

LECTURE GUIDE SOLUTIONS – CHAPTER 7
Internal Control and Cash

Example 1 – Bank Reconciliation

The following information relates to the bank checking account for Cantor Corp. as of May 31.

Balance per bank statement at May 31		\$9,740.15
Outstanding checks		3,352.70
Deposit in transit		1,106.30
Service charge by bank		10.00
Interest credited by bank		43.10
Balance per general ledger at May 31		7,550.65

In addition, the accountant for Cantor just discovered that an employee's paycheck written for \$435 was mistakenly recorded for \$345.

Prepare a bank reconciliation and record the adjusting entry needed to adjust to the correct cash balance.

SOLUTION

Balance per bank statement		\$9,740.15
Add:		
Deposits in transit	\$1,106.30	
Undeposited receipts	xxx	
Bank errors that understate bank balance	<u>xxx</u>	1,106.30
Deduct:		
Outstanding checks	\$3,352.70	
Bank errors that overstate bank balance	<u>xxx</u>	<u>-3,352.70</u>
Adjusted cash balance		<u>\$7,493.75</u>
Balance per books		\$7,550.65
Add:		
Bank credits and collections not in books	\$ 43.10	
Book errors that understate book balance	<u>xxx</u>	43.10
Deduct:		
Bank charges not recorded in books	\$ 10.00	
Book errors that overstate book balance	<u>90.00</u>	<u>-100.00</u>
Adjusted cash balance		<u>\$7,493.75</u>

Adjusting journal entry:

Cash	43.10	
Interest revenue		43.10
Bank service charge	10.00	
Salary expense	90.00	
Cash		100.00

Example 2 – Cash Budget

The following information is available for the Eclectic Company for the month of November: expected cash receipts \$115,000; expected cash disbursements \$124,000; cash balance on October 1 \$12,000. Management wishes to maintain a minimum cash balance of \$11,000. Prepare a basic cash budget for the month of November.

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SOLUTION

Balance cash balance	\$ 12,000
Add: cash receipts for November	<u>115,000</u>
Total available cash	127,000
Less: cash disbursements for November	<u>-124,000</u>
Excess of available cash over cash disbursements	3,000
Desired ending cash balance	<u>11,000</u>
Financing needed	\$ 8,000

Example 3 – Adequacy of Cash Measures

Calculate the cash to daily cash expenses and the free cash flow for Procter & Gamble for 1999-2001. How can we interpret these calculations?

Cash to Daily Cash Expenses:

	2001	2000	1999
Cash	2,306	1,415	2,294
(Exp. – depr.)	(36,996-2,271)	(36,713-2,191)	(34,597-2,148)
÷365	÷365 = 95.14	÷365 = 94.58	÷365 = 88.90
Ratio	24.2 days	<u>15.0 days</u>	<u>25.8 days</u>

Free Cash Flow:

	2001	2000	1999
Net cash provided by operations	\$ 5,804	\$ 4,675	\$ 5,544
Less: Capital Expenditures	(2,486)	(3,018)	(2,828)
Dividends	<u>(1,943)</u>	<u>(1,796)</u>	<u>(1,626)</u>
Free cash flow	<u>\$ 1,375</u>	<u>\$ (139)</u>	<u>\$ 1,090</u>

Interpret: To interpret these measures, we might (1) understand what they measure, (2) compare to last year, (3) compare to other companies in the same industry, and/or (4) compare to rules of thumb.

- (1) Cash to daily cash expenses: P&G could pay its expenses for 24 days without having to find other financing.
Free cash flow: P&G had \$1,375 million in discretionary cash to use for purchasing investments, paying debts, or adding to liquidity.
- (2) There seemed to be a problem with cash in 2000. The cash to daily cash expenses dipped sharply and P&G had no discretionary cash. The ratios improved again in 2001.
- (3) Industry/S&P data: unable to find.
- (4) Rules of thumb: unable to find.

Example 4 – Marketable Securities

The Clarion Co. purchased shares of Procter & Gamble Co. stock for \$42,000 on September 9, 2002. On October 15, Clarion received \$1,500 in dividends. By December 31, 2002, the P&G stock was worth \$45,000. Assuming Clarion classifies the investment as available for sale, prepare the entry to record dividends and the adjusting journal entry to record the change in value. How will any investment-related accounts appear in the financial statements? How would your answer change if the investment were considered a trading security? Could the investment be classified as “held to maturity?”

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SOLUTION

Available for sale

Receipt of dividends

Cash	1,500	
Dividend revenue		1,500

Adjusting journal entry

Marketable securities	3,000	
Unrealized holding gain on investments		3,000

Financial statements

The marketable securities will be shown in the balance sheet at the \$45,000 market value. In the stockholders' equity section of the balance sheet, include the unrealized holding gain account, probably right after retained earnings. The balance will increase stockholders' equity.

Trading security

The dividend entry would be the same, but the unrealized holding gain would go on the income statement rather than the balance sheet.

Held to maturity

The investment could never be considered held to maturity because stock does not have a maturity date.

Brief exercise 12-6 (prepare adjusting entry using fair value)

Brief exercise 12-8 (prepare investments section of balance sheet)

Exercise 12-3 (journalize transactions for investments in stock)

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Reporting and Analyzing Receivables

Example 1 – Direct Write-Off Method

Fortney Co. determines that its \$1,000 account receivable from Barton Co. is uncollectible. Fortney uses the direct write-off method of accounting for bad debts. Record the necessary journal entry.

