chapter 7

Internal Control and Cash

Accounting Matters!

Counting Out the Money

On any given evening at the Granite Brewery and Ginger's Tavern, you can find students and the after-work crowd enjoying pub snacks and quality ale brewed by owner Kevin Keefe.

The brewery and pub have become a Halifax institution since the brewery first opened in 1987. In fact, it was so popular that, in 1991, the Keefes opened a location in Toronto. In 2001, they added another in Halifax to house the brewing operations and a second restaurant, but have since disposed of the restaurant to focus on brewing and serving fine beer.

The Halifax brewery and pub take in approximately $300,000 in annual sales, all of which flows through the hands of the wait staff and bartenders. General manager Denise Avery has a detailed system to track it all.

“There are two cash registers,” explains Ms. Avery, “and up to three people might use each one on any given shift. Each server has a private code number that they punch into the register when they ring up a sale, and it tracks their totals separately.” Each bartender is given a float of $200. They are responsible for turning in that amount plus their total cash receipts at the end of the day.

What if there's a discrepancy between the cash register's total and the amount in the till? “The machine prints two tapes—one we can use as receipts and one that stays inside,” says Ms. Avery, “so we can look for the error.”

The Brewery also has internal controls in place at its two bars, where four bartenders work each day on two separate shifts. “When they come in to work in the morning, the first thing they do is count the inventory in the fridge and read the meters on each ale,” explains Ms. Avery. “At the end of the shift, they do another count with the next bartender, who in turn rings off at closing.” Everything must correspond to the cash register tape. For example, if three beers are missing from the fridge, three beers should have been rung in. If they weren’t, the bartender is responsible.

“With a good system, discrepancies just don’t happen often,” she continues. “If ever there is one, it's usually pretty easy to find the problem by looking at the cash tapes.”

Cash control is crucial to a business like the Granite Brewery. But, with a carefully thought-out system and the help of modern automation, cash can be controlled reliably and fairly easily.

Granite Brewery: www.granitebrewery.ca

The Navigator

- Read *Feature Story*
- Scan *Study Objectives*
- Read *Chapter Preview*
- Read text and answer *Before You Go On*
- Work *Using the Decision Toolkit*
- Review *Summary of Study Objectives*
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Study Objectives

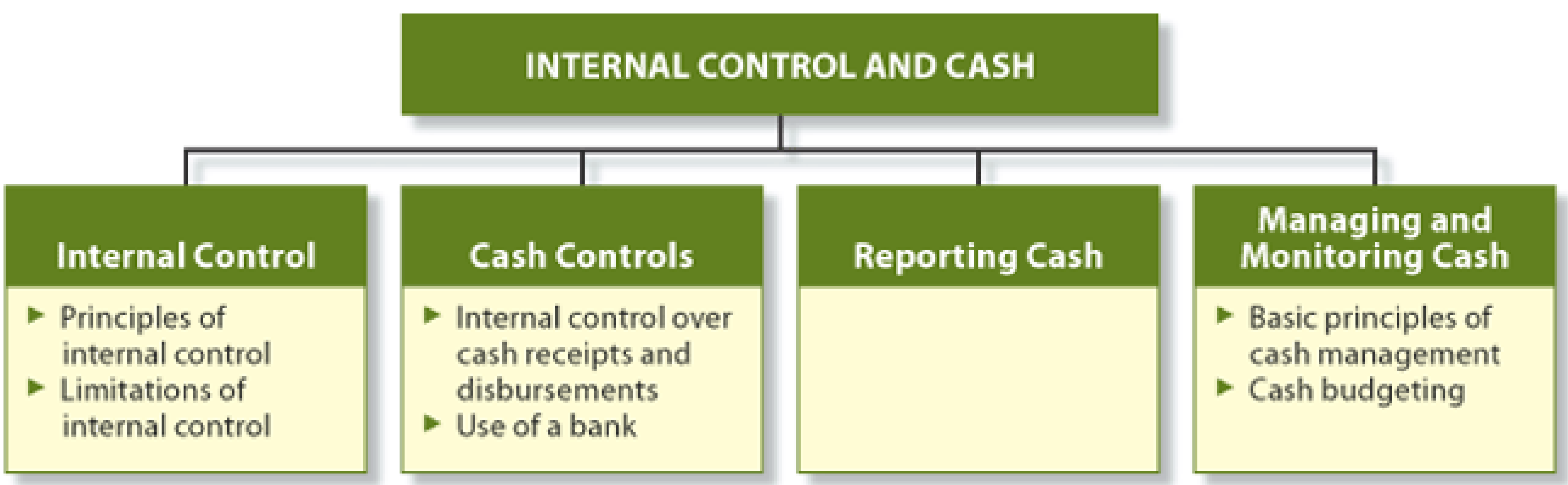
After studying this chapter, you should be able to:

1. Identify the principles of internal control.
2. Apply internal control to cash receipts and disbursements.
3. Prepare a bank reconciliation.
4. Explain the reporting of cash.
5. Identify ways to manage and monitor cash.

Preview of Chapter 7

Cash is the lifeblood of any company. Large and small companies alike must guard it carefully. Even companies that are successful in every other way can go bankrupt if they fail to manage their cash well. Managers must know both how to use cash efficiently and how to control it, as described in the feature story. In this chapter, we explain the essential features of an internal control system and describe how these controls apply to cash receipts and disbursements. We then explain how cash is reported in the financial statements, and describe ways to manage and monitor cash.

The chapter is organized as follows:



Internal Control

A 2004 report by the Association of Certified Fraud Examiners estimated that $4 billion is lost annually due to fraudulent activities committed within Canadian companies by their own employees. The Association also found that one-quarter of Canadian employees have either committed or witnessed fraudulent activity. Findings like these emphasize the need for a good system of internal control.

You were first introduced to the need for internal control in Chapter 6. As mentioned in that chapter, **internal control** consists of all the related methods and measures adopted within a business to:

1. **optimize the use of resources** to reduce inefficiencies and waste
2. **prevent and detect errors and irregularities** in the accounting process
3. **safeguard assets** from theft, robbery, and unauthorized use
4. **maintain reliable control systems** to enhance the accuracy and reliability of accounting records

The importance of internal control to the efficient and effective operation of a company cannot be overestimated. All federally incorporated companies are required, under the *Canada Business Corporations Act*, to maintain an adequate system of internal control. In addition, the Canadian Securities Administrators (CSA) have recently proposed that large publicly traded Canadian companies evaluate and report on the effectiveness of their internal control over financial reporting. The CSA believes that this proposal will help improve the quality and reliability of financial reporting, which had lost some of its credibility after many widely publicized corporate scandals.

Accounting Matters! Ethics Perspective

Canadian securities regulators have been in a regulatory frenzy in the aftermath of corporate scandals such as those of Bre-X Minerals, Livent, Nortel Networks, and others. New requirements, including internal control reports, CEO/CFO certifications, independent audit committees, and other proposals, are coming fast and furious as regulators work to protect investors and rebuild confidence in Canada's capital markets. In addition, because many

Canadian companies rely on U.S. capital, Canadian regulators have found that they simply have no choice but to keep pace with increasingly strict U.S. regulatory requirements, such as the *Sarbanes-Oxley Act* of 2002.

Principles of Internal Control

Study Objective 1

Identify the principles of internal control.

To optimize resources, prevent and detect errors and irregularities, safeguard assets, and maintain reliable systems, a company follows internal control principles. The specific control measures that are used vary with the size and nature of the business and with management's control philosophy. However, the six principles listed in Illustration 7-1 apply to most companies.

