deductible for tax purposes. Unless the expense is expected to reduce tax payments when it becomes deductible, however, the tax must be charged as an expense of the period when paid.

(C) **Revenues or gains taxed before accrued.** This situation is a classic example of a prepaid expense. Cash is received and a tax on it is paid; the revenue or gain is recognized in the future, not currently. Amortization of the prepaid tax is an expense of the period when the revenue or gain is recognized.

(D) **Expenses or losses deducted before accrued.** Interperiod income tax allocation in this situation is the accrual of a tax expense and a liability. The presence of the tax deduction in the period in which the timing difference originates reduces current tax payments. A tax expense is accrued because in a later period when the expense is recognized for accounting purposes no deduction will be available and the tax paid will be increased.
The study considers possible methods of measuring the amounts of tax effects of timing differences. One conclusion is that the combined normal and surtax rate should be applied to a timing difference to compute the differential in taxes payable caused by the timing difference. Another conclusion is that to avoid overstating liabilities and misstating periodic net income, discounting of long-term tax liabilities is required whenever the interest factor is significant. Analysis indicates that the internal earning rate of a company is the appropriate discount rate.

**Effects of Operating Losses**

Current practice is to record the tax effect of loss carrybacks in the loss year and to record the tax effect of loss carryforwards in the year of realization, unless this distorts income. Although Chapter 10B of Accounting Research Bulletin No. 43 recommends this procedure, critics contend that it overstates the loss and subsequently overstates income of carryforward years.

The pro and con of present practice are considered and the study concludes that the theory to be applied is that the income tax should follow the income. Implementing the theory is difficult because loss years cause uncertainties. Two possible ways are to (1) recognize an asset for the carryforward benefit in the loss year or (2) recognize the carryforward benefit only when realized but as a correction of the results of the loss year. The first alternative is not practical for all companies. The second is clearly an expedient but nevertheless it is better than present practice because it avoids overstating income in carryforward years.

The solution to this problem recommended in the study is a judicious combination of these two alternatives. When realization of the carryforward benefit is substantially assured it should be recognized as an asset in the loss year. In all other cases the carryforward benefit should not be recognized in the loss year and when realized should be treated as a correction of results of the loss year. The study emphasizes that carryforward benefits should not be recognized unless their realization is virtually certain and gives some criteria and examples as guidance.

The interaction of operating losses and interperiod tax allocation complicates accounting for each. Both the recognition of carryforward benefits and the recognition of assets and liabilities in interperiod income tax allocation depend on the expectation of future income. Recognizing carryforward benefits therefore requires recognizing
assets and liabilities for tax effects of other timing differences, and
the failure to recognize the carryforward benefit precludes recognizing
assets and liabilities related to other timing differences. Numerous
exceptions to this general rule are required and the study analyzes
some general circumstances in Chapter 7.

The conclusions and recommendations for interperiod allocation of
corporate income taxes are summarized in this chapter without the
supporting reasons. The analyses in Chapters 4 to 7 leading to the
decisions that certain procedures are preferable and others unaccept­
able must be examined to judge the conclusions.
Comments by Members of Project Advisory Committee

Comments of Sidney Davidson

A major assumption of this study is that income tax allocation is now accepted in the United States. If this assumption is accepted—and I do accept it—the next question is how broadly should allocation be applied. Is it “required for all timing differences between tax returns and financial statements” or only in those situations where it is necessary “to avoid distortions of income”? The study concludes (p. 72) that “income tax allocation should . . . be applied comprehensively to material timing differences . . . . no exception should be made.” I disagree emphatically with this conclusion. It imposes a straitjacket of arbitrary uniformity in situations where substantial economic differences may exist and results in financial statement presentation which may be misleading.

The opposing view stresses that for a growing or even a static firm most tax deferrals will not be reversed, that in most situations a current excess of financial income over taxable income will not be followed in any foreseeable future year by an excess of taxable income over financial income. In other words there is likely to be an “indefinite postponement” of the liquidation of most of the items described as deferred tax liabilities or deferred tax credits.

The study designates two somewhat contradictory reasons for accepting the “comprehensive allocation” view (pp. 71 to 72). They are: (1) The “revolving account” or “roll over” approach that is at the heart of comprehensive allocation is the basis of measuring both accounting and taxable income. (2) Not all deferrals, even in the depreciation situation, are indefinite deferrals. In my opinion, neither of these reasons survives close analysis.

In support of the roll over view, the study quotes extensively from authors who emphasize the similarity of deferred tax accruals to other balance sheet items, usually accounts payable. They cite the fact that there is an indefinite postponement of the payment of accounts payable—its balance is unlikely to fall to zero and usually grows for a growing firm. Yet no one urges anything less than a full recognition of accounts payable.
This argument is deceptively appealing, as are many simple solutions to complex problems. Unfortunately, it ignores the basic and vital differences between accounts payable and deferred tax accruals. Accounts payable arise from actual, specific transactions in which identifiable goods or services are received. Each account is owed to a designated party and the amount of the obligation and the due date are usually set forth unambiguously on the written document that serves as the basis for the recognition of the payable. Actual cash payments to creditors are made regularly, even though other payables may at the same time be taking the place of those liquidated. The legal necessity to make the payments is not conditioned by any question about future operations being profitable. The "roll over" of transactions in accounts payable is real and undeniable.

The most important distinction, of course, is that the deferred tax accrual results not from an actual event but from a hypothesis. Accounting deals with events, and those who would modify the recording of actual events (the payments of taxes) bear the burden of demonstrating that their modifications will increase the usefulness of the reports to management, investors, or other users. This is not accomplished by vague analogies to the roll over of items like accounts payable that do describe actual and discrete events. It requires, instead, a demonstration that the current lower tax payments will result in higher cash outflows for taxes within a span of time that is of significant interest to management or investors. All the evidence points to a contrary result.

Much is made of the point that accounting emphasizes "current or past transactions not . . . future transactions" (p. 71). But liquidation of the deferred tax item is a transaction that will usually occur, if it occurs at all, at a distant if not indefinite date in the future. It depends upon a confluence of several events, each of which has an uncertain probability. Uncertain though they are, the probabilities can and must be estimated. When the product of these probabilities is high enough to indicate that current differences between taxable income and accounting income will be likely to have an adverse effect on income tax payments in the predictable future (say, within 20 years as a maximum), income tax allocation is called for. That is far different, of course, from insisting on the recognition of a deferred tax obligation.

* In writing this paragraph and the one that follows, I have drawn freely from an unpublished memorandum on this subject by Herman W. Bevis. I have also benefited from the comments of my colleague, George H. Sorter.
in every case where taxable income and income reported on the financial statements differ.

The second major justification offered for comprehensive allocation is that, in fact, this unlikely confluence of events has occurred in some cases. "Deferred taxes of a number of companies have declined recently" (p. 72). To support this view, the study cites six recent cases where the balance of the deferred tax accrual declined (in one case, for two consecutive years). In one of the companies cited, Pittsburgh Plate Glass Company, the decline was \( \frac{1}{2} \) of 1\% of the opening balance in the deferred tax account and was equal to \( \frac{1}{3} \) of 1\% of net income for the year—hardly enough to worry about distortion of reported figures. The important question to be answered, though, is not whether this list of six cases may be expanded in the future or even whether the minuscule amounts shown will grow; the basic and central question is whether we should impose comprehensive allocation on all firms without regard to their economic conditions and intentions.

What is needed is a case by case analysis of the firm's economic position and plans. How likely is it that additional tax payments will have to be made in the foreseeable future as a result of the difference this period between taxable income and accounting income? In its recognition of most assets and liabilities, accounting relies on probability estimates of future events. My plea is that we adapt our accounting in the tax area to the most probable outcome indicated by the economic analysis, and do not, in the name of narrowing reporting differences, impose a requirement of comprehensive tax allocation in all cases where the probability of an increased subsequent tax payment is anything greater than zero.

The original Accounting Research Bulletins on this subject all suggested a case by case analysis of the economic facts. That is still needed instead of the imposed uniformity of comprehensive allocation for all firms. Such analysis is likely to conclude, as did Accounting Research Bulletin No. 43, that tax allocation is inappropriate in those cases "where there is a presumption that particular differences between the tax return and the income statement will recur regularly over a comparatively long period of time."
Comments of Richard C. Gerstenberg

This study does not, in my opinion, provide a balanced presentation of the pertinent information needed, particularly from a business management standpoint, for an effective appraisal of the problems of accounting for income taxes. As a result, I do not consider it to be an adequate vehicle for consideration by the business community prior to the issuance of a pronouncement on that subject by the Accounting Principles Board and, accordingly, do not recommend that it be published.

In addition to the failure to deal with certain fundamental points such as the nature of the income tax and the related question of the validity of the concept of interperiod allocation, the study does not deal with the practical problems, or possible legal questions, that might arise if the conclusions of the study are adopted. I believe that the present confusion and controversy about interperiod income tax allocation arise more from questions in these areas than from problems relative to the mechanics of income tax allocation or the positioning of the balance sheet residuals to which a substantial part of the study is devoted.

In regard to the conclusions of the study, it is my opinion that where it is necessary to apply some type of tax effect accounting to avoid distortion or misleading inferences, it should be done within the bounds of presently accepted principles regarding balance sheet values. The study concludes that income tax allocation should be applied to all material timing differences. I disagree with this conclusion in respect to repetitive timing differences, particularly on items of costs and expenses, since it would appear to result in so-called tax prepayments and deferred tax liabilities which will not be realized or mature in the foreseeable future being carried in the balance sheet at amounts far in excess of their actual value.

I agree with Dr. Sidney Davidson's position to the effect that accounting deals with actual events and those who would modify the recording of the actual income tax liability should bear the responsibility of demonstrating that their modifications improve the usefulness of the financial statements. I do not think that this has been demonstrated in the study.
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Pronouncements

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS
COMMITTEE ON ACCOUNTING PROCEDURE

Accounting Research Bulletin No. 43. 1953.
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