

## Chapter 4

### Adjustments, Financial Statements, and the Quality of Earnings 调整分录，财务报告和收益质量

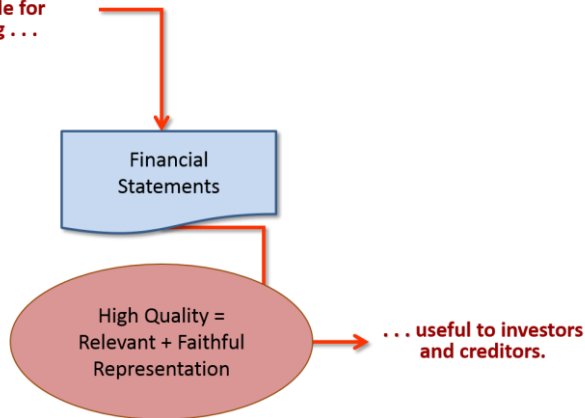
#### Learning Objectives

After studying this chapter, you should be able to:

- 4-1 Explain the purpose of adjustments and analyze the adjustments necessary at the end of the period to update revenues and expenses and related balance sheet accounts.
- 4-2 Present an income statement with earnings per share, a statement of stockholders' equity, and a balance sheet.
- 4-3 Compute and interpret the total asset turnover ratio.
- 4-4 Explain the closing process.

## Understanding the Business 了解企业

Management is responsible for preparing ...



4-3

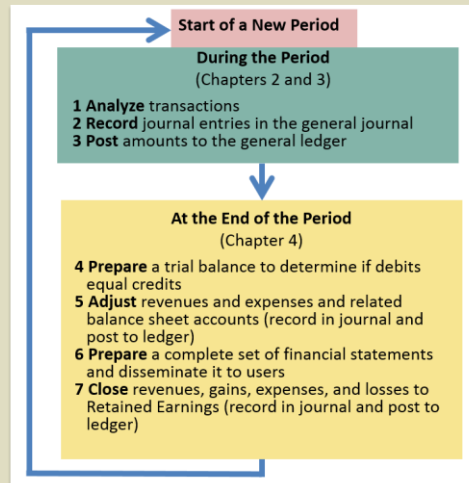
## Learning Objective 4-1

- 4-1** Explain the purpose of adjustments and analyze the adjustments necessary at the end of the period to update revenues and expenses and related balance sheet accounts.

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## Exhibit 4.1

### The Accounting Cycle 会计循环



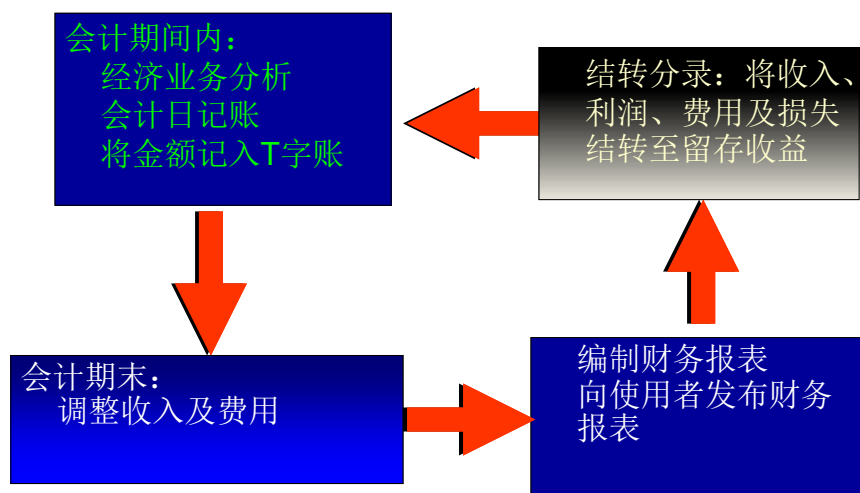
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## Steps in the accounting cycle 会计循环步骤

1. 分析交易和原始凭证
2. 记录：编制记账会计分录。
3. 过帐：将会计分录内容抄至相应的账户(T字帐户)
4. 编制试算平衡表，确保借方合计等于贷方合计
5. 调整收入费用和相应的资产负债表项目：编制调整分录，并过帐
6. 编制会计报表
7. 结账：将收入、利得、费用和损失结转至留存收益账户，编制结帐分录、并过帐

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## 会计循环



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## The Purpose of Adjustments 账项调整目的

内部事项需要调整

Revenues are recorded when earned (the **revenue recognition principle**).

Expenses are recorded when they are incurred to generate revenue (the **expense recognition principle**).

*Companies wait until the end of the accounting period to adjust their accounts because doing so daily or weekly would be very costly and time-consuming. 调整在期末进行*

*Adjusting entries are required every time a company prepares financial statements 编表前必须调整*

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## Exhibit 4.2

### Four Types of Adjustments

|   |  | Period 1  | End of Period 1                          | Period 2                    |
|---|--|---|--|-----------------------------|
| <b>Adjusting Entries that Increase Revenues:</b> <ul style="list-style-type: none"> <li>• <b>Deferred Revenues</b> Previously recorded liabilities that were created when cash was received in advance and that must be reduced for the amount of revenue actually earned during the period.</li> </ul>   |  | Entry for cash receipt<br>↓<br>Revenue earned   | Adjusting Entry<br>↑                     |                             |
|   |  |   | Adjusting Entry<br>↓<br>Revenue earned   | Entry for cash receipt<br>↓ |
| <b>Adjusting Entries that Increase Expenses:</b> <ul style="list-style-type: none"> <li>• <b>Deferred Expenses</b> Previously recorded assets, such as Prepaid Rent, Supplies, and Equipment, that were created when cash was paid in advance and that must be reduced for the amount of expense actually incurred during the period through use of the asset.</li> </ul> |  | Entry for cash payment<br>↓<br>Expense incurred | Adjusting Entry<br>↑                     |                             |
|   |  |   | Adjusting Entry<br>↓<br>Expense incurred | Entry for cash payment<br>↓ |
| <ul style="list-style-type: none"> <li>• <b>Accrued Revenues</b> Revenues that have been earned but not yet recorded because cash will be received after the services are performed or goods are delivered.</li> </ul>  |  |   |  |                             |
|   |  |   |  |                             |
| <ul style="list-style-type: none"> <li>• <b>Accrued Expenses</b> Expenses that have been incurred but not yet recorded because cash will be paid after the goods or services are used.</li> </ul>   |  |   |  |                             |
|   |  |   |  |                             |

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## Three Steps in the Adjustment Process

### Step 1: Ask – 是否有未记录的收入/费用？

- If **YES**, increase the revenue or expense account in the adjusting entry.

### Step 2: Ask – 现金收/支在前还是在后

- If cash **was received** in the past, a liability account (**deferred revenue** 预收收入) was recorded in the past → Now reduce the liability account and record revenue earned.
- If cash **will be received** in the future → Increase the receivable account to record what is owed by others (creating an **accrued revenue** 应计收入).
- If cash **was paid** in the past, a **deferred expense** 预付费用 account (asset) was created → Now reduce the asset because some or all of the asset has been used.
- If cash **will be paid** in the future → Increase the payable account to record what is owed by the company (creating an **accrued expense** 应计费用).

### Step 3: 计算收入费用

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Summary of the Adjustment Process

When revenue is earned:

DEFERRED REVENUE

If cash was received and previously recorded, the adjusting entry is

|                             |    |
|-----------------------------|----|
| Unearned Revenue (–L) ..... | xx |
| Revenue (+R, +SE) .....     | xx |

OR

ACCRUED REVENUE

If cash will be received, the adjusting entry is

|                         |    |
|-------------------------|----|
| Receivable (+A) .....   | xx |
| Revenue (+R, +SE) ..... | xx |

When expense is incurred:

DEFERRED EXPENSE

If cash was paid and previously recorded, the adjusting entry is

|                            |    |
|----------------------------|----|
| Expense (+E, –SE) .....    | xx |
| Prepaid Expense (–A) ..... | xx |

OR

ACCRUED EXPENSE

If cash will be paid, the adjusting entry is

|                         |    |
|-------------------------|----|
| Expense (+E, –SE) ..... | xx |
| Payable (+L) .....      | xx |

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Exhibit 4.4  
Unadjusted Trial Balance

