

Introduction to Financial Accounting

Horngren Sundem Elliott Philbrick  
Eleventh Edition

**Pearson New International Edition**

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payment is an explicit transaction that the team records as an expense in 2012. Because no explicit transaction for the additional \$9 million occurs during 2012, the team does not routinely enter it into the accounting record. However, Rodriguez has earned the full \$29 million as a result of playing the whole season and the team must eventually pay the remaining \$9 million, so a liability exists. Further, the team incurred the entire \$29 million for the benefit of the 2012 season, so the \$9 million deferred payment is an expense for 2012. Thus, at the end of the period, when the team prepares the 2012 financial statements, an adjustment is necessary to record the deferred \$9 million payment as an expense and to record a \$9 million liability for its payment.

The principal adjustments arise from four basic types of implicit transactions:

- I. Expiration or consumption of unexpired costs
- II. Earning of revenues received in advance
- III. Accrual of unrecorded expenses
- IV. Accrual of unrecorded revenues

Let us now examine each of these four categories in detail.

## I. Expiration or Consumption of Unexpired Costs

Some costs expire due to the passage of time. For example, initially a company engages in an explicit transaction that creates an asset. As the company consumes the asset, it must make an adjustment to reduce the asset and to recognize an expense. The key characteristic of unexpired costs is that an explicit transaction in the past created an asset, and subsequent implicit transactions recognize the consumption of this asset.

For example, consider the following. Biwheels paid \$6,000 in January to cover rent for the months of January, February, and March. The company initially recorded \$6,000 of Prepaid Rent as an asset. As each day passed, Biwheels incurred rent expense and the asset declined in value. However, there is no benefit to recording daily adjusting entries. Rather, Biwheels made a \$2,000 adjustment at the end of each month to reflect the gradual expiration of the rent costs. The adjusting entry reduced the asset, Prepaid Rent, and increased Rent Expense. Another example of adjusting for asset expiration is the expensing of Office Supplies Inventory. Suppose a company just initiating operations purchases \$10,000 of Office Supplies Inventory on March 1, 2013. The company had no supplies inventory on hand prior to this purchase. At the time of the purchase an explicit transaction has occurred and the company records an increase (debit) to Office Supplies Inventory and a decrease (credit) to Cash. The journal entry to record this purchase is as follows:

Office supplies inventory .....	10,000	
Cash .....		10,000

At the end of March, the company determines that it has used \$1,500 of the Office Supplies Inventory acquired on March 1. This requires the following adjusting entry to increase Office Supplies Expense (debit) and reduce Office Supplies Inventory (credit):

Office supplies expense.....	1,500	
Office supplies inventory.....		1,500

After recording this adjusting entry, the balance sheet will show only \$8,500 (\$10,000 – \$1,500) in Office Supplies Inventory, and the income statement will show an expense of \$1,500. Will failure to record an adjusting entry cause the balance sheet and income statement to be incorrect? Yes. Even though the balance sheet will balance, both the income statement and the balance sheet will be in error. If the company fails to make the preceding adjusting entry, Office Supplies Inventory is overstated by \$1,500 and Office Supplies Expense is understated by \$1,500. Understated expenses result in overstated net income and overstated Retained Earnings, a stockholders' equity account.

Another example of the expiration of unexpired costs is the recording of Depreciation Expense and Accumulated Depreciation.

### ► OBJECTIVE 2

Make adjustments for the expiration or consumption of unexpired costs.

## II. Earning of Revenues Received in Advance

### » OBJECTIVE 3

Make adjustments for the earning of revenues received in advance.

#### unearned revenue (revenue received in advance, deferred revenue)

Represents cash received from customers who pay in advance for goods or services to be delivered at a future date.

Just as a company acquires assets and recognizes the related expense over time as it uses the assets, it may receive revenue in advance and then earn the revenue over time. **Unearned revenue** (also called **revenue received in advance** or **deferred revenue**) represents cash received from customers who pay in advance for goods or services that the company promises to deliver at a future date. The company receives cash before it earns the related revenue. This commitment to provide goods or services in the future is a liability, and the company must record both the receipt of cash and the liability. For instance, airlines often require advance payment for tickets. **American Airlines** recently showed a balance of almost \$4.4 billion in an unearned revenue account labeled Air Traffic Liability. Over time, as customers take the flights they have paid for, American reduces the liability and increases revenue.