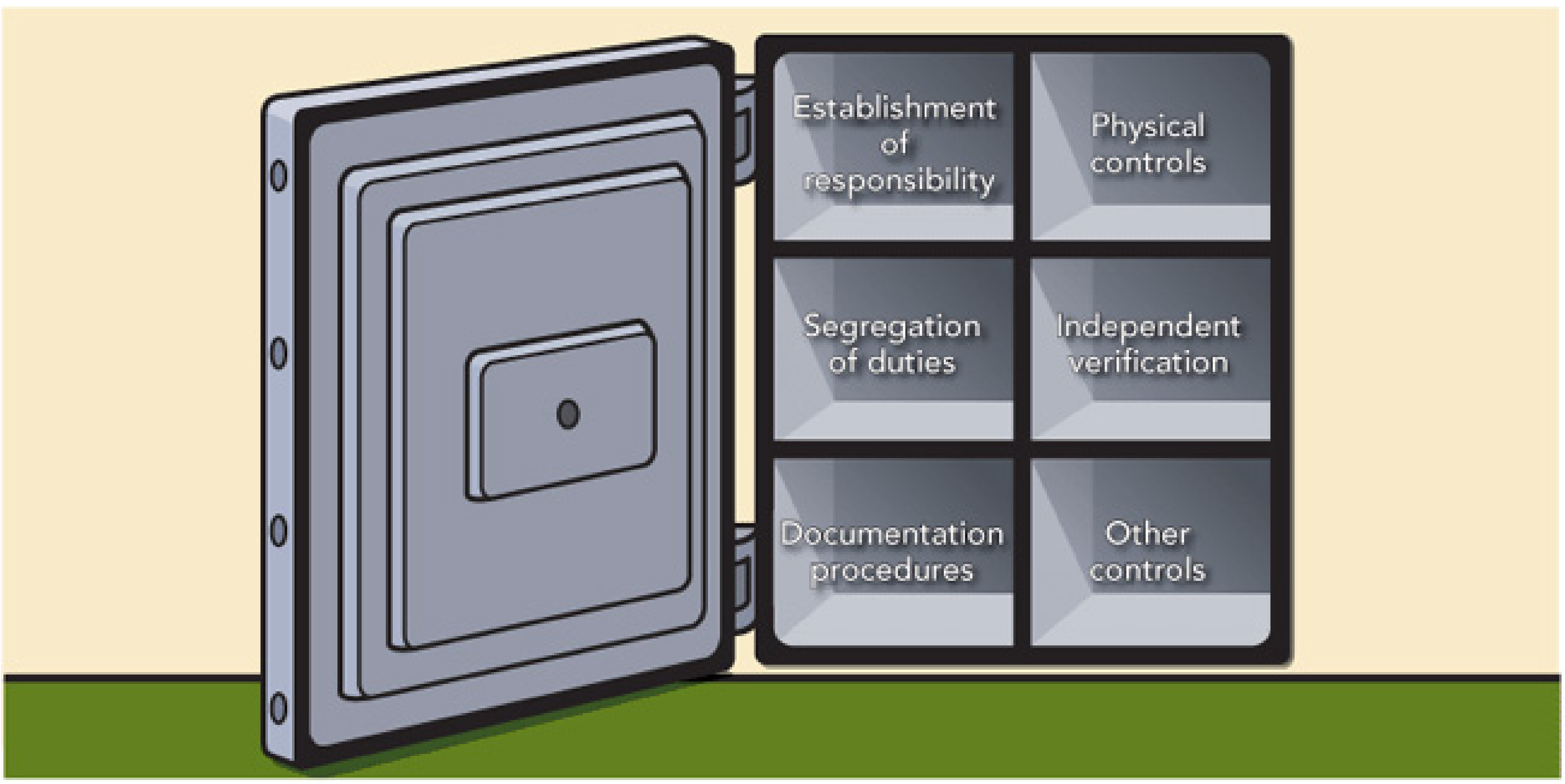


Illustration 7-1 ▲

Principles of internal control

These principles are explained in the following sections.

Establishment of Responsibility

An essential characteristic of internal control is the assignment of responsibility to specific individuals. **Control is most effective when only one person is responsible for a specific task**. To illustrate, assume that the cash on hand at the end of the day is $10 short of the cash rung up on the cash register. If only one person has operated the register, responsibility for the shortage can be attributed quickly. If two or more individuals have worked the same register, it may be impossible to determine who is responsible for the error unless each person is given a separate cash drawer or code number, as is done at the Granite Brewery described in the feature story.

Responsibility must also be assigned for the authorization and approval of transactions. For example, the vice-president of sales should have the authority to establish policies for making credit sales. The policies that are established also typically require written credit department approval of credit sales.

Segregation of Duties

Segregation of duties is essential in a system of internal control. **The work of one employee should, without a duplication of effort, provide a reliable basis for evaluating the work of another employee**. There are two common applications of segregation of duties:

1. The responsibility for related activities should be assigned to different individuals.
2. The responsibility for accounting for an asset should be separate from the responsibility for physical custody of that asset.

Related Activities. **When one individual is responsible for all of the related activities, the potential for errors and irregularities is increased**. Consider related purchasing activities, for example, which include ordering merchandise, receiving goods, and paying (or authorizing payment) for merchandise. In purchasing, orders could be placed with friends or with suppliers who give kickbacks. In addition, