1988 Student Supplement for **Fundamentals of Financial Accounting**

Fifth Edition

Deferred Taxes and Statement of Cash Flows

Glenn A. Welsch and Daniel G. Short
both of the University of Texas at Austin

Printed in the United States of America.

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Part One

Chapter 10

Deferred Income Tax

Several earlier chapters discussed income taxes that corporations must pay. The usual entry to record income tax debits income tax expense (reported on the income statement) and credits income tax payable (reported on the balance sheet). However, in some cases a taxable revenue or a tax-deductible expense may occur in one accounting period but is taxable in another accounting period. In such cases the question arises about which year income tax expense should be recognized--in the year when the transaction was completed or in the year when the item must be shown in the income tax return. This dilemma is important because GAAP accrual accounting requires that the income tax effects of a transaction must be recognized and reported on the income statement for the year that the related transaction occurred. However, income tax laws require that the income tax effects must be included in another accounting period. Deferred income tax accounting is used to resolve this problem. The discussions that follow conform with FASB Statement of Accounting Standards, No. 96, issued in December 1987. [10]

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[10] Accounting for deferred income taxes was required by APB Opinion 11 until December, 1987. At this date it was superceded by FASB Statement 96. The significant changes made can be summarized as follows:

Change	FASB Statement 96	APB Opinion 11
1. Basic concept	Liability concept	Deferral concept
2. Conforms to accrual basis	Fully	Partially
3. Income tax rates used	Current enacted tax rate change deferrals when new tax rates are enacted	Current tax rates; but ignore new tax rates enacted in the future
4. Computation approach*	Compute income tax payable and deferred income tax; difference is tax expense (a residual)	Compute income tax payable and deferred income tax difference is deferred income tax (a residual)

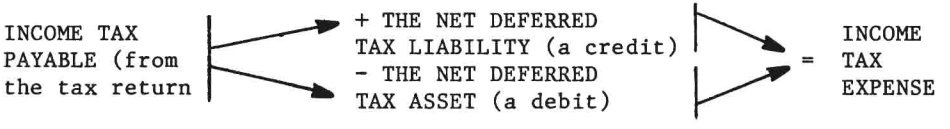
*This is a significant and subtle change. Under APB 11, the residual amount was deferred income tax; therefore, all estimating errors, slippages, and other unintentional or intentional oversights were accumulated in the balance sheet account, deferred income taxes (which tended to be on a long-time basis). In contrast under FASB 96, these various effects flow out each year through income tax expense on the income statement.

The basic purpose of recognizing deferred income tax is to match income tax expense in the income statement with the effects of the completed transaction(s) that caused the income tax effect(s). To accomplish this purpose, an allocation of income tax expense is made by using a deferred income tax account.

The effects of most transactions that are subject to income tax must be reported in the income statement and in the income tax return in the same accounting period. Deferred income tax is recognized only for those few transactions when a taxable revenue, or tax deductible expense, must be reported on the income statement (in conformity with GAAP) and on the income tax return (in conformity with income tax laws) in different accounting years. In these cases the amount of the taxable revenue, or tax-deductible expense is called a temporary difference. For example, consider a simple case. At the end of 19A, DIT Corporation has a $10,000 taxable revenue and a 30 percent income tax rate. This revenue must be reported on the 19A income statement (in conformity with GAAP) but the income tax laws require that it must be reported in the 19B income tax return. This means that there is a temporary difference of $10,000 and the income tax effect is $10,000 x 30 percent = $3,000.

Application of the Deferred Income Tax Concept. Under this concept (a) income tax expense is calculated based on the numbers reported on the income statement, and (b) income taxes payable is calculated on the income tax return in strict conformity with the tax laws. Each temporary difference, as defined above, necessarily will always reverse (or turn around) at some time(s) in the future. Each temporary difference initially occurs in one or more accounting period(s) and then reverses in one or more future accounting period(s). The time between the initial and reversing periods is called the tax deferral time. A tax deferral will always start with a credit (a liability) or a debit (an asset). During the reversing periods these debits or credits will be the opposite so that, at the end of the tax deferral time the deferred tax account will have a zero balance.

FASB Statement 96 requires that income tax expense must be computed each year-end as follows:



Therefore, the primary problem in deferred tax accounting is to properly identify and measure each temporary difference.

To illustrate, return to the DIT Corporation case given above, relating to a 19A taxable revenue of $10,000, reported on the 19B tax return at a 30 percent rate. Assume income tax payable amounts from the tax returns are: 19A, $20,000, and 19B, $22,000.

a. Is this a temporary difference?

It is a temporary difference because it must be reported on the income statement and the income tax return in different years.

b. What is the length of the tax deferral time?

The tax deferral time is two years--19A and 19B.

c. What are the originating and reversing dates?

The originating date is at the end of 19A and the reversing date is at the end of 19B.

d. What is the amount of income tax effects of this temporary difference?

Temporary difference, $10,000 multiplied by the income tax rate, 30 percent, equals $3,000.

e. Give the journal entry at the end of 19A and 19B to recognize income tax payable, deferred income tax, and income tax expense.

December 31, 19A--Originating entry:

a.	Income tax expense (b + c)	23,000	
b.	Deferred income tax liability (computed)*		3,000
c.	Income tax payable (from tax return)		20,000

*$10,000 x 30% = $3,000. This is a liability (credit) because the income tax on the $10,000 temporary difference must be recognized on the 19B tax return --to be paid in the future.

Reporting:

19A income statement:

Income tax expense	$23,000

19A balance sheet:

Liabilities:

Deferred income tax liability	3,000
Income tax payable	20,000

December 31, 19B--Reversing entry:

a.	Income tax expense (c - b)	19,000	
b.	Deferred income tax (computed)	3,000	
c.	Income tax payable (from tax return)		22,000

Reporting:

19B income statement:

Income tax expense	$19,000

19B balance sheet:

Liabilities:

Deferred income tax liability	-0-
Income tax payable	22,000

Notice that the deferred income tax account was used to "move" the $3,000 tax effect of the temporary difference from 19B (on the tax return) to 19A for reporting on the income statement, thereby matching income tax expense with the 19A revenue to which it is related.

Also notice that if the revenue had been on the tax return before it is reported on the income statement, a deferred income tax asset (a debit) would have been originated.

Another case of income tax allocation is shown in Exhibit 10-1. This case involved depreciation of equipment (cost, $12,000) over an estimated three-year useful life and no residual value. The company uses straight-line depreciation for the income statement and accelerated depreciation on the income tax return. This is the only temporary difference, and for instructional purposes, income tax entries are shown for the three-year tax deferral time. Notice that the originating entry is in 19A and the reversing entry is in 19C. Depreciation presents a unique case because the temporary difference is the difference each year between straight-line depreciation and accelerated depreciation as shown in the exhibit.

The use of a carryback/carryforward procedure is discussed in intermediate accounting courses. In the case of multiple temporary differences, this procedure requires offsets of deferred tax assets against tax liabilities.

This discussion of deferred income taxes will help you understand the nature of income tax expense reported on the income statement and deferred income tax reported on the balance sheet of most medium and large corporations. Income tax payable (a liability) and income tax expense is easy to understand; however, many statement users have difficulty understanding the other tax item--deferred income tax.

Exhibit 10-1 Deferred income tax--Depreciation expense

Case data for 19A--On January 1, 19A, DEP Corporation purchased equipment that cost $12,000. The equipment has an estimated three-year useful life and no residual or salvage value. Data related to the equipment and income taxes payable.

	19A	19B	19C
a. Depreciation:			
For accounting (straight-line)	$ 4,000	$ 4,000	$ 4,000
For income tax (accelerated)	6,000	4,000	2,000
b. Income tax payable (from tax return, 30 percent tax rate)	$19,000	$20,000	$21,000

Required--Give the journal entry to record income taxes each year. Show computations. Also show the reporting at each year end.

Journal entries:

	19A		19B		19C	
Income tax expense	19,600		20,000		20,400	
Deferred income tax		600*			600**	
Income tax payable		19,000		20,000		21,000

*originating; ** reversing

Computations:

a. Temporary difference:

	19A	19B	19C
Straight-line depreciation	$ 4,000	$ 4,000	$ 4,000
Accelerated depreciation	6,000	4,000	2,000
Temporary difference	$(2,000)	$ -0-	$ 2,000
	(originating credit)*		(reversing; debit)

*A deferred tax liability (a credit) is created because additional income taxes must be paid in the future. This is a result of lower depreciation deductions in the tax return for the future; that is, lower tax deductions mean more income tax in the future on other taxable amounts.

b. Deferred income tax amounts:

	19A	19B	19C
Temporary differences	$(2,000)	$ -0-	$ 2,000
Income tax rate	x 30%	-	x 30%
Deferred income tax	$ (600)	-	$ 600
	(originating liability; credit)		(reversing; debit)

Reporting at Year-end:

	19A	19B	19C
Income statement:			
Income tax expense	$19,600	$20,000	$20,400
Balance sheet:			
Liabilities:			
Deferred income tax	600	600	-0-
Income tax payable	19,000	20,000	21,000

E 10-9 (Deferred Income Tax; One Temporary Difference)

The comparative income statements of Rowan Corporation at December 31, 19B, showed the following summarized pretax data:

	Year 19A	Year 19B
Sales revenue	$50,000	$61,000
Expenses (excluding income tax)	40,000	48,000
Pretax income	$10,000	$13,000

Include in the above 19B data is a $2,000 expense that was deductible only in the 19A income tax return (rather than in 19B). The average income tax rate was 30 percent. Taxable income from the income tax returns were: 19A, $9,000; and 19B, $12,300.

Required:

a. For each year compute (1) income tax payable and (2) deferred income tax. Is the deferred tax a liability or an asset? Explain.
b. Give the journal entry for each year to record income tax payable, deferred income tax, and income tax expense.
c. Show what amounts, related to income taxes, should be reported each year on the income statement and balance sheet. Assume income tax is paid on April 15 of the next year.

E 10-10 (Deferred Income Tax; One Temporary Difference)

The comparative income statement for Nader Corporation at the end of December 31, 19X2, provided the following summarized pretax data:

	Year 19X1	Year 19X2
Revenues	$90,000	$94,000
Expenses (excluding income tax)	75,000	78,000
Pretax income	$15,000	$16,000

Included in the above 19X2 data is a $6,000 revenue that was taxable only in the 19X1 income tax return (rather than in 19X2). The average income tax rate was 32 percent. Taxable income shown in the tax returns were: 19X1, $14,000; and 19X2, $15,500.

Required:

a. For each year compute (1) income tax payable and (2) deferred income tax. Is the deferred tax a liability or an asset? Explain.
b. Give the journal entry for each year to record income tax payable, deferred income tax, and income tax expense.
c. Show what amounts, related to income taxes, should be reported each year on the income statement and balance sheet. Assume income tax is paid on April 15 of the next year.

E 10-11 (Deferred Income Tax, Depreciation and Analysis of Cash Flows)

Green Corporation reported the following summarized pretax data at the end of each year.

	Income Statement at December 31		
	19A	19B	19C
Revenues	$150,000	$160,000	$175,000
Expenses (including depreciation)*	110,000	106,000	115,000
Pretax income	$ 40,000	$ 54,000	$ 60,000

*Depreciation expense on the income statement was straight-line, on a machine purchased January 1, 19A, for $60,000. The machine has a 3-year estimated life and no residual value. The company used accelerated depreciation on the income tax return as follows: 19A, $30,000; 19B, $20,000; and 19C, $10,000. The average income tax rate is 30 percent for the three years.

Taxable income from the income tax return was as follows: 19A, $28,000; 19B, $53,000; and 19C, $82,000.

Required:

a. For each year compute (1) income tax payable, and (2) deferred income tax. Is the deferred income tax liability or an asset? Explain.
b. Give the journal entry for each year to record income tax payable, deferred income tax, and income tax expense.
c. Show what amounts, related to income taxes, should be reported each year on the income statement and balance sheet.

P 10-6 (Deferred Income Tax; Two Temporary Differences; Cash Flow)

The records of Radney Corporation provided the following summarized data for 19X8 and 19X9:

a. Income

	Year-end December 31	
	19X8	19X9
Revenues	$180,000	$190,000
Expenses (excluding income tax)	120,000	125,000
Pretax income	$ 60,000	$ 65,000

b. Income tax rate, 35 percent. Assume income tax payable is paid 75 percent in the current and 25 percent on April 15 of the next year.

c. Temporary differences:
   (1) The 19X9 expenses include a $6,000 expense that must be deducted only in the 19X8 tax return.
   (2) The 19X8 revenues include a $4,000 revenue that was taxable only in 19X9.

d. Taxable income shown in the tax returns were: 19X8, $62,000; and 19X9, $65,000.

Required:

a. For each year compute (1) income tax payable, and (2) deferred income tax. Is each deferred tax a liability or an asset? Explain.
b. Give the journal entry for each year to record income tax payable, deferred income tax, and income tax expense.
c. Show what amounts, related to income taxes, should be reported each year on the income statement, balance sheet and statement of cash flows (an operating activity on the SCF).

P 10-7 (Deferred Income Tax; Depreciation)

At December 31, 19A, the records of Laymon Corporation provided the following information:

1. Income statement:

Revenues	$150,000[a]
Depreciation expense (straight-line)	(13,000)[b]
Remaining expenses (excluding income tax)	(100,000)
Pretax income	$137,000

   a. These revenues include $20,000 interest on tax-free municipal bonds.
   b. Equipment depreciated--acquired January 1, 19A, cost $52,000; estimated useful life, 4 years and no residual value. Accelerated depreciation is used on the tax return as follows: 19A, $20,800; 19B, $15,600; 19C, $10,400, and 19D, $5,200.

2. Income tax rate, 35 percent. Assume 75 percent is paid in year incurred.

3. Taxable income from the 19A income tax return, $90,000.

Required:

a. Compute income tax payable and deferred income tax for 19A. Is the deferred income tax a liability or an asset? Explain.

b. Give the journal entry to record income taxes for 19A.
c. Show what amounts, related to 19A income taxes, should be reported on the income statement, balance sheet, and statement of cash flows (income taxes paid is an operating activity on the SCF).

Part Two

Chapter 15

Statement of Cash Flows

Purpose:

Three basic statements are required for external reporting purposes--income statement, balance sheet, and statement of cash flows (abbreviated SCF). This chapter will discuss the purpose of the SCF and show how it is prepared. Two alternative methods for preparing the SCF (the direct method and the indirect method) will be discussed.

Organization:

1. Overview of the statement of cash flows (SCF).
2. Characteristics and format of the SCF.
3. Comparison of the direct and indirect methods.
4. Preparation of the SCF using the direct method.
5. Preparation of the SCF using the indirect method.

Learning Objectives--To Be Able To:

1. Explain the purpose of the SCF.
2. Identify the format and characteristics of the SCF.
3. Classify cash flows from operating, investing, and financing activities.
4. Give examples of cash equivalents.
5. Compare the direct and indirect methods.
6. Prepare the SCF using the direct method.
7. Prepare the SCF using the indirect method.
8. Expand your accounting vocabulary by learning the "Important Terms Defined in This Chapter."
9. Apply the knowledge gained from this chapter by completing the homework assigned by your instructor.

Overview of the Statement of Cash Flows

Many of us experience cash flow problems. Most businesses have this same problem from time to time. For example, a new business usually starts with a cash flow problem that continues intermittently during the first several years of operations. These cash flow problems arise because the timing of cash inflows often lags the timing of cash needs. During periods of depressed economic activities, or due to ineffective planning, large businesses also may experience similar cash flow problems.

A major problem for investors, creditors and other interested parties is that they need to realistically project the prospective (i.e., the future) cash flows of the business and hence project their own prospective cash flows.

The purpose of this chapter is to discuss the statement of cash flows which is designed to help investors, creditors, and others to project their own prospective net cash flows from investments in, and loans to, an enterprise.

Purposes of the Statement of Cash Flows

The statement of cash flows (SCF) is designed to help investors, creditors, and other decision-makers in two important ways:

(1) To assess the **past performance** of the entity to generate, plan and control the actual cash inflows and outflows.

(2) To assess the entity's **probable future cash inflows, outflows, and net cash flows**, including its ability to meet future obligations and to pay dividends. This assessment should help the investor, or creditor, project a return on resources committed to the entity.

Consistent with the fundamental objective, the SCF reports information concerning cash inflows and outflows of an entity classified as cash flows from (1) operating activities, (2) investing activities and (3) financing activities. Also, the statement reports any related investing and financing transactions that do not directly affect cash.

Characteristics of the Statement of Cash Flows

FASB Statement 95 specifies the basic format for the statement of cash flows. Exhibit 15-1 outlines the required format with illustrative amounts.

Exhibit 15-1 The Basic Format of a Statement of Cash Flows

	UTEX Company	
A. Cash flows from operating activities:		
Cash inflows (detailed)	$ 60	
Cash outflows (detailed)	(40)	
Net cash inflow (outflow) from operating activities		20
B. Cash flows from investing activities:		
Cash inflows (detailed)	21	
Cash outflows (detailed)	(30)	
Net cash inflow (outflow) from investing activities		(9)
C. Cash flows from financing activities:		
Cash inflows (detailed)	88	
Cash outflows (detailed)	(65)	
Net cash inflow (outflow) from financing activities		23
D. Reconciliation of beginning and ending cash balance:		
Net increase (decrease) in cash during the period		34
Add: Beginning cash balance		42
Ending Cash balance		$76

E. Noncash investing and financing activities--must be disclosed in a separate schedule.

Classifications on the Statement of Cash Flows

To assure consistent terminology and comparability, FASB Statement 95 defined each category included on the required SCF. These definitions (with explanations) are as follows:

A. **Cash flows from operating activities.** This classification reports both the cash inflows and cash outflows that are directly related to net income reported on the income statement. Under this classification the usual cash flows are:

Inflows--cash received from:	Outflows--cash paid for:
-Customers	-Purchase of goods for resale
-Interest on receivables	-Interest on liabilities
-Dividends	-Income taxes
-Refunds from suppliers	-Salaries and wages

A gain or loss on a nonoperating activity (e.g., the sale of excess equipment) may be "removed" from operating activities. The **full** cash effect is included in investing or financing activities, whichever is the dominant source.

The difference between the above inflows and outflows is called the **net cash inflow (outflow) from operating activities.** Typically, the net amount will be an inflow because revenues usually exceed expenses.

B. **Cash flows from investing activities.** This classification reports cash inflows and outflows that are related to the acquisition of productive facilities used by the company and other noncash assets. Under this classification the **cash outflows** represent the "investments" of cash by the entity to acquire its noncash assets and under this classification the **cash inflows** occur only when cash is received from the prior investments. Typical cash flows from investing activities are:

Inflows--cash received from:	Outflows--cash paid for:
-Disposal of property, plant and equipment	-Property, plant and equipment
-Disposal of investments in securities	-Purchase of long-term investments
-Collection of a loan (excluding interest, which is an operating activity)	-Lending to other parties
-Disposal of other assets used in productive activities (excluding inventories)	-Other assets used in productive activities, such as a patent (excluding inventories, which is an operating activity.

The difference between the above cash inflows and outflows is called **net cash inflow (outflow) from investing activities.**

C. **Cash flows from financing activities.** This classification represents both cash inflows and outflows that are related to **how cash was obtained** to finance the enterprise (including its operations). Under this classification the **cash inflows** represent the financing activities used to obtain cash for the entity. The **cash outflows** occur only when cash is paid back to the owners and creditors for their prior cash-providing activities. Usual cash flows from financing activities are:

Inflows--cash received from:	Outflows--cash paid to:
-Owners--issuing equity securities -Creditors--borrowing on notes, mortgages, bonds, etc.	-Owners for dividends and other distributions -Owners for treasury stock purchased -Payment of principal amounts borrowed (excluding interest, which is an operating expense)

The difference between the above cash inflows and outflows is called **net cash inflow (outflow) from financing activities.**

D. **Reconciling balances.** FASB Statement 95 requires reporting of the three related amounts (1) net increase (decrease) in cash, (2) beginning cash balance, and (3) ending cash balance, as shown in Exhibit 15-1.

E. **Noncash investing and financing activities.** These activities are the investing and financing transactions that involve some noncash effects. An example is the purchase of a building where there is no cash down payment and the seller provides the mortgage. In this case, there is an investing activity that did not cause a cash outflow and a financing activity that did not cause a cash inflow. Noncash activities must be reported in a separate schedule or set out separately in the disclosures notes.

Cash and Cash Equivalents

FASB Statement 95 requires that a statement of cash flows must explain the change during the period in **cash and cash equivalents.** Cash equivalents are defined as "short-term, highly liquid investments" that are both:

a. Readily convertible to known amounts of cash, and

b. So near their maturity that they present insignificant risk of changes in value because of changes in interest rates.

Generally, only investments with original maturities of less than three months qualify as a cash equivalent under this definition.[1] Examples of cash equivalents are treasury bills, money market funds, and commercial paper.

Comparison of the Direct and Indirect Methods

There are two alternative approaches for preparing the SCF:

1. The **direct method** which reports the components of cash flows from operating activities as gross receipts and gross payments (such as total cash receipts from customers and total cash payments to employees). This method starts with revenues and expenses to compute net cash inflow (outflow) from operating activities. Exhibit 15-2 shows an example of a SCF prepared under the direct method.

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[1] Original maturity means original maturity to the entity holding the investment. For example, both a three-month U.S. Treasury bill and a three-year Treasury note purchased three months from maturity qualify as cash equivalents. However, a Treasury note purchased three years ago does not become a cash equivalent when its remaining maturity is three months.

2. The **indirect method** which reports only net changes in the cash flows from operating activities. This method adjusts net income to compute net cash inflow (outflow) from operating activities. Exhibit 15-3 shows an example of a SCF prepared under the indirect method.

Either method is acceptable, however **FASB Statement 95 strongly recommends the direct method.**

Notice that the basic difference between the direct and indirect methods (Exhibits 15-2 and 15-3) is the way that **cash flows from operating activities** are reported (boxed for emphasis). The two methods report the same net cash flow from each of the four classifications (A-D). Therefore, the basic difference is in the individual amounts that are shown within the classification "cash flows from operating activities."

The **direct method** reports the gross cash flow amount for each revenue and expense. The direct method converts the accrual-basis revenues and expenses amounts reported on the income statement to the cash-basis amounts reported on the SCF. For example, an income statement might report revenue of $100,000 which included $75,000 cash collected from customers and $25,000 for credit sales (i.e., accounts receivable). Under the direct method, the SCF would report cash collections from customers of $75,000.

In contrast, the **indirect method** starts with accrual-basis net income and converts that amount to a cash basis. This means that under operating activities the indirect method reports only net income, changes in certain balance sheet accounts, and net cash flow from operating activities.

The remainder of this chapter discusses the direct and indirect methods. The **direct method** is discussed first because it is preferred for the following reasons:

1. It has greater relevance for investors and creditors because it reports gross cash amounts for revenues and expenses rather than net conversion amounts.

2. It reports operations, investment, and financing activities consistently; that is, cash inflows and outflows by source under all three activities. The indirect method does this under investing and financing activities but not under operating activities.

3. It is easier to explain and understand.

4. It is strongly recommended in FASB Statement 95.

Exhibit 15-2 Direct Method, Statement of Cash Flows

UTEX Company
Direct Method--Statement of Cash Flows (000s)
For the Year Ended, December 31, 19B

A.	Cash flows from operating activities:		
	Cash inflows:		
	From customers	$ 60	
	Cash outflows:		
	Payments to employees	(18)	
	Payments to suppliers	(10)	
	Administrative and selling expenses	(12)	
	Net cash inflow from operating activities		$ 20
B.	Cash flows from investing activities:		
	Cash inflows:		
	Cash received from sale of plant assets	21	
	Cash outflows:		
	Cash paid for acquisition of plant assets	(30)	
	Net cash outflow from investment activities		(9)
C.	Cash flows from financing activities:		
	Cash inflows:		
	Cash received from sale of common stock	48	
	Cash received from long-term debt	40	
	Cash outflows:		
	Cash paid on long-term debt (principal only)	(46)	
	Cash paid for treasury stock purchased	(8)	
	Cash paid for dividends	(11)	
	Net cash inflow from financing activities		23
D.	Net increase (decrease) in cash during 19B		34
	Cash balance, January 1, 19B		42
	Cash balance at December 31, 19B		$ 76