The analysis of adjusting entries for unearned revenue is easier to understand if we visualize the financial positions of both parties to a contract. For example, recall the Biwheels Company's January advance payment of \$6,000 for 3 months' rent. Compare the financial impact on Biwheels Company with the impact on the company that owns the property (the landlord), who received the rental payment:

	Owner of Property (Landlord, Lessor)					Biwheels Company (Tenant, Lessee)				
	A	=	L	+	SE	A	=	L	+	SE
	Cash	=	Unearned Rent Revenue	+	Rent Revenue	Cash	+	Prepaid Rent	=	Rent Expense
(a) Explicit transaction (advance payment of 3 months' rent)	+6,000	=	+6,000			−6,000		+6,000	=	
(b) January adjustment (for 1 month rent)		=	−2,000		+2,000			−2,000	=	−2,000
(c) February adjustment (for 1 month rent)		=	−2,000		+2,000			−2,000	=	−2,000
(d) March adjustment (for 1 month rent)		=	−2,000		+2,000			−2,000	=	−2,000

The journal entries for (a) and (b) follow:

#### OWNER (LANDLORD)

(a) Cash	6,000
Unearned rent revenue	6,000
(b) Unearned rent revenue	2,000
Rent revenue	2,000

[Entries for (c) and (d) are the same as for (b).]

#### BIWHEELS COMPANY (TENANT)

(a) Prepaid rent	6,000
Cash	6,000
(b) Rent expense	2,000
Prepaid rent	2,000

[Entries for (c) and (d) are the same as for (b).]

We are already familiar with the analysis from Biwheels' point of view. The \$2,000 monthly entries for Biwheels are examples of the first type of adjustment, the expiration of a prepaid asset. From the viewpoint of the landlord, transaction (a) is an explicit transaction that recognizes the receipt of cash and an increase in Unearned Rent Revenue, a liability. Why record a liability? Because the landlord is now obligated to either deliver the rental services or refund the money if the services are not delivered. This account could be called Rent Collected in Advance or Deferred Rent Revenue instead of Unearned Rent Revenue. Regardless of the title, it is a liability account representing revenue collected in advance that the landlord has not earned, and it obligates the landlord to provide services in the future.

# BUSINESS FIRST

## FRANCHISES AND REVENUE RECOGNITION

In a franchise arrangement, a central organization, such as [McDonald's](#) or the [National Basketball Association](#), sells the right to use the company name and company products to a franchisee. The franchisee also receives the benefit of advertising through the larger company, along with management assistance and product development. The Web site [www.azfranchises.com](http://www.azfranchises.com) reports that 300 different business categories use franchising to distribute goods and services to U.S. consumers. In *Entrepreneur Magazine's* 2012 Franchise 500 rankings, the top 50 companies include 16 fast-food or family service restaurants, 9 companies that provide residential or commercial cleaning services, 5 personal services companies such as fitness centers and beauty salons, and 3 hotels.

One source estimates that there are 3,000 different franchise business companies operating more than 825,000 franchise outlets and employing more than 18 million people in the United States. The global franchising industry generates revenues of more than \$2.1 trillion. Two of the largest global franchises are [Subway](#) with almost 35,000 outlets (30% outside the United States) and McDonald's with more than 26,000 franchise outlets (57% outside the United States). One important difference between Subway and McDonald's is that all of Subway's locations are franchises, while McDonald's operates 6,400 company-owned locations in addition to its franchise outlets.

Franchising raises an interesting accounting problem. How does the central organization account for the franchise fees? At first glance, it might seem clear that companies should record such fees as revenue when they receive the cash. However, under accrual accounting, companies should record revenue only after

two conditions have been satisfied: (1) the company has completed the "work," that is, it has earned the revenue, and (2) there is reasonable assurance the company will actually collect the fee (it is realized in cash or will be collectible).

The [Rocky Mountain Chocolate Factory](#) is a franchisor of premium chocolate shops with more than 315 stores in the United States, Canada, and the United Arab Emirates. It provides an example of a company that collects franchise fees before it performs the related work. Rocky Mountain Chocolate sells its franchisees area development rights that grant the franchisee the exclusive right to develop outlets in a specific geographic area. In return for these rights, Rocky Mountain Chocolate Factory receives an initial franchise fee. Should Rocky Mountain Chocolate record the fee as revenue when it receives the cash? It should not because Rocky Mountain Chocolate's work is not done until the franchisee actually opens and operates the franchise stores. In the interim, Rocky Mountain Chocolate must report the fees as deferred revenue.

McDonald's is perennially named one of *Entrepreneur Magazine's* top franchising organizations. In 2011, McDonald's had \$85.9 billion in system-wide sales, of which franchisees and affiliates generated \$67.6 billion. However, when we look at the income statement, we see total revenue of only \$27.0 billion—\$18.3 billion from company-owned restaurants and \$8.7 billion from franchisees and affiliates. Why? McDonald's recognizes as revenues only the franchise fees, not the total product sales of its franchisees.

Sources: [www.entrepreneur.com/franchises](http://www.entrepreneur.com/franchises); [www.azfranchises.com/franchisefacts.htm](http://www.azfranchises.com/franchisefacts.htm); McDonald's 2010 Annual Report; Rocky Mountain Chocolate Factory 2010 Annual Report.

Notice that transaction (a) does not affect the landlord's stockholders' equity because it does not recognize any revenue. Companies cannot recognize revenue on the income statement until it is both earned and realized. While the landlord realized the \$6,000 when it received the cash, it had not earned any revenue as of that date. The landlord earns and recognizes the revenue over time as the adjusting entries in transactions (b), (c), and (d) are recorded. The landlord simultaneously decreases (debits) Unearned Rent Revenue and increases (credits) the stockholders' equity account Rent Revenue. The net effect is an increase in stockholders' equity at the time the owner recognizes the revenue. If the landlord fails to record the adjusting entry represented in (b), liabilities are overstated by \$2,000 and revenues are understated by \$2,000. Understated revenues result in an understatement of both net income and stockholders' equity. Similarly, if Biwheels fails to record the adjusting entry represented previously, its assets are overstated by \$2,000 and its expenses are understated by \$2,000. When expenses are understated, both net income and stockholders' equity are overstated.

By looking at both sides of the Biwheels rent contract, you can see that adjustment categories I and II are really mirror images of each other. Why? If a contract causes one party to record a Prepaid Expense, it will cause the other party to record Unearned Revenue. This basic relationship holds for any prepayment situation, from a 2-year fire insurance policy to a 5-year magazine subscription. In the case of the magazine subscription, the buyer initially recognizes a Prepaid Expense (asset) and uses adjustments to allocate the initial cost to an expense account over the term of the subscription. In turn, the seller, the magazine publisher, initially records a liability, Unearned Subscription Revenue, on receipt of payment for the 5-year subscription and uses adjustments to recognize the revenue over the subscription term.

Another example is **Starbucks**, who lists Deferred Revenue of \$449.3 million among its liabilities on October 2, 2011. Starbucks sells prepaid coffee cards (stored value cards) as well as gift certificates, both of which holders can redeem for a beverage or food item. Starbucks receives cash when customers purchase the card but cannot recognize revenue until the card or certificate is redeemed. Suppose Starbucks sells stored value cards and gift certificates totaling \$10,000 on September 8. The explicit transaction creates a liability, Deferred Revenue, on the balance sheet and increases Cash. By the October 2 year-end, customers have redeemed cards and certificates worth \$3,000. The company will recognize \$3,000 in revenue on the income statement and reduce the Deferred Revenue account by \$3,000. Another example of companies that receive revenue in advance is franchisors as described in the Business First box.

►► **OBJECTIVE 4**

Make adjustments for the accrual of unrecorded expenses.

### III. Accrual of Unrecorded Expenses

Wages are an example of a liability that grows moment to moment as employees perform their duties. The services provided by employees represent expenses. It is unnecessary to make hourly, daily, or even weekly formal entries in the accounts for many accrued expenses, as the cost of such frequent recording would exceed the benefits. This is true, even though computers can perform these tasks effortlessly. The costs of computing are small, but in this case the benefits are even smaller. Accountants aggregate these costs only when they prepare financial statements, and this rarely needs to be done hourly or daily. Consequently, they make adjustments to bring each accrued expense (and corresponding liability) account up-to-date at the end of the accounting period, just before they prepare the formal financial statements. These adjustments are necessary to accurately match the expenses to the period in which they help generate revenues.

#### Accounting for Payment of Wages

Most companies pay their employees on a predetermined schedule. Assume that **Columbia Sportswear** pays its employees each Friday for services rendered during that week. Consider the following sample calendar for January:

January						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Because wage expenses accrue for an entire week before Columbia pays employees, wages paid on January 26 are compensation for work done during the week ended January 26. Assume the total wages paid on the four Fridays during January total \$500,000, which is \$125,000 per 5-day workweek, or \$25,000 per day. Columbia makes routine entries for wage payments at the end of each week in January. As it pays wages, the company increases Wages Expense and decreases Cash. During the January shown in the preceding calendar, Columbia would pay wages on the 5th, 12th, 19th, and 26th. These events represent explicit transactions, prompted by

writing payroll checks. At the end of January, the balance sheet shows the summarized amounts of these explicit transactions and their effect on the accounting equation:

	A	=	L	+	SE
	Cash	=			Wages Expense
(a) Routine entries for explicit transactions	-500,000	=			-500,000

### Accounting for Accrual of Wages

Assume that Columbia Sportswear prepares financial statements on a monthly basis. In addition to the \$500,000 actually paid to employees during the month of January, Columbia owes \$75,000 for employee services rendered during the last 3 days of the month. The company will not pay the employees for these services until Friday, February 2. To ensure an accurate accounting of Wages Expense for the month of January, Columbia must make an adjustment. Transaction (a) shows the total of the routine entries for the explicit payment of wages to employees during January, and transaction (b) shows the adjusting entry to accrue wages for Monday, January 29, through Wednesday, January 31. Transaction (b) recognizes both the expense and the liability.

(a) Wages expense	500,000	
Cash		500,000
(b) Wages expense	75,000	
Accrued wages payable		75,000

If Columbia does not record transaction (b), both expenses and liabilities are understated by \$75,000. Understated expenses result in the overstatement of both net income and stockholders' equity.

The total effect of wages on the balance sheet equation for the month of January, including transactions (a) and (b), is as follows:

	A	=	L	+	SE
	Cash	=	Accrued Wages Payable	+	Wages Expense
(a) Routine entries for explicit transactions	-500,000	=			-500,000
(b) Adjustment for implicit transaction, the accrual of unrecorded wages		=	+75,000		-75,000
Total effects	-500,000	=	+75,000		-575,000

The adjustment in entry (b) is the first adjusting entry we have examined that shows an expense offset by an increase in a liability instead of a decrease in an asset. The accountant's problem is different for this type of accrual than it was for prepaid rent. With prepaid rent, there is a record in the accounts of an asset, and the accountant might recognize the necessity for an adjustment by asking the following question: Is the asset balance shown on the books correct or is an adjustment required to reduce it? With accrued wages there is no asset account to prompt such a question. However, because most end-of-period adjustments are routine, accountants know to check for adjustments such as expired rent and accrued wages because they experience these items every period.

On February 2, Columbia will pay off the liability for the work performed during the last 3 days of January, together with the wages expense for February 1 and 2:

Wages expense (February 1 and 2)	50,000	
Accrued wages payable	75,000	
Cash		125,000
To record wages expense for February 1 and 2 and to pay wages for the week ended February 2		



These entries clearly demonstrate the matching principle. The routine entries and the adjusting entries match the wages expense to the periods in which they help generate revenues.

### Accrual of Interest

Other examples of accrued expenses include sales commissions, property taxes, income taxes, and interest on borrowed money. Interest is the “rent” paid for the use of money, just as rent is paid for the use of buildings. The interest accumulates (accrues) as time passes, regardless of when a company actually pays cash for interest.

Assume that Columbia Sportswear borrowed \$100,000 from **Wells Fargo Bank** on December 31, 2012. The terms of the loan require that Columbia repay the loan amount of \$100,000 plus 6% interest on December 31, 2013. By convention, we express interest rates on an annual basis. We can calculate interest for any part of a year as follows:

$$\text{Principal} \times \text{Interest rate} \times \text{Fraction of a year} = \text{Interest}$$

Principal is the amount borrowed (\$100,000). The interest rate is expressed as an annual percentage (6% or .06). For the full year, the interest expense is

$$\$100,000 \times .06 \times 1 = \$6,000$$

As of January 31, 2013, Columbia has had use of the \$100,000 bank loan for 1 month or one-twelfth of a year. Columbia owes the bank for the use of this money, and the amount owed has accrued for the entire month of January. The amount of interest owed is  $(\$100,000 \times .06 \times 1/12) = \$500$ . The monthly cost of the loan is \$500. The interest is not due to be paid until December 31, 2013. However, at the end of January, Columbia is liable for 1 month of accrued interest. We analyze and record the adjustment in the same way as the adjustment for accrued wages:

	A	=	L	+	SE
			Accrued Interest Payable		Interest Expense
Adjustment to accrue January interest not yet recorded		=	+500		-500

The adjusting journal entry is as follows:

Interest expense .....	500	
Accrued interest payable .....		500

At the end of January, Columbia owes Wells Fargo \$100,500, not \$100,000. The adjusting entry matches the \$500 interest expense with the period in which Columbia had the benefit of the bank loan. If Columbia omits the adjusting entry, liabilities and expenses will both be understated at the end of January. Would the understatement of interest expense have other financial statement implications? Yes. If interest expense is understated, both net income and stockholders' equity are overstated.

### Accrual of Income Taxes

As a company generates income, it accrues income tax expense. Income taxes exist worldwide, although rates and details differ from country to country. Corporations in the United States are subject to federal income taxes and, in most states, state income taxes. For many corporations, the federal plus state income tax rates are around 40%. Assuming a combined 40% tax rate, for every dollar of income a company makes, it accrues \$.40 of income tax expense. Of course, the company does not pay \$.40 in tax as it earns each dollar. Instead, taxes accrue over the accounting period, and the company makes an adjustment at the end of the period when it prepares financial statements.