# Financial Accounting

John J. Wild

Sixth Edition

McGraw-Hill/Irwin

# Chapter 7

## Reporting and Analyzing Receivables

# Conceptual Learning Objectives

C1: Describe accounts receivable and how they occur and are recorded.

C2: Describe a note receivable, computation of its maturity date and the recording of its existence.

C3: Explain how receivables can be converted to cash before maturity.

# Analytical Learning Objectives

A1: Compute accounts receivable turnover and use it to help assess financial condition.

# Procedural Learning Objectives

P1: Apply the direct write-off method to account for accounts receivable.

P2: Apply the allowance method and estimate uncollectibles based on sales and accounts receivable.

P3: Record the honoring and dishonoring of a note and adjustments for interest.

C 1

# Accounts Receivable

- Amounts due from customers for credit sales.
- Credit sales require:
  - Maintaining a separate account receivable for each customer.
  - Accounting for bad debts that result from credit sales.

C 1

# Sales on Credit

**On July 16, Barton, Co. sells $950 of merchandise on credit to Webster, Co., and $1,000 of merchandise on account to Matrix, Inc.**

| | | | |
|---|---|---|---|
| **Jul. 16** | **Accounts Receivable - Webster** | **950** | |
| | **Sales** | | **950** |
| | ***To record credit sales to Webster Co.*** | | |
| | **Accounts Receivable - Matrix** | **1,000** | |
| | **Sales** | | **1,000** |
| | ***To record credit sales to Matrix, Inc.*** | | |

C 1

# Sales on Credit

## Accounts Receivable Ledger

| Webster, Co. | | | | |
|---|---|---|---|---|
| Date | PR | Debit | Credit | Balance |
| Jul. 16 | | 950 | | 950 |

| Matrix, Inc. | | | | |
|---|---|---|---|---|
| Date | PR | Debit | Credit | Balance |
| Jul. 16 | | 1,000 | | 1,000 |

## Schedule of Accounts Receivable

| | |
|---|---|
| Webster, Co. | $ 950 |
| Matrix, Inc. | 1,000 |
| Total | $1,950 |

## General Ledger

| Accounts Receivable | | | | |
|---|---|---|---|---|
| Date | PR | Debit | Credit | Balance |
| Jul. 16 | | 1,950 | | 1,950 |

C 1

# Sales on Credit

**On July 31, Barton, Co. collects $500 from Webster, Co., and $800 from Matrix, Inc. on account.**

| | | | |
|---|---|---|---|
| **Jul. 31** | **Cash** | **500** | |
| | **Accounts Receivable - Webster** | | **500** |
| | ***To record cash collections on account*** | | |
| | **Cash** | **800** | |
| | **Accounts Receivable - Matrix** | | **800** |
| | ***To record cash collections on account*** | | |

C 1

# Sales on Credit

## Accounts Receivable Ledger

| Webster, Co. | | | | |
|---|---|---|---|---|
| Date | PR | Debit | Credit | Balance |
| Jul. 16 | | 950 | | 950 |
| Jul. 31 | | | 500 | 450 |

| Matrix, Inc. | | | | |
|---|---|---|---|---|
| Date | PR | Debit | Credit | Balance |
| Jul. 16 | | 1,000 | | 1,000 |
| Jul. 31 | | | 800 | 200 |

## Schedule of Accounts Receivable

| | |
|---|---|
| Webster, Co. | $ 450 |
| Matrix, Inc. | 200 |
| Total | $ 650 |

## General Ledger

| Accounts Receivable | | | | |
|---|---|---|---|---|
| Date | PR | Debit | Credit | Balance |
| Jul. 16 | | 1,950 | | 1,950 |
| Jul. 31 | | | 1,300 | 650 |

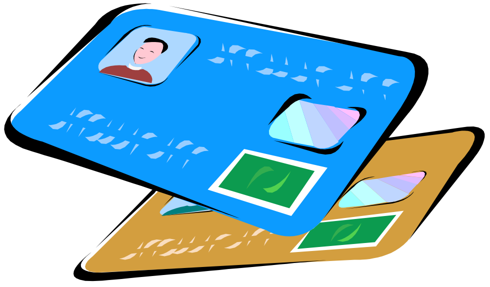
C 1

# Credit Card Sales

## Advantages of allowing customers to use credit cards:

Customers' credit is evaluated by the credit card issuer.

Sales increase by providing purchase options to the customer.



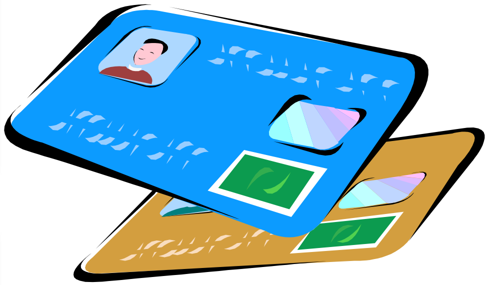
The risks of extending credit are transferred to the credit card issuer.

Cash collections are quicker.

C 1

# Credit Card Sales

❶ With bank credit cards, the seller deposits the credit card sales receipt in the bank just like it deposits a customer's check.



❷ The bank increases the balance in the company's checking account.

Ž The company usually pays a fee of 1% to 5% for the service.

C 1

# Credit Card Sales

On July 16, 2011, Barton, Co. has a bank credit card sale of $500 to a customer. The bank charges a processing fee of 2%. The cash is received immediately.

| | | | |
|---|---|---|---|
| Jul. 16 | Cash | 490 | |
| | Credit Card Expense | 10 | |
| | Sales | | 500 |
| | *To record credit card sales and fees* | | |

C 1

# Credit Card Sales

**On July 16, 2011, Barton, Co. has a bank credit card sale of $500 to a customer. The bank charges a processing fee of 2%. Barton remits the credit card sale to the credit card company and waits for the payment that is received on July 28.**

| | | DR | CR |
|---|---|---|---|
| Jul. 16 | Accounts Receivable - Credit Card Co. | 490 | |
| | Credit Card Expense | 10 | |
| | Sales | | 500 |
| | *To record credit card sales and fees.* | | |
| Jul. 28 | Cash | 490 | |
| | Accounts Receivable - Credit Card Co. | | 490 |
| | *To record receipt from credit card company* | | |

C 1

# Installment Accounts Receivable

Amounts owed by customers from credit sales for which payment is required in periodic amounts over an extended time period. The customer is usually charged interest.

P1/P2

# Valuing Accounts Receivable

**Some customers may not pay their account. Uncollectible amounts are referred to as bad debts. There are two methods of accounting for bad debts:**

- **Direct write-off method**
- **Allowance method**

P1

# Direct Write-Off Method

**On August 4, Barton determines it cannot collect $350 from Martin, Inc., a credit customer.**

| | | DR | CR |
|---|---|---|---|
| **Aug. 4** | **Bad Debts Expense** | **350** | |
| | **Accounts Receivable - Martin** | | **350** |
| | ***To write off uncollectible account*** | | |

P1

# Direct Write-Off Method

**On September 9, Martin decides to pay $200 that was previously written off.**

| | | DR | CR |
|---|---|---|---|
| **Sep. 9** | **Accounts Receivable - Martin** | **200** | |
| | **Bad Debts Expense** | | **200** |
| | ***To reinstate account previously written-off*** | | |
| **Sep. 9** | **Cash** | **200** | |
| | **Accounts Receivable - Martin** | | **200** |
| | ***To record payment on account*** | | |

P1

# Matching vs. Materiality

The matching principle requires expenses to be reported in the same accounting period as the sales they help produce.

The materiality constraint states that an amount can be ignored if its effect on the financial statements is unimportant to users' business decisions.

P2

# Allowance Method

At the end of each period, **estimate** total bad debts expected to be realized from that period's sales.

There are two advantages to the allowance method:

1. It records estimated bad debts expense in the period when the related sales are recorded.
2. It reports accounts receivable on the balance sheet at the estimated amount of cash to be collected.

P2

# Recording Bad Debts Expense

At the end of its first year of operations, Barton Co. estimates that $3,000 of its accounts receivable will prove uncollectible. The total accounts receivable balance at December 31, 2011, is $278,000.

| | | DR | CR |
|---|---|---|---|
| Dec. 31 | Bad Debts Expense | 3,000 | |
| | Allowance for Doubtful Accounts | | 3,000 |
| | *To record estimated bad debts* | | |

Contra-asset account

| Accounts Receivable | |
|---|---|
| Bal. 278,000 | |

| Allowance for Doubtful Accounts | |
|---|---|
| | Dec. 31 3,000 |

P2

# Recording Bad Debts Expense

At the end of its first year of operations, Barton Co. estimates that $3,000 of its accounts receivable will prove uncollectible. The total accounts receivable balance at December 31, 2011, is $278,000.

**Barton, Co.**
**Partial Balance Sheet**
**December 31, 2011**

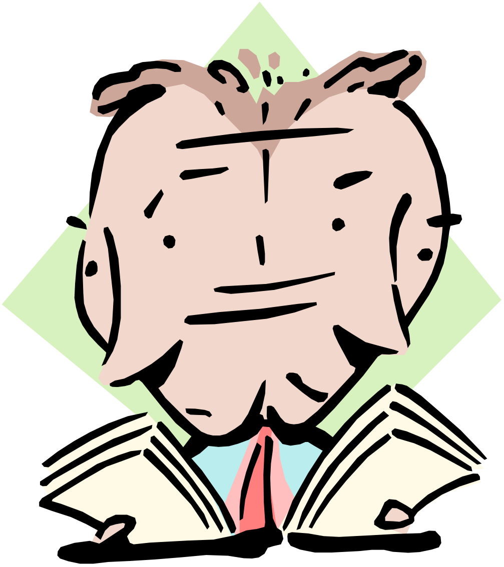
| | | |
|---|---|---|
| **Cash** | | |
| **Accounts receivable** | **$ 278,000** | |
| **Less: Allowance for doubtful accounts** | **3,000** | **$ 275,000** |

P2

# Estimating Bad Debts Expense

**Two Methods**

1. **Percent of Sales Method; and**
2. **Accounts Receivable Methods**
   - **Percent of Accounts Receivable Method**
   - **Aging of Accounts Receivable Method.**



P2

# Percent of Sales Method

## Bad debts expense is computed as follows:

| | |
|---|---|
| | Current Period Sales |
| × | Bad Debt % |
| = | Estimated Bad Debts Expense |

**Barton has credit sales of $1,400,000 in 2011. Management estimates 0.5% of credit sales will eventually prove uncollectible.**

**What is bad debts expense for 2011?**

P2

# Percent of Sales Method

| | | |
|---|---|---|
| | $ | 1,400,000 |
| × | | 0.50% |
| = | $ | 7,000 |

**Barton's accountant computes estimated Bad Debts Expense of $7,000.**

| | | DR | CR |
|---|---|---|---|
| Dec. 31 | Bad Debts Expense | 7,000 | |
| | Allowance for Doubtful Accounts | | 7,000 |
| | *To record estimated bad debts* | | |

P2

# Percent of Accounts Receivable Method

Œ **Compute the estimate of the allowance for doubtful accounts.**

**Year-end Accounts Receivable × Bad Debt %**

❷ **Bad debts expense is computed as:**

| | |
|---|---|
| | Estimated Adj. Bal. in Allowance for Doubtful Accounts |
| - | **Unadj. Year-End Bal. in Allowance for Doubtful Accounts** |
| = | **Estimated Bad Debts Expense** |

P2

# Percent of Accounts Receivable

**Barton has $100,000 in accounts receivable and a $900 credit balance in Allowance for Doubtful Accounts on December 31, 2011. Past experience suggests that 4% of receivables are uncollectible.**

**What is Barton's bad debts expense for 2011?**

P2

# Percent of Accounts Receivable

Desired balance in Allowance for Doubtful Accounts.

| | | |
|---|---|---|
| | $ | 100,000 |
| × | | 4.00% |
| = | $ | 4,000 |

| Allowance for Doubtful Accounts | |
|---|---|
| | 900 |
| | 3,100 |
| | 4,000 |

| | | DR | CR |
|---|---|---|---|
| Dec. 31 | Bad Debts Expense | 3,100 | |
| | Allowance for Doubtful Accounts | | 3,100 |
| | *To record estimated bad debts* | | |

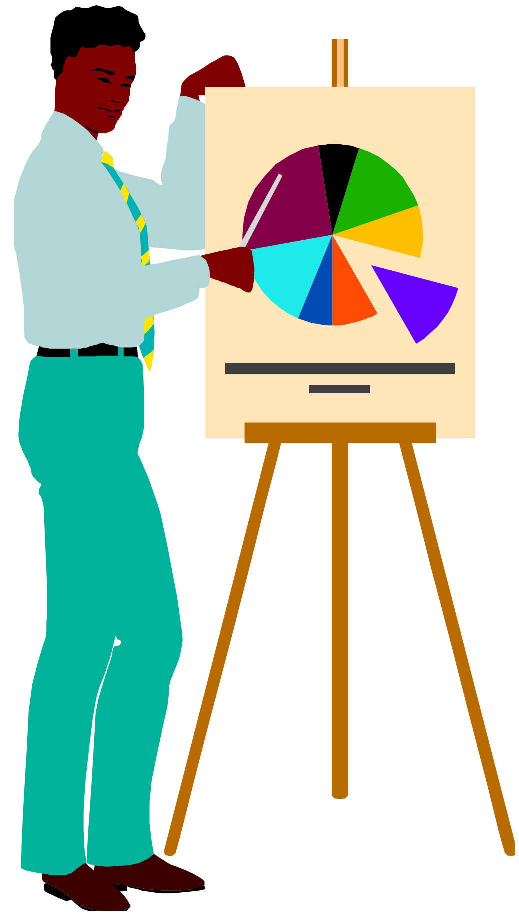
P2

# Aging of Accounts Receivable Method

Œ Each receivable is grouped by how long it is past its due date.

❷ Each age group is multiplied by its estimated bad debts percentage.

Ž Estimated bad debts for each group are totaled.



P2

# Aging of Accounts Receivable

| Barton, Co.<br>Schedule of Accounts Receivable by Age<br>December 31, 2011 | | | Ž |
|---|---|---|---|
| Œ<br>Days Past Due | Accounts Receivable Balance | 2<br>Percent Uncollectible | Estimated Uncollectible Amount |
| Not Yet Due | $ 64,500 | 1% | $ 645 |
| 1 - 30 Days Past Due | 18,500 | 3% | 555 |
| 31 - 60 Days Past Due | 10,000 | 7% | 700 |
| 61 - 90 Days Past Due | 3,900 | 40% | 1,560 |
| Over 90 Days Past Due | 3,100 | 60% | 1,860 |
| | $ 100,000 | | $ 5,320 |

P2

# Aging of Accounts Receivable

**Barton's unadjusted balance in the allowance account is $900.**

**We estimated the proper balance to be $5,320.**

**Allowance for Doubtful Accounts**

| | |
|---|---|
| | 900 |
| | 4,420 |
| | 5,320 |

| | | DR | CR |
|---|---|---|---|
| Dec. 31 | Bad Debts Expense | 4,420 | |
| | Allowance for Doubtful Accounts | | 4,420 |
| | *To record estimated bad debts* | | |

P2

# Writing Off a Bad Debt

With the allowance method, when an account is determined to be uncollectible, the debit goes to **Allowance for Doubtful Accounts**.

**Barton determines that Martin's $300 account is uncollectible.**

| | | DR | CR |
|---|---|---|---|
| Dec. 31 | Allowance for Doubtful Accounts | 300 | |
| | Accounts Receivable - Martin | | 300 |
| | *To write-off an uncollectible account* | | |

P2

# Recovery of a Bad Debt

**Subsequent collections on accounts written off require that the original write-off entry be reversed before the cash collection is recorded.**

| | | DR | CR |
|---|---|---|---|
| | | **DR** | **CR** |
| **Feb. 8** | **Accounts Receivable - Martin** | **300** | |
| | **Allowance for Doubtful Accounts** | | **300** |
| | ***To reinstate account previously written off*** | | |
| **Feb. 8** | **Cash** | **300** | |
| | **Accounts Receivable - Martin** | | **300** |
| | ***To record full payment on account*** | | |

P2

# Summary

| % of Sales | % of Receivables | Aging of Receivables |
|---|---|---|
| Emphasis on Matching | Emphasis on Realizable Value | Emphasis on Realizable Value |
| Sales ↔ Bad Debts Exp. | Accts. Rec. ↔ All. for Doubtful Accts. | Accts. Rec. ↔ All. for Doubtful Accts. |
| Income Statement Focus | Balance Sheet Focus | Balance Sheet Focus |

C2

# Notes Receivable


$1,000.00 July 10, 2011

Ninety days after date I promise to pay to

the order of Barton Company, Los Angeles, CA

One thousand and no/100 ---------------------------------- Dollars

Payable at First National Bank of Los Angeles, CA

Value received with interest at 12% per annum

No. 42 Due Oct. 8, 2011 *Julia Browne*

C2

# Interest Computation

Principal of the note × Annual interest rate × Time expressed in years = Interest

Even for maturities less than one year, the rate is annualized.

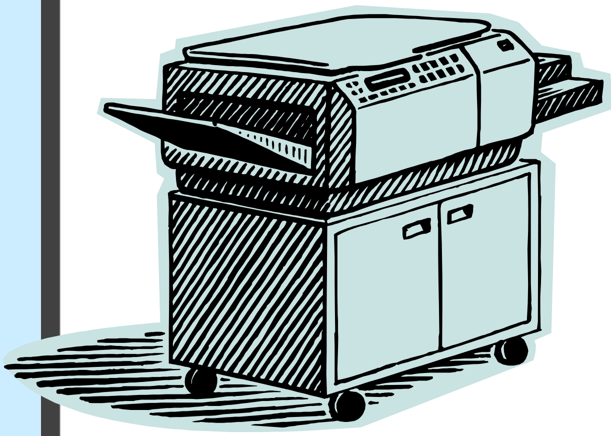
If the note is expressed in days, base a year on 360 days.

C2

# Computing Maturity and Interest

**On March 1, 2011, Matrix, Inc. purchased a copier for $12,000 from Office Supplies, Inc. Matrix gave Office Supplies a 9% note due in 90 days in payment for the copier.**

**What is the maturity date of the note?**



C2

# Computing Maturity and Interest

| | | |
|---|---|---|
| **Days in March** | **31** | |
| **Minus the date of the note** | **1** | |
| **Days remaining in March** | | **30** |
| **Days in April** | | **30** |
| **Days in May to maturity** | | **30** |
| **Period of the note in days** | | **90** |

**The note is due and payable on May 30, 2011.**

**How much interest will Matrix pay to Office Supplies, Inc. on this note?**

C2

# Computing Maturity and Interest

| Principal of the note | × | Annual interest rate | × | Time expressed in years | = | Interest |
|---|---|---|---|---|---|---|
| $ 12,000 | × | 9% | × | 90/360 | = | $ 270 |

**Total interest due at May 30.**

P3

# Recognizing Notes Receivable

**Here are the entries to record the note on March 1, and the settlement on May 30, 2011.**

| | | DR | CR |
|---|---|---|---|
| Mar. 1 | Notes Receivable | 12,000 | |
| | Sales | | 12,000 |
| | *Sold goods in exchange for note* | | |

| | | DR | CR |
|---|---|---|---|
| May 30 | Cash | 12,270 | |
| | Interest Revenue | | 270 |
| | Notes Receivable | | 12,000 |
| | *Collected note and interest due* | | |

P3

# Recording a Dishonored Note

**On May 30, 2011, Matrix informs us that the company is unable to pay the note or interest.**

| | | |
|---|---|---|
| **Accounts Receivable - Matrix** | **12,270** | |
| **Interest revenue** | | **270** |
| **Notes Receivable** | | **12,000** |
| ***To charge accounts receivable for dishonored note*** | | |

# Recording End-of-Period Interest Adjustments

P3

**On December 1, 2011, Matrix, Inc. purchased a copier for $12,000 from Office Supplies, Inc. Matrix issued a 9% note due in 90 days in payment for the copier. What adjusting entry is required on December 31, the end of the company's accounting period?**

$$\$12{,}000 \times 9\% \times 30/360 = \$90$$

| | | DR | CR |
|---|---|---|---|
| **Dec. 31** | **Interest Receivable** | **90** | |
| | **Interest Revenue** | | **90** |
| | ***To accrue interest on note*** | | |

P3

# Recording End-of-Period Interest Adjustments

## Recording collection on note at maturity.

| | | |
|---|---|---|
| Days in December | 31 | |
| Minus the date of the note | (1) | |
| Day remaining in December | | 30 |
| Days in January | | 31 |
| Days in February | | 28 |
| Days in March until maturity | | 1 |
| Period of the note in days | | 90 |

| | | DR | CR |
|---|---|---|---|
| Mar. 1 | Cash | 12,270 | |
| | Interest Receivable | | 90 |
| | Interest Revenue | | 180 |
| | Notes Receivable | | 12,000 |
| | *To record full payment of note* | | |

C3

# Disposing of Receivables

- Companies sometimes want to convert receivables to cash before they are due.
- They can sell or factor receivables.
- They may pledge receivables as security for a loan.

A1

# Accounts Receivable Turnover

This ratio provides useful information for evaluating how efficient management has been in granting credit to produce revenue.

$$\text{Accounts receivable turnover} = \frac{\textbf{Net sales}}{\textbf{Average accounts receivable, net}}$$

# End of Chapter 7