CHIPOTLE MEXICAN GRILL—UNADJUSTED  
TRIAL BALANCE Based on hypothetical  
transactions for the first quarter ended  
March 31, 2018

| (in millions)                        | Debit | Credit |
|--------------------------------------|-------|--------|
| Cash                                 | 731   |        |
| Short-term investments               | 333   |        |
| Accounts receivable                  | 54    |        |
| Supplies                             | 390   |        |
| Prepaid expenses                     | 131   |        |
| Land                                 | 21    |        |
| Buildings (at cost)                  | 1,711 |        |
| Equipment (at cost)                  | 628   |        |
| Accumulated depreciation (used cost) |       | 979    |
| Long-term investments                | 35    |        |
| Intangible assets                    | 81    |        |
| Intangible assets                    |       | 88     |
| Unearned revenue                     |       | 106    |
| Dividends payable                    |       | 2      |
| Income taxes payable                 |       | 0      |
| Wages payable                        |       | 0      |
| Utilities payable                    |       | 5      |
| Notes payable (current)              |       | 0      |
| Notes payable (noncurrent)           |       | 80     |
| Other liabilities                    |       | 279    |
| Common stock                         |       | 2      |
| Additional paid-in capital           |       | 1,604  |
| Treasury stock                       | 2,334 |        |
| Retained earnings                    |       | 2,391  |
| Restaurant sales revenue             |       | 1,228  |
| Interest revenue                     |       | 1      |
| Wages expense                        | 177   |        |
| Utilities expense                    | 75    |        |
| Repairs expense                      | 19    |        |
| Training expense                     | 41    |        |
| Loss on disposal of assets           | 4     |        |
| Income tax expense                   | 0     |        |
| Total                                | 6,765 | 6,765  |

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Deferred (Unearned) Revenues (1 of 2)

**AJE 1 Unearned Revenue:** Chipotle received cash last period from customers purchasing gift cards. During the first quarter of 2018, customers redeemed a portion of the gift cards for \$52 in food service.

- Step 1

**Was revenue earned that is not yet recorded? Yes.** When customers redeemed their gift cards during the quarter, Chipotle provided food service. Therefore, Chipotle earned \$52 in Restaurant Sales Revenue that is not yet recorded by the end of the quarter. **Record an increase in the revenue account.**
- Step 2

**Was the related cash received in the past or will it be received in the future? In the past.** The Unearned Revenue account was created when cash was received in the past. At the end of the quarter, there is a \$106 balance in the account. However, it is too large because a portion of it has been earned. Therefore, **record a decrease in the unearned revenue account** for the amount earned.
- Step 3

**Compute the amount of revenue earned.** The amount of the revenue that was earned is \$52. **Record \$52** in the adjusting journal entry.

|                                    | Debit | Credit |
|------------------------------------|-------|--------|
| (AJE 1) Unearned Revenue (-L)      | 52    |        |
| Restaurant sales revenue (+R, +SE) |       | 52     |

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Deferred (Unearned) Revenues (2 of 2)

**AJE 1 Unearned Revenue** – AJE 1 had the following effect on the general ledger account balances.

| – Unearned Revenue (L) + |    |          | – Restaurant Sales Revenue (R) + |            |  |
|--------------------------|----|----------|----------------------------------|------------|--|
|                          |    | 106 Bal. |                                  | 1,228 Bal. |  |
| (AJE 1)                  | 52 |          |                                  | 52 (AJE 1) |  |
|                          |    | 54       |                                  | 1,280      |  |

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## Accrued Revenues

**AJE 2 Interest on Investments:** Investments owned by Chipotle earned \$1 in additional interest revenue for the quarter, but the cash will be received in the next quarter.

- Step 1

**Was revenue earned that is not yet recorded?** Yes. Investments earned an additional amount of interest during the quarter, but no interest revenue has yet been recorded. Therefore, revenue is understated in the current quarter. **Record an increase in the revenue account.**
- Step 2

**Was the related cash received in the past or will it be received in the future?** In the future. Chipotle will receive the cash from the interest revenue in the next quarter. Because cash will be received, a new account (a receivable) needs to be increased. **Increase Interest Receivable.**
- Step 3

**Compute the amount of revenue earned.** The amount of the revenue that was earned is given. **Record \$1** in the adjusting journal entry.

|                                  | Debit | Credit |
|----------------------------------|-------|--------|
| (AJE 2) Interest receivable (+A) | 1     |        |
| Interest revenue (+R, +SE)       |       | 1      |

| + Interest Receivable (A) - |   |  |
|-----------------------------|---|--|
| Bal.                        | 0 |  |
| (AJE 2)                     | 1 |  |
|                             | 2 |  |

| - Interest Revenue (R) + |   |         |
|--------------------------|---|---------|
|                          | 1 | Bal.    |
|                          | 1 | (AJE 2) |
|                          | 2 |         |

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## Deferred Expenses (1 of 7)

Many assets are used over time to generate revenues, such as:

- Supplies
- Buildings and equipment
- Prepaid expenses (e.g., prepaid rent, prepaid insurance, prepaid advertising)

These assets are **deferred expenses** (that is, recording the expenses for using these assets is deferred to the future). At the end of every period, an adjustment must be made to record the amount of the asset that was used during the period.

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Deferred Expenses (2 of 7)

**AJE 3 Supplies:** At the end of the quarter, Chipotle counted \$24 in supplies on hand, but the Supplies account indicated an unadjusted balance of \$390.

- Step 1

**Was expense incurred that is not yet recorded?** Yes. Supplies were used during the quarter to generate revenue, but no entry has been made to record the amount used. Expenses are understated. **Record an increase in the Supplies Expense account.**
- Step 2

**Was the related cash paid in the past or will it be paid in the future?** In the past. Chipotle purchased supplies during the quarter and recorded the acquisition in the Supplies account. Some of these supplies have been used during the quarter, but no entry has been made yet to reduce the account. Assets are overstated. **Record a decrease in the Supplies account.**
- Step 3

**Compute the amount of expense incurred.** The easiest way to determine the dollar amount of supplies used is to add the dollar amount of supplies available at the beginning of the period plus any purchases made during the period, and then subtract the dollar amount of supplies remaining on hand at the end of the period.

| Computation of Supplies Expense      |               |
|--------------------------------------|---------------|
| Beginning balance—Supplies           | \$ 20         |
| + Purchases during quarter           | 370           |
| Unadjusted balance at end of quarter | 390           |
| – Amount on hand at end of quarter   | (24)          |
| Supplies used during quarter         | <u>\$ 366</u> |

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Deferred Expenses (3 of 7)

AJE 3 Supplies

The balance of Supplies on the unadjusted trial balance is \$390, which includes the beginning balance for the quarter (\$20) and the purchases during the quarter (\$370). With \$24 remaining on hand, the amount of supplies used during the period is \$366. **Record \$366 in the adjusting entry.**

|                                    | Debit | Credit |
|------------------------------------|-------|--------|
| (AJE 3) Supplies Expense (+E, -SE) | 366   |        |
| Supplies (-A)                      |       | 366    |

| + Supplies (A) – |     |             | + Supplies Expense (E) – |     |  |
|------------------|-----|-------------|--------------------------|-----|--|
| Bal.             | 390 |             | Bal.                     | 0   |  |
|                  |     | 366 (AJE 3) | (AJE 3)                  | 366 |  |
|                  | 24  |             |                          | 366 |  |

4-18

Deferred Expenses (4 of 7)

**AJE 4 Prepaid Expenses:** The Prepaid Expenses unadjusted account balance of \$131 includes (1) \$72 paid at the beginning of the quarter for rental of facilities at \$18 per month, (2) \$48 for insurance coverage for six months beginning January 1, 2018, and (3) \$4 for advertising during the quarter.

**Step 1 Was expense incurred that is not yet recorded? Yes.** 部分租金/保险/广告费已经为当期创收而有所耗费，但未作记录，费用被低估。Record an increase in the Rent Expense, Insurance Expense, and Advertising Expense.

**Step 2 Was the related cash paid in the past or will it be paid in the future?** 期初已经支付的租金/保险/广告费，这类预付费用在当期已经有所耗费，但未作记录，预付费用被高估。Record a decrease in Prepaid Expenses.

**Step 3 Compute the amount of expense incurred.** For the Chipotle example, the computations are as follows:

- Rent: \$18 per month × 3 months in the quarter = \$54 used
- Insurance: \$48 prepaid × (3 months in the quarter / 6 months of coverage) = \$24 used
- Advertising: All during the quarter = \$4 used

Record a total of \$82

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Deferred Expenses (5 of 7)

AJE 4 Prepaid Expenses

|                                | Debit | Credit |
|--------------------------------|-------|--------|
| (AJE 4) Rent expense (+E, -SE) | 54    |        |
| Insurance expense (+E, -SE)    | 24    |        |
| Advertising expense (+E, -SE)  | 4     |        |
| Prepaid expenses (-A)          |       | 82     |

| + Prepaid Expenses (A) — |            |
|--------------------------|------------|
| Bal.                     | 131        |
|                          | 82 (AJE 4) |
|                          | 49         |

| + Rent Expense (E) — |    |
|----------------------|----|
| Bal.                 | 0  |
| (AJE 4)              | 54 |
|                      | 54 |

| + Insurance Expense (E) — |    |
|---------------------------|----|
| Bal.                      | 0  |
| (AJE 4)                   | 24 |
|                           | 24 |

| + Advertising Expense (E) — |   |
|-----------------------------|---|
| Bal.                        | 0 |
| (AJE 4)                     | 4 |
|                             | 4 |

4-20

Deferred Expenses (6 of 7)

AJE 5 Buildings and Equipment

Building and equipment, but not land, **depreciate** over time as they are used. **Depreciation is the allocation of the cost of buildings and equipment over their estimated useful lives to the organization.**

Step 1 **Was expense incurred that is not yet recorded?** Yes. 使用固定资产，但是没有确认相应的费用。Record an increase in the expense account, Depreciation Expense.

Step 2 **Was the related cash paid in the past or will it be paid in the future?** In the past.几年前购买的固定资产，在当期有所耗费，但未作记录。Reduce the net book value by recording an increase in the contra-account Accumulated Depreciation.

Step 3 **Compute the amount of expense incurred.** The property and equipment have been used to generate revenue for the quarter. Thus, we need to calculate one quarter of Depreciation Expense:  
  
Depreciation expense for the quarter = \$124 for the year (given) × 1/4 of the year  
= \$31

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Deferred Expenses (7 of 7)

**AJE 5 Depreciation on Buildings and Equipment:** The amount of annual depreciation expense was given in the problem as \$124. The quarterly depreciation expense is \$31.

|  | Debit | Credit |
|--|-------|--------|
| (AJE 5) Depreciation expense (+E, -SE) | 31    |        |
| Accumulated depreciation (+XA, -A)     |       | 31     |

| + Depreciation Expense (E) - |    |  | - Accumulated Depreciation (XA) + |       |         |
|------------------------------|----|--|-----------------------------------|-------|---------|
| Bal.                         | 0  |  |                                   | 979   | Bal.    |
| (AJE 5)                      | 31 |  |                                   | 31    | (AJE 5) |
|                              | 31 |  |                                   | 1,010 |         |

4-22

Accrued Expenses (1 of 5)

Many expenses are incurred in the current period without being paid until the next period.

Common examples include:

- Wages Expense for the wages owed to employees who worked during the period
- Utilities Expense for the water, gas, and electricity used during the period
- Interest Expense incurred on debt owed during the period

These **accrued expenses** accumulate (accrue) over time but are not recognized as expenses until the end of the period in an adjusting entry.

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Accrued Expenses (2 of 5)

**AJE 6 Wages:** Chipotle’s employees earned \$67 in wages for working two days at the end of the quarter. They will be paid in the next quarter.

- Step 1

**Was expense incurred that is not yet recorded? Yes.** 公司利用了员工的劳动，但是尚未记录相应的费用，费用低估。Record an increase in Wages Expense.
- Step 2

**Was the related cash paid in the past or will it be paid in the future?** 公司在未来有支付对应工资的义务，但尚未记录，负债低估。Record an increase in Wages Payable.
- Step 3

**Compute the amount of expense incurred.** The amount of wages owed to employees is given. Record \$67 in the adjusting entry.

|                                 | Debit | Credit |
|---------------------------------|-------|--------|
| (AJE 6) Wages expense (+E, -SE) | 67    |        |
| Wages payable (+L)              |       | 67     |

| + Wages Expense (E) - |     |  | - Wages Payable (L) + |    |         |
|-----------------------|-----|--|-----------------------|----|---------|
| Bal.                  | 177 |  |                       | 0  | Bal.    |
| (AJE 6)               | 67  |  |                       | 67 | (AJE 6) |
|                       | 244 |  |                       | 67 |         |

4-24

Accrued Expenses (3 of 5)

**AJE 7 Interest on Debt:** Chipotle had a balance of \$78 in long-term notes payable from prior years and borrowed an additional \$2 at the beginning of the quarter, for a total of \$80 of interest-bearing debt obligations. The interest (5.0% rate) will be paid in the future.

**Step 1** Was expense incurred that is not yet recorded? Yes. 公司借债，但尚未确认相应的利息费用，费用低估。Record an increase in Interest Expense.

**Step 2** Was the related cash paid in the past or will it be paid in the future? In the future. 公司将在未来支付相应的利息费用，需确认相应的负债。Record an increase in Interest Payable.

**Step 3** Compute the amount of expense incurred. Calculate interest owed using the following formula:

$$\text{Principal} \times \frac{\text{Annual Interest Rate}}{\text{Interest Rate}} \times \frac{\text{Fraction of Year}}{\text{(since last computation)}} = \frac{\text{Interest for the Period}}{\text{Period}}$$

|                                    | Debit | Credit |
|------------------------------------|-------|--------|
| (AJE 7) Interest expense (+E, -SE) | 1     |        |
| Interest payable (+L)              |       | 1      |

| + Interest Expense (E) - |   |
|--------------------------|---|
| Bal.                     | 0 |
| (AJE 7)                  | 1 |
|                          | 1 |

| - Interest Payable (L) + |         |
|--------------------------|---------|
|                          | 0       |
|                          | 1       |
|                          | (AJE 7) |
|                          | 1       |

4-25

Accrued Expenses (4 of 5)

**AJE 8 Utilities:** Chipotle received a utility bill for \$15 for usage during the quarter. The bill will be paid next quarter.

**Step 1** Was expense incurred that is not yet recorded? Yes. Chipotle used the utilities during the first quarter but has not yet recorded the expense. Expenses are understated. Record an increase in Utilities Expense.

**Step 2** Was the related cash paid in the past or will it be paid in the future? In the future. Chipotle will pay next quarter the utility billed for usage in the first quarter. The liability is understated. Record an increase in Utilities Payable.

**Step 3** Compute the amount of expense incurred. The amount of the utilities incurred in the first quarter is given. Record \$15 in the adjusting entry.

|                                     | Debit | Credit |
|-------------------------------------|-------|--------|
| (AJE 8) Utilities expense (+E, -SE) | 15    |        |
| Utilities payable (+L)              |       | 15     |

| + Utilities Expense (E) - |    |
|---------------------------|----|
| Bal.                      | 75 |
| (AJE 8)                   | 15 |
|                           | 90 |

| - Utilities Payable (L) + |         |
|---------------------------|---------|
|                           | 5       |
|                           | 15      |
|                           | (AJE 8) |
|                           | 20      |

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Accrued Expenses (5 of 5)

**AJE 9 Income Taxes:** The final adjusting entry is to record the accrual of \$101 of income taxes that will be paid in the next quarter.

- Step 1

**Was expense incurred that is not yet recorded?** Yes. Chipotle incurred taxes on its quarterly income. Until an adjusting entry is recorded at the end of the period based on all adjusted revenues, gains, expenses, and losses, total expenses on the income statement are understated. **Record an increase in Income Tax Expense.**
- Step 2

**Was the related cash paid in the past or will it be paid in the future?**  
**In the future.** Income taxes from the first quarter are due by the end of the second quarter. So the liabilities on the balance sheet must be increased. **Record an increase in Income Taxes Payable.**
- Step 3

**Compute the amount of expense incurred.** Income taxes are computed on pretax income after all other adjustments. **Record \$101 in the adjusting entry.**

|                                      | Debit | Credit |
|--------------------------------------|-------|--------|
| (AJE 9) Income tax expense (+E, -SE) | 101   |        |
| Income taxes payable (+L)            |       | 101    |

| + Income Tax Expense (E) - |     | - Income Taxes Payable (L) + |     |
|----------------------------|-----|------------------------------|-----|
| Bal.                       | 0   |                              | 0   |
| (AJE 9)                    | 101 |                              | 101 |
|                            | 101 |                              | 101 |

4-27

Exercise 4-1

- Alexa Company completed its first year of operations on December 31. All of the year’s entries have been recorded except for the following:
- a.

At year-end, employees earned wages of \$6,400, which will be paid on the next payroll date in January of next year.
- b.

At year-end, the company had earned interest revenue of \$3,900. The cash will be collected March 1 of the next year.

Identify whether each transaction results in adjusting a deferred or an accrued account. Using the process illustrated in the chapter, prepare the required adjusting entry for transactions (a) and (b). Include appropriate dates and write a brief explanation of each entry.

- a.

Wages expense

6,400

Wages payable

6,400

To accrue wages earned by employees at year-end, will be paid January of the next year
- b.

Interest receivable

3,900

Interest revenue

3,900

To accrue interest revenue earned at year-end, will be collected March 1 of next year

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## Exercise 4-2

Van Detailing Services, Inc., completed its first year of operations on June 30. All of the year's entries have been recorded except for the following:

- On January 1 of the current year, the company borrowed \$50,000 at a 8 percent interest rate to be repaid in five years.
- On the last day of the current year, the company received a \$120 utility bill for utilities used in June. The bill will be paid in July of next year.

**Required:**

1. What is the annual reporting period for this company?
2. Identify whether each transaction results in adjusting a deferred or an accrued account. Using the process illustrated in the chapter, prepare the required adjusting entry for transactions (a) and (b). Include appropriate dates and write a brief explanation of each entry.
3. Why are these adjustments made?

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### **Requirement 1**

The annual reporting period for this company is July 1 through June 30.

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**Requirement 2**

- a. On January 1 of the current year, the company borrowed \$50,000 at a 8 percent interest rate to be repaid in five years.

Accrued Expense

Computation:

$$\$50,000 \times 0.08 \times 6 \div 12 = \$2,000$$

Adjusting entry:

|  | Debit | Credit |
|--|-------|--------|
| Interest Expense (+E,-SE).....                 | 2,000 |        |
| Interest Payable (+L).....                     |       | 2,000  |
| <i>To record interest accrued at year-end.</i> |       |        |

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**Requirement 2**

- b. On the last day of the current year, the company received a \$120 utility bill for utilities used in June. The bill will be paid in July of next year.

Accrued Expense

Adjusting entry:

|  | Debit | Credit |
|--|-------|--------|
| Utilities Expense (+E, -SE).....                 | 120   |        |
| Accounts Payable (+L).....                       |       | 120    |
| <i>To record utilities incurred at year-end.</i> |       |        |

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**Requirement 3**

Adjusting entries are necessary at the end of the accounting period to ensure that:

- All revenues earned and expenses incurred are recorded
- The related assets and liabilities are measured properly

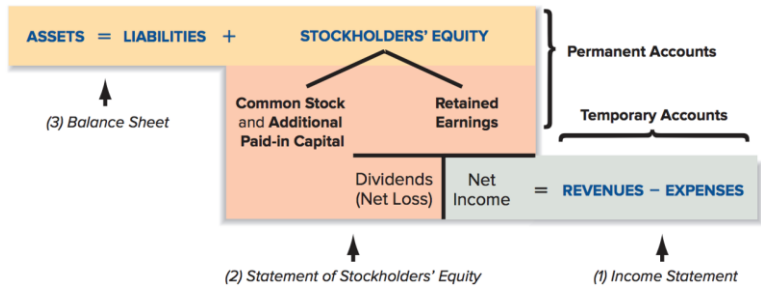
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## Learning Objective 4-2

**4-2** Present an income statement with earnings per share, a statement of stockholders' equity, and a balance sheet.

4-34

Interconnections among Financial Statements

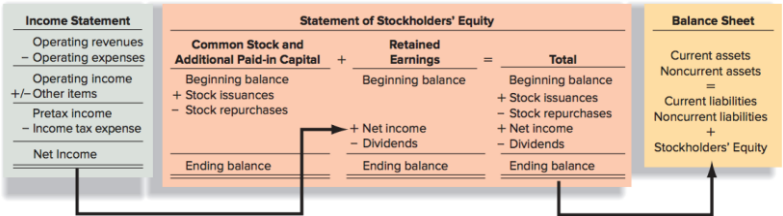


**Balance Sheet accounts are permanent.** They retain their balances from one period to the next.

**Revenue, expense, gain, and loss accounts are temporary.** Their balances accumulate but start with a zero balance at the beginning of the next period.

4-35

Relationships among Financial Statements



4-36

Exhibit 4.5  
Trial Balance Spreadsheet

| CHIPOTLE MEXICAN GRILL<br>Trial Balance Spreadsheet<br>For the first quarter ended March 31, 2018<br>(in millions of dollars) |            |        |             |        |          |        |
|---|------------|--------|-------------|--------|----------|--------|
|   | Unadjusted |        | Adjustments |        | Adjusted |        |
|   | Debit      | Credit | Debit       | Credit | Debit    | Credit |
| Cash  | 731        |        |             |        | 731      |        |
| Short-term investments  | 333        |        |             |        | 333      |        |
| Accounts receivable   | 54         |        |             |        | 54       |        |
| Interest receivable   | 0          |        | AJE 2       | 1      | 1        |        |
| Supplies  | 390        |        | AJE 3       | 366    | 24       |        |
| Prepaid expenses  | 131        |        | AJE 4       | 82     | 49       |        |
| Land  | 21         |        |             |        | 21       |        |
| Buildings   | 1,711      |        |             |        | 1,711    |        |
| Equipment   | 628        |        |             |        | 628      |        |
| Accumulated depreciation  |            | 979    | AJE 5       |        | 31       | 1,010  |
| Long-term investments   | 35         |        |             |        | 35       |        |
| Intangible assets   | 81         |        |             |        | 81       |        |
| Accounts payable  |            | 88     |             |        |          | 88     |
| Unearned revenue  |            | 106    | AJE 1       | 52     |          | 54     |
| Dividends payable   |            | 2      |             |        |          | 2      |
| Income taxes payable  |            | 0      | AJE 9       | 101    |          | 101    |
| Wages payable   |            | 0      | AJE 6       | 67     |          | 67     |
| Utilities payable   |            | 5      | AJE 8       | 15     |          | 20     |
| Interest payable  |            | 0      | AJE 7       | 1      |          | 1      |
| Notes payable (current)   |            | 0      |             |        |          | 0      |
| Notes payable (noncurrent)  |            | 80     |             |        |          | 80     |
| Other liabilities   |            | 279    |             |        |          | 279    |
| Common stock  |            | 2      |             |        |          | 2      |
| Additional paid-in capital  |            | 1,604  |             |        |          | 1,604  |
| Treasury stock  | 2,334      |        |             |        | 2,334    |        |
| Retained earnings   |            | 2,391  |             |        |          | 2,391  |
| Restaurant sales revenue  |            | 1,228  | AJE 1       |        | 52       | 1,280  |
| Interest revenue  |            | 1      | AJE 2       |        | 1        | 2      |
| Supplies expense  | 0          |        | AJE 3       | 366    | 366      |        |
| Wages expense   | 177        |        | AJE 6       | 67     | 244      |        |
| Utilities expense   | 75         |        | AJE 8       | 15     | 90       |        |
| Rent expense  | 0          |        | AJE 4       | 54     | 54       |        |
| Insurance expense   | 0          |        | AJE 4       | 24     | 24       |        |
| Advertising expense   | 0          |        | AJE 4       | 4      | 4        |        |
| Repairs expense   | 19         |        |             |        | 19       |        |
| Training expense  | 41         |        |             |        | 41       |        |
| Depreciation expense  | 0          |        | AJE 5       | 31     | 31       |        |
| Loss on disposal of assets  | 4          |        |             |        | 4        |        |
| Interest expense  | 0          |        | AJE 7       | 1      | 1        |        |
| Income tax expense  | 0          |        | AJE 9       | 101    | 101      |        |
| Total   | 6,765      | 6,765  | 716         | 716    | 6,981    | 6,981  |

NOTE: Cash did not change because cash is never adjusted.

4-37

Income Statement

| CHIPOTLE MEXICAN GRILL, INC.<br>Consolidated Statement of Income*<br>For the quarter ended March 31, 2018 (in millions of dollars, except per share data) |          |
|---|----------|
| Restaurant sales revenue  | \$ 1,280 |
| Restaurant operating expenses:  |          |
| Supplies expense  | 366      |
| Wages expense   | 244      |
| Rent expense  | 54       |
| Insurance expense   | 24       |
| Utilities expense   | 90       |
| Repairs expense   | 19       |
| General and administrative expenses:  |          |
| Training expense  | 41       |
| Advertising expense   | 4        |
| Depreciation expense  | 31       |
| Loss on disposal of assets  | 4        |
| Total operating expenses  | 877      |
| Income from operations  | 403      |
| Other items:  |          |
| Interest revenue  | 2        |
| Interest expense  | (1)      |
| Income before income taxes  | 404      |
| Income tax expense  | 101      |
| Net income  | \$ 303   |
| Earnings per share (for the quarter)  | \$ 2.02  |

Source: Chipotle

4-38

### Earnings per Share

You will note that the earnings per share (EPS) ratio is reported on the income statement. It is widely used in evaluating the operating performance and profitability of a company.

Earnings  
per  
Share

=

Net income

Average number of shares of common  
stock outstanding during the period

*The actual computation of EPS is quite complex. In this text, we simplify the earnings per share computation.*

4-39

### Statement of Stockholders' Equity

| CHIPOTLE MEXICAN GRILL, INC.<br>Consolidated Statement of Stockholders' Equity<br>For the quarter ended March 31, 2018<br>(in millions of dollars) |                 |                                  |                   |                      |                                  |
|--|-----------------|----------------------------------|-------------------|----------------------|----------------------------------|
|  | Common<br>Stock | Additional<br>Paid-in<br>Capital | Treasury<br>Stock | Retained<br>Earnings | Total<br>Stockholders'<br>Equity |
| Balance at December 31, 2017   | \$ 1            | \$1,305                          | \$(2,334)         | \$2,393              | \$1,365                          |
| Additional stock issuance  | 1               | 299                              |                   |                      | 300                              |
| Net income   |                 |                                  |                   | 303                  | 303                              |
| Dividends declared   |                 |                                  |                   | (2)                  | (2)                              |
| Balance at March 31, 2018  | <u>\$ 2</u>     | <u>\$1,604</u>                   | <u>\$(2,334)</u>  | <u>\$2,694</u>       | <u>\$1,966</u>                   |

From transaction (a) in Ch. 2

From the income statement

From transaction (f) in Ch. 2

On the balance sheet

4-40

## Balance Sheet (1 of 2)

| CHIPOTLE MEXICAN GRILL, INC.   |                |                   |
|--|----------------|-------------------|
| Consolidated Balance Sheets* (in millions of dollars, except per share data) |                |                   |
|  | March 31, 2018 | December 31, 2017 |
| <b>ASSETS</b>  |                |                   |
| Current Assets:  |                |                   |
| Cash   | \$ 731         | \$ 186            |
| Short-term investments   | 333            | 324               |
| Accounts receivable  | 54             | 49                |
| Interest receivable  | 1              | —                 |
| Supplies   | 24             | 20                |
| Prepaid expenses   | 49             | 51                |
| Total current assets   | 1,192          | 630               |
| Property and equipment:  |                |                   |
| Land   | 21             | 13                |
| Buildings  | 1,711          | 1,677             |
| Equipment  | 628            | 627               |
| Total cost   | 2,360          | 2,317             |
| Accumulated depreciation   | (1,010)        | (979)             |
| Net property and equipment   | 1,350          | 1,338             |
| Long-term investments  | 35             | —                 |
| Intangible assets  | 81             | 78                |
| Total assets   | \$ 2,658       | \$ 2,046          |

4-41

## Balance Sheet (2 of 2)

| CHIPOTLE MEXICAN GRILL, INC.   |                |                   |
|--|----------------|-------------------|
| Consolidated Balance Sheets* (in millions of dollars, except per share data) |                |                   |
|  | March 31, 2018 | December 31, 2017 |
| <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>                                  |                |                   |
| Current Liabilities:   |                |                   |
| Accounts payable   | \$ 88          | \$ 82             |
| Unearned revenue   | 54             | 64                |
| Dividends payable  | 2              | —                 |
| Accrued expenses payable:  |                |                   |
| Wages payable  | 67             | 83                |
| Utilities payable  | 20             | 77                |
| Interest payable   | 1              | —                 |
| Income taxes payable   | 101            | 18                |
| Total current liabilities  | 333            | 324               |
| Notes payable  | 80             | 78                |
| Other liabilities  | 279            | 279               |
| Total liabilities  | 692            | 681               |
| Stockholders' Equity:  |                |                   |
| Common stock (\$0.01 par value per share)                                    |                |                   |
| Additional paid-in capital   | 1,604          | 1,305             |
| Treasury stock   | (2,334)        | (2,334)           |
| Retained earnings  | 2,694          | 2,393             |
| Total stockholders' equity   | 1,966          | 1,365             |
| Total liabilities and stockholders' equity                                   | \$ 2,658       | \$ 2,046          |

4-42

## Cash Flows from Operations, Net Income, and the Quality of Earnings

### FOCUS ON CASH FLOWS

Analysts look for **unusual deferrals and accruals** when they attempt to predict future periods' earnings.

\$\$\$

#### Warning sign:

What if there is a significant difference between cash flow from operations and net income?

This could signal the existence of unusual

- 1) Deferrals
- 2) Allocations
- 3) Valuations

Some users consider earnings of higher quality when the ratio of cash flows from operations divided by net income is greater.

4-43

## Exercise 4-3

Nanking Company is making adjusting entries for the year ended December 31 of the current year. In developing information for the adjusting entries, the accountant learned the following:

- a. A two-year insurance premium of \$4,560 was paid on October 1 of the current year for coverage beginning on that date. The bookkeeper debited the full amount to Prepaid Insurance on October 1.
- b. At December 31 of the current year, the following data relating to Shipping Supplies were obtained from the records and supporting documents.

|   |          |
|---|----------|
| Shipping supplies on hand, January 1 of the current year              | \$16,000 |
| Purchases of shipping supplies during the current year                | 62,500   |
| Shipping supplies on hand, counted on December 31 of the current year | 18,000   |

#### Required:

1. Using the process illustrated in the chapter, record the adjusting entry for insurance at December 31 of the current year.
2. Using the process illustrated in the chapter, record the adjusting entry for supplies at December 31 of the current year, assuming that the shipping supplies purchased during the current year were debited in full to the account Shipping Supplies.
3. What amount should be reported on the current year's income statement for Insurance Expense? For Shipping Supplies Expense?
4. What amount should be reported on the current year's balance sheet for Prepaid Insurance? For Shipping Supplies?

4-44

**Requirement 1**

- a. A two-year insurance premium of \$4,560 was paid on October 1 of the current year for coverage beginning on that date. The bookkeeper debited the full amount to Prepaid Insurance on October 1.

Deferred Expense

Computation:  
 $\$4,560 \times 3 \div 24 = \$570$  used

Adjusting entry:

|  | Debit | Credit |
|--|-------|--------|
| Insurance Expense (+E, -SE)              | 570   |        |
| Prepaid Insurance (-A)                   |       | 570    |
| To record insurance expense at year-end. |       |        |

4-45

**Requirement 1**

- b. At December 31 of the current year, the following data relating to Shipping Supplies were obtained from the records and supporting documents.

|   |          |
|---|----------|
| Shipping supplies on hand, January 1 of the current year              | \$16,000 |
| Purchases of shipping supplies during the current year                | 62,500   |
| Shipping supplies on hand, counted on December 31 of the current year | 18,000   |

Deferred Expense

|              |                         |                 |
|--------------|-------------------------|-----------------|
| Computation: | Beginning balance       | \$16,000        |
|              | Supplies purchased      | 62,500          |
|              | Supplies on hand at end | (18,000)        |
|              | Supplies used           | <u>\$60,500</u> |

Adjusting entry:

|   | Debit  | Credit |
|---|--------|--------|
| Shipping Supplies Expense (+E, -SE)     | 60,500 |        |
| Shipping Supplies (-A)                  |        | 60,500 |
| To record shipping expense at year-end. |        |        |

4-46

Requirements 2 and 3

| Insurance Expense |            |
|-------------------|------------|
| Beg.              | 0          |
| AJE               | 570        |
|                   | <u>570</u> |

| Shipping Supplies Expense |               |
|---------------------------|---------------|
| Beg.                      | 0             |
| AJE                       | 60,500        |
|                           | <u>60,500</u> |

| Prepaid Insurance |              |
|-------------------|--------------|
| 1/10              | 4,560        |
|                   | AJE 570      |
|                   | <u>3,990</u> |

| Shipping Supplies |               |
|-------------------|---------------|
| Beg.              | 16,000        |
| Pur.              | 62,500        |
|                   | AJE 60,500    |
|                   | <u>18,000</u> |

Income Statement:

|                           |        |
|---------------------------|--------|
| Insurance Expense         | \$ 570 |
| Shipping Supplies Expense | 60,500 |

Balance Sheet:

|                   |          |
|-------------------|----------|
| Prepaid Insurance | \$ 3,990 |
| Shipping Supplies | 18,000   |

4-47

Exercise 4-4

Nichols’ Store is completing the accounting process for the year just ended, December 31, Year 1. The transactions during Year 1 have been journalized and posted. The following data with respect to adjusting entries are available:

- a. Wages earned by employees during December Year 1, unpaid and unrecorded at December 31, Year 1, amounted to \$540. The last payroll was December 28; the next payroll will be January 6, Year 2 (the next year).
- b. Office supplies on hand at January 1, Year 1, totaled \$90. Office supplies purchased and debited to Office Supplies during the year amounted to \$100. The year-end count showed \$55 of supplies on hand.
- c. One fourth of the basement space is rented to McLaughlin’s Specialty Shop for \$112 per month, payable monthly. On December 31, Year 1, the rent for November and December, Year 1 had not been collected or recorded. Collection is expected January 10, Year 2.
- d. The store used delivery equipment that cost \$12,100; \$2,420 was the estimated depreciation for Year 1.
- e. On July 1, Year 1, a two year insurance premium amounting to \$480 was paid in cash and debited in full to Prepaid Insurance. Coverage began on July 1, Year 1.
- f. The remaining basement of the store is rented for \$320 per month to another merchant, T. Boltman, Inc. Boltman sells compatible, but not competitive, merchandise. On November 1, Year 1, the store collected six months’ rent in the amount of \$1,920 in advance from Boltman; it was credited in full to Unearned Rent Revenue when collected.

4-48



- g. Nichols’ Store operates a repair shop to meet its own needs. The shop also does repairs for T. Boltman. At the end of December 31, Year 1, Boltman had not paid \$160 for completed repairs. This amount has not yet been recorded as Repair Shop Revenue. Collection is expected during January, Year 2.

**Required:**

For each of the transactions listed above, indicate the amount and the direction of effects of the adjusting entry on the elements of the balance sheet and income statement. Using the following format, indicate + for increase, – for decrease, and NE for no effect.

| Transaction | BALANCE SHEET |             |                      | INCOME STATEMENT |          |            |
|-------------|---------------|-------------|----------------------|------------------|----------|------------|
|             | Assets        | Liabilities | Stockholders' Equity | Revenues         | Expenses | Net Income |
| a.          |               |             |                      |                  |          |            |
| b.          |               |             |                      |                  |          |            |
| c.          |               |             |                      |                  |          |            |
| (etc.)      |               |             |                      |                  |          |            |

4-49

- a. Wages earned by employees during December Year 1, unpaid and unrecorded at December 31, Year 1, amounted to \$540. The last payroll was December 28; the next payroll will be January 6, Year 2 (the next year).

| Transaction | BALANCE SHEET |             |                      | INCOME STATEMENT |          |            |
|-------------|---------------|-------------|----------------------|------------------|----------|------------|
|             | Assets        | Liabilities | Stockholders' Equity | Revenues         | Expenses | Net Income |
| a.          | NE            | +540        | -540                 | NE               | +540     | -540       |

4-50

- b. Office supplies on hand at January 1, Year 1, totaled \$90. Office supplies purchased and debited to Office Supplies during the year amounted to \$100. The year-end count showed \$55 of supplies on hand.

|             | BALANCE SHEET |             |                      | INCOME STATEMENT |          |            |
|-------------|---------------|-------------|----------------------|------------------|----------|------------|
| Transaction | Assets        | Liabilities | Stockholders' Equity | Revenues         | Expenses | Net Income |
| a.          | NE            | +540        | -540                 | NE               | +540     | -540       |
| b.          | -135          | NE          | -135                 | NE               | +135     | -135       |

4-51

- c. One fourth of the basement space is rented to McLaughlin's Specialty Shop for \$112 per month, payable monthly. On December 31, Year 1, the rent for November and December, Year 1 had not been collected or recorded. Collection is expected January 10, Year 2.

|             | BALANCE SHEET |             |                      | INCOME STATEMENT |          |            |
|-------------|---------------|-------------|----------------------|------------------|----------|------------|
| Transaction | Assets        | Liabilities | Stockholders' Equity | Revenues         | Expenses | Net Income |
| a.          | NE            | +540        | -540                 | NE               | +540     | -540       |
| b.          | -135          | NE          | -135                 | NE               | +135     | -135       |
| c.          | +224          | NE          | +224                 | +224             | NE       | +224       |

4-52

- d. The store used delivery equipment that cost \$12,100; \$2,420 was the estimated depreciation for Year 1.

|             | BALANCE SHEET |             |                      | INCOME STATEMENT |          |            |
|-------------|---------------|-------------|----------------------|------------------|----------|------------|
| Transaction | Assets        | Liabilities | Stockholders' Equity | Revenues         | Expenses | Net Income |
| a.          | NE            | +540        | -540                 | NE               | +540     | -540       |
| b.          | -135          | NE          | -135                 | NE               | +135     | -135       |
| c.          | +224          | NE          | +224                 | +224             | NE       | +224       |
| d.          | -2,420        | NE          | -2,420               | NE               | +2,420   | -2,420     |

4-53

- e. On July 1, Year 1, a two year insurance premium amounting to \$480 was paid in cash and debited in full to Prepaid Insurance. Coverage began on July 1, Year 1.

|             | BALANCE SHEET |             |                      | INCOME STATEMENT |          |            |
|-------------|---------------|-------------|----------------------|------------------|----------|------------|
| Transaction | Assets        | Liabilities | Stockholders' Equity | Revenues         | Expenses | Net Income |
| a.          | NE            | +540        | -540                 | NE               | +540     | -540       |
| b.          | -135          | NE          | -135                 | NE               | +135     | -135       |
| c.          | +224          | NE          | +224                 | +224             | NE       | +224       |
| d.          | -2,420        | NE          | -2,420               | NE               | +2,420   | -2,420     |
| e.          | -120          | NE          | -120                 | NE               | +120     | -120       |

4-54

- f. The remaining basement of the store is rented for \$320 per month to another merchant, T. Boltman, Inc. Boltman sells compatible, but not competitive, merchandise. On November 1, Year 1, the store collected six months' rent in the amount of \$1,920 in advance from Boltman; it was credited in full to Unearned Rent Revenue when collected.

| Transaction | BALANCE SHEET |             |                      | INCOME STATEMENT |          |            |
|-------------|---------------|-------------|----------------------|------------------|----------|------------|
|             | Assets        | Liabilities | Stockholders' Equity | Revenues         | Expenses | Net Income |
| a.          | NE            | +540        | -540                 | NE               | +540     | -540       |
| b.          | -135          | NE          | -135                 | NE               | +135     | -135       |
| c.          | +224          | NE          | +224                 | +224             | NE       | +224       |
| d.          | -2,420        | NE          | -2,420               | NE               | +2,420   | -2,420     |
| e.          | -120          | NE          | -120                 | NE               | +120     | -120       |
| f.          | NE            | -640        | +640                 | +640             | NE       | +640       |

4-55

- g. Nichols' Store operates a repair shop to meet its own needs. The shop also does repairs for T. Boltman. At the end of December 31, Year 1, Boltman had not paid \$160 for completed repairs. This amount has not yet been recorded as Repair Shop Revenue. Collection is expected during January, Year 2.

| Transaction | BALANCE SHEET |             |                      | INCOME STATEMENT |          |            |
|-------------|---------------|-------------|----------------------|------------------|----------|------------|
|             | Assets        | Liabilities | Stockholders' Equity | Revenues         | Expenses | Net Income |
| a.          | NE            | +540        | -540                 | NE               | +540     | -540       |
| b.          | -135          | NE          | -135                 | NE               | +135     | -135       |
| c.          | +224          | NE          | +224                 | +224             | NE       | +224       |
| d.          | -2,420        | NE          | -2,420               | NE               | +2,420   | -2,420     |
| e.          | -120          | NE          | -120                 | NE               | +120     | -120       |
| f.          | NE            | -640        | +640                 | +640             | NE       | +640       |
| g.          | +160          | NE          | +160                 | +160             | NE       | +160       |

4-56

Exercise 4-5

Janson Company prepared the following trial balance at the end of its first year of operations ending December 31. To simplify the case, the amounts given are in thousands of dollars. The "Ref." column is for the reference letter of the adjusting entry effect.

| Account Titles              | UNADJUSTED |        | ADJUSTMENTS |       |        | ADJUSTED |        |
|-----------------------------|------------|--------|-------------|-------|--------|----------|--------|
|                             | Debit      | Credit | Ref.        | Debit | Credit | Debit    | Credit |
| Cash                        | 40         |        |             |       |        |          |        |
| Accounts receivable         | 26         |        |             |       |        |          |        |
| Prepaid insurance           | 16         |        |             |       |        |          |        |
| Machinery                   | 170        |        |             |       |        |          |        |
| Accumulated depreciation    |            |        |             |       |        |          |        |
| Accounts payable            |            | 22     |             |       |        |          |        |
| Wages payable               |            |        |             |       |        |          |        |
| Income taxes payable        |            |        |             |       |        |          |        |
| Common stock (8,000 shares) |            | 8      |             |       |        |          |        |
| Additional paid-in capital  |            | 134    |             |       |        |          |        |
| Retained earnings           | 12         |        |             |       |        |          |        |
| Revenues (not detailed)     |            | 164    |             |       |        |          |        |
| Expenses (not detailed)     | 64         |        |             |       |        |          |        |
| Totals                      | 328        | 328    |             |       |        |          |        |

Other data not yet recorded at December 31 include

- a. Insurance expired during the current year, \$12.
- b. Wages payable, \$15.
- c. Depreciation expense for the current year, \$22.
- d. Income tax expense, \$10.

Required:

- 1. Prepare the adjusting entries for the current year.
- 2. Complete the trial balance Adjustments and Adjusted columns.

4-57

Other data not yet recorded at December 31 include

- a. Insurance expired during the current year, \$12.
- b. Wages payable, \$15.
- c. Depreciation expense for the current year, \$22.
- d. Income tax expense, \$10.

Required:

- 1. Prepare the adjusting entries for the current year.

|    |                          |    |    |
|----|--------------------------|----|----|
| a. | Insurance expense        | 12 |    |
|    | Prepaid insurance        |    | 12 |
| b. | Wages expense            | 15 |    |
|    | Wages payable            |    | 15 |
| c. | Depreciation expense     | 22 |    |
|    | Accumulated depreciation |    | 22 |
| d. | Income tax expense       | 10 |    |
|    | Income taxes payable     |    | 10 |

4-58

- Other data not yet recorded at December 31 include
- a. Insurance expired during the current year, \$12.
  - b. Wages payable, \$15.
  - c. Depreciation expense for the current year, \$22.
  - d. Income tax expense, \$10.

Required:

2. Complete the trial balance Adjustments and Adjusted columns.

| Account Titles              | UNADJUSTED |        | Ref. | ADJUSTMENTS |        | ADJUSTED |        |
|-----------------------------|------------|--------|------|-------------|--------|----------|--------|
|                             | Debit      | Credit |      | Debit       | Credit | Debit    | Credit |
| Cash                        | 40         |        |      |             |        | 40       |        |
| Accounts receivable         | 26         |        |      |             |        | 26       |        |
| Prepaid insurance           | 16         |        | a.   |             | 12     | 4        |        |
| Machinery                   | 170        |        |      |             |        | 170      |        |
| Accumulated depreciation    |            |        | c.   |             | 22     |          | 22     |
| Accounts payable            |            | 22     |      |             |        |          | 22     |
| Wages payable               |            |        | b.   |             | 15     |          | 15     |
| Income taxes payable        |            |        | d.   |             | 10     |          | 10     |
| Common stock (8,000 shares) |            | 8      |      |             |        |          | 8      |
| Additional paid-in capital  |            | 134    |      |             |        |          | 134    |
| Retained earnings           | 12         |        |      |             |        | 12       |        |
| Revenues (not detailed)     |            | 164    |      |             |        |          | 164    |
| Expenses (not detailed)     | 64         |        |      | 59          |        | 123      |        |
| Totals                      | 328        | 328    |      | 59          | 59     | 375      | 375    |

4-59

Royal Company had the following adjusted balances (in thousands) at the end of its first year of operations ending December 31, Year 1.

| Account Titles              | ADJUSTED |        |
|-----------------------------|----------|--------|
|                             | Debit    | Credit |
| Cash                        | 105      |        |
| Accounts receivable         | 27       |        |
| Prepaid insurance           | 6        |        |
| Machinery                   | 240      |        |
| Accumulated depreciation    |          | 24     |
| Accounts payable            |          | 27     |
| Wages payable               |          | 15     |
| Income taxes payable        |          | 27     |
| Common stock (4,000 shares) |          | 40     |
| Additional paid-in capital  |          | 179    |
| Retained earnings           | 12       |        |
| Revenues (not detailed)     |          | 252    |
| Expenses (not detailed)     | 147      |        |
| Income tax expense          | 27       |        |
| Totals                      | 564      | 564    |

Required:

Using the adjusted balances above, prepare an income statement, statement of stockholders' equity, and balance sheet for Year 1.

4-60

## Learning Objective 4-3

**4-3** Compute and interpret the total asset turnover ratio.

4-61

## Total Asset Turnover Ratio 总资产周转率

KEY RATIO ANALYSIS

**How efficient is management in using its resources to generate sales?**

The higher the asset turnover is, the more efficient assets are being utilized to generate revenues.

\$\$\$

$$\text{Total Asset Turnover Ratio} = \frac{\text{Net Sales (or Operating Revenues)}}{\text{Average Total Assets*}}$$

\*An average is computed as: (Beginning balance + Ending balance) ÷ 2

4-62

杜邦分析DuPont analysis

净资产收益率ROE=NI/OE=(NI/TA)\*(TA/OE)

3

总资产收益率ROA=NI/TA=(NI/REV)\*(REV/TA)

1

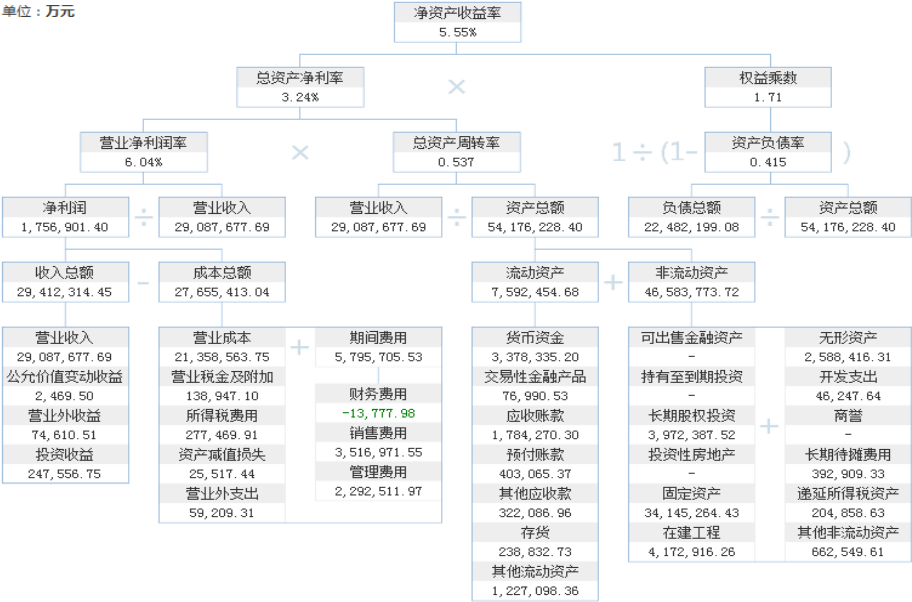
2

- 1
- 销售净利率ROS=NI/REV 盈利能力
- 2
- 资产周转率Asset turnover ratio=REV/TA 资产运营效率
- 3
- 权益乘数equity multiplier=TA/OE=1/(1-TL/TA) 负债比例

4-63

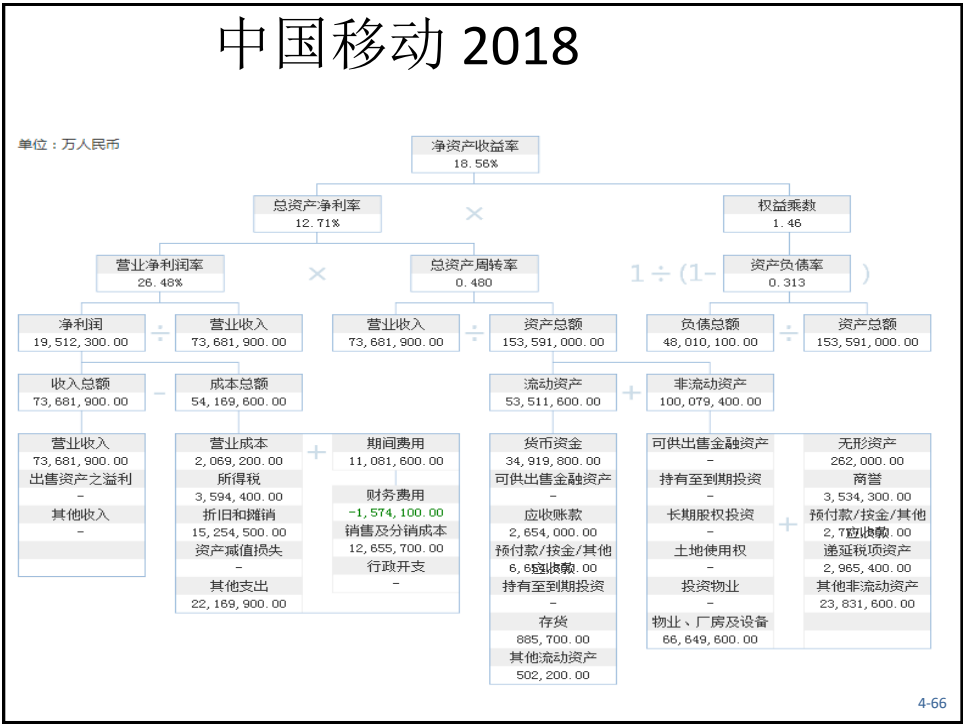
中国联通 2018

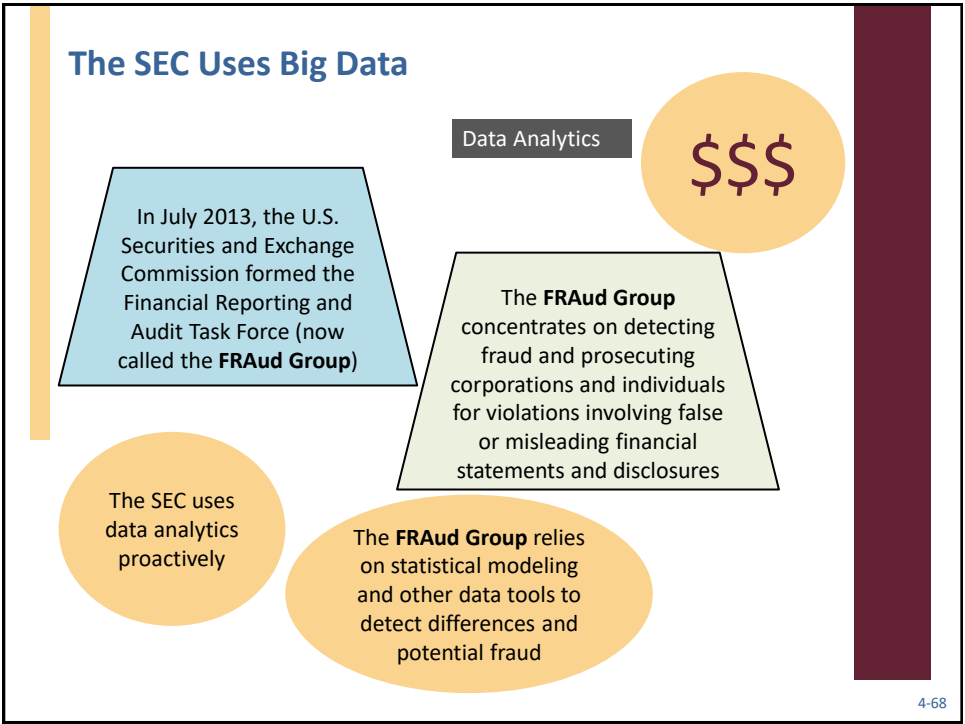
单位：万元



4-64







## Learning Objective 4-4

**4-4** Explain the closing process.

4-69

## Closing the Books 结账

Even though the balance sheet account balances carry forward from period to period, the income statement account balances *DO NOT* carry forward.

Closing entries:

1. Transfer net income (or loss) to Retained Earnings. 将利润转入留存收益
2. Establish a zero balance in each of the **temporary** accounts to start the accumulation in the next accounting period. 将临时性账户清零，为下一期记录做准备

**Reminder:** **Temporary** accounts are revenue, expense, gain, and loss accounts

4-70

Closing Entries (1 of 3)结账分录

Revenues and gains have credit balances. Close them with debits.

|                             | Debit | Credit |
|-----------------------------|-------|--------|
| Sales revenue (-R)          | 100   |        |
| Gain on sale of assets (-R) | 30    |        |
| Retained earnings (+SE)     |       | 80     |
| Wages expense (-E)          |       | 40     |
| Loss on sale of assets (-E) |       | 10     |

= Net income

Expenses and losses have debit balances. Close them with credits.

CE is short for closing entry.

| Wages Expense |    |    |    | Retained Earnings |       |      |    | Sales Revenue |     |     |        |
|---------------|----|----|----|-------------------|-------|------|----|---------------|-----|-----|--------|
| Bal.          | 40 | 40 | CE |                   | 6,000 | Bal. |    | CE            | 100 | 100 | Bal.   |
| Closed        |    | 0  |    |                   | 80    |      | CE |               |     | 0   | Closed |
|               |    |    |    |                   | 6,080 | Bal. |    |               |     |     |        |

| Loss on Sale of Assets |    |    |    | Gain on Sale of Assets |    |    |    |        |
|------------------------|----|----|----|------------------------|----|----|----|--------|
| Bal.                   | 10 | 10 | CE |                        | CE | 30 | 30 | Bal.   |
| Closed                 |    | 0  |    |                        |    |    | 0  | Closed |

130 revenues and gains  
 -50 expenses and losses  
 80 Net income

4-71

Closing Entries (2 of 3)

|                                    | Debit | Credit |
|------------------------------------|-------|--------|
| (CE) Restaurant sales revenue (-R) | 1,280 |        |
| Interest revenue (-R)              | 2     |        |
| Retained earnings (+SE)            |       | 303    |
| Supplies expense (-E)              |       | 366    |
| Wages expense (-E)                 |       | 244    |
| Rent expense (-E)                  |       | 54     |
| Insurance expense (-E)             |       | 24     |
| Utilities expense (-E)             |       | 90     |
| Repairs expense (-E)               |       | 19     |
| Training expense (-E)              |       | 41     |
| Advertising expense (-E)           |       | 4      |
| Depreciation expense (-E)          |       | 31     |
| Loss on disposal of assets (-E)    |       | 4      |
| Interest expense (-E)              |       | 1      |
| Income tax expense (-E)            |       | 101    |

4-72

Closing Entries (3 of 3)

|                                |                 |                         |             |                          |                 |
|--------------------------------|-----------------|-------------------------|-------------|--------------------------|-----------------|
| — Restaurant Sales Revenue +   |                 | — Interest Revenue +    |             | — Retained Earnings +    |                 |
|                                | 1,280 Adj. Bal. |                         | 2 Adj. Bal. |                          | 2,391 Adj. Bal. |
| (CE)                           | 1,280           | (CE)                    | 2           |                          | 303 (CE)        |
|                                | 0 End. Bal.     |                         | 0 End. Bal. |                          | 2,694 End. Bal. |
| + Supplies Expense —           |                 | + Wages Expense —       |             | + Rent Expense —         |                 |
| Adj. Bal.                      | 366             | Adj. Bal.               | 244         | Adj. Bal.                | 54              |
|                                | 366 (CE)        |                         | 244 (CE)    |                          | 54 (CE)         |
| End. Bal.                      | 0               | End. Bal.               | 0           | End. Bal.                | 0               |
| + Insurance Expense —          |                 | + Utilities Expense —   |             | + Repairs Expense —      |                 |
| Adj. Bal.                      | 24              | Adj. Bal.               | 90          | Adj. Bal.                | 19              |
|                                | 24 (CE)         |                         | 90 (CE)     |                          | 19 (CE)         |
| End. Bal.                      | 0               | End. Bal.               | 0           | End. Bal.                | 0               |
| + Training Expense —           |                 | + Advertising Expense — |             | + Depreciation Expense — |                 |
| Adj. Bal.                      | 41              | Adj. Bal.               | 4           | Adj. Bal.                | 31              |
|                                | 41 (CE)         |                         | 4 (CE)      |                          | 31 (CE)         |
| End. Bal.                      | 0               | End. Bal.               | 0           | End. Bal.                | 0               |
| + Loss on Disposal of Assets — |                 | + Interest Expense —    |             | + Income Tax Expense —   |                 |
| Adj. Bal.                      | 4               | Adj. Bal.               | 1           | Adj. Bal.                | 101             |
|                                | 4 (CE)          |                         | 1 (CE)      |                          | 101 (CE)        |
| End. Bal.                      | 0               | End. Bal.               | 0           | End. Bal.                | 0               |

4-73

Post-Closing Trial Balance结账后试算平衡表

After the closing process is complete, all income statement accounts have a zero balance.

The ending balance in Retained Earnings now is up-to-date (matches the amount on the balance sheet) and is carried forward as the beginning balance for the next period.

As an additional step of the accounting information processing cycle, a post-closing trial balance should be prepared as a check that debits still equal credits and that all temporary accounts have been closed.

4-74

### 收入/费用与留存收益的记录!!!

1. 过程：平时(during the period)发生收入/费用时记录相应的收入/费用账户，不记录留存收益账户；结果：到期末(at the end of the period)通过结账转入留存收益
2. 平时宣告分红，记录留存收益减少。留存收益也基本只在分红时发生变化，其他事项（发生收入费用）不能直接记录留存收益
3. 前2章尚未学习收入费用的确认和记录，发生相关交易时会计等式直接记作留存收益的变化，这个操作反应的是最终影响，不是过程，希望不要误导后续的分录编制

4-75

### HW4

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