SOLUTION

Bad debt expense	1,000	
Accounts receivable		1,000

Example 2 – Estimating Bad Debts Using the Allowance Method

The following information relates to the Banyon Company.

Charge sales	\$500,000	
Estimated % of charge sales not collectible	1¼%	
Accounts receivable balance	\$72,500	
Estimated % of accounts receivable not collectible	8%	

Determine the charge to bad debt expense:

- (1) using the balance sheet approach, assuming the balance in the allowance account is \$150 credit;
- (2) using the balance sheet approach, assuming the balance in the allowance account is \$150 debit;
- (3) using the income statement approach.

What would be the appropriate journal entry to record bad debt expense?

SOLUTION

- (1) Balance sheet approach if allowance account has \$150 credit balance

Desired balance in allowance account ($.08 \times \$72,500$)	\$5,800	
Expense = (\$5,800 - 150)		\$5,650

- (2) Balance sheet approach if allowance account has \$150 debit balance

Desired balance in allowance account ($.08 \times \$72,500$)	\$5,800	
Expense = (\$5,800 + 150)		\$5,950

- (3) Income statement approach, based on percentage of sales.

Expense = ($\$500,000 \times .0125$)		\$6,250
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Required journal entry

Bad Debt Expense		
Allowance for Doubtful Accounts		

Example 3 – Net Realizable Value

Refer to Example 2, part (1). Show the proper presentation of accounts receivable on the balance sheet.

SOLUTION

Accounts receivable	\$72,500	
Less: Allowance for doubtful accounts	<u>5,800</u>	\$ 66,700

(Note: the \$66,700 = NRV)

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Example 4 – Write-Off of Account

Assume that the account of a customer, the Morton Co., is 90 days past due. Banyon Company has decided to write off the \$1,500 account as of June 30.

- (1) Record the journal entry to write off Morton's account.
- (2) How will the net realizable value of accounts receivable change as a result of this write-off?
- (3) How will net income be affected by this write-off?

SOLUTION

(1) June 30

Allowance for doubtful accounts	1,500	
Accounts receivable (Morton Co.)		1,500

- (2) The net realizable value of accounts receivable does not change as a result of the write-off.

	<u>Before Write-off</u>	<u>After Write-off</u>
Accounts receivable	\$72,500	\$71,000
Allowance for doubtful accounts	<u>5,800</u>	<u>4,300</u>
Net realizable value	<u>\$66,700</u>	<u>\$66,700</u>

- (3) Net income is not affected by the write-off because no entry is made to bad debt expense.

Example 5 – Reinstatement of Account

Refer to Example 4. Assume that three months later (September 30), Morton is able to pay one-half of the account balance that was written off in June. Record the September 30 journal entries.

September 30

Accounts receivable (Morton Co.)	750	
Allowance for doubtful accounts		750
Cash	750	
Accounts receivable (Morton Co.)		750

Example 6 – Maturity Date

What is the maturity date of a 60-day note dated July 17?

SOLUTION

Term of note		60
July	31 days	
Date of note	<u>17</u>	
	14	
August	<u>31</u>	45
Maturity date, September		<u>15</u>

Example 7 – Note Receivable

The Dresden Company had accounts receivable due from the Piccolo Corp. Piccolo was experiencing financial difficulties and requested an extension to pay the amount owed. Dresden agreed, and on October 1, Piccolo signed a 120-day, 12% note.

- (1) Record all necessary entries assuming that the note was paid at the due date.
- (2) Record the entry needed on the due date assuming that Piccolo Corp. defaulted.

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SOLUTION

(1)

October 1--receipt of note

Note receivable	10,000	
Accounts receivable		10,000

December 31 adjusting entry

Interest receivable (\$1,000 × .12 × 3/12)	300	
Interest revenue		300

February 1--collection of principal and interest.

Cash	10,400	
Note receivable		10,000
Interest receivable		300
Interest revenue		100

(2)

February 1--defaulted note

Accounts receivable	10,400	
Note receivable		10,000
Interest receivable		300
Interest revenue		100

Example 8 – Ratios for Evaluating Accounts Receivable

Compute the inventory turnover rate and days in inventory for Procter & Gamble and interpret the results. Also, calculate the length of Procter & Gamble's operating cycle (recall that days in inventory = 56.8).

SOLUTION

$$\text{A/R turnover} = \frac{\text{net sales}}{\text{average A/R}} = \frac{39,244}{(2,931 + 2,910) \div 2} = 13.44$$

$$\text{Average collection period} = \frac{\text{days in year}}{\text{A/R turnover}} = \frac{365}{13.44} = 27.2 \text{ days}$$

Interpret: To interpret these measures, we might (1) understand what they measure, (2) compare to last year, (3) compare to industry data or data for a broad group of companies, and/or (4) compare to rules of thumb.

- (1) AR turned over completely 13.44 during last year. On average, it took 27.2 days to collect AR.
- (2) Last year, the turnover was 13.73, or 26.6 days to collect (using 2000 AR balance, not the average AR), so P&G had a slight decline in 2001.
- (3) Industry/S&P data: inventory turnover = 10.46/9.40; collection period = 34.9/38.8. P&G is doing better than the industry overall and firms in general. However, we don't really know how credit terms differ among the firms.
- (4) Rules of thumb: none, although the collection period should not greatly exceed the credit term period (a figure we don't have access to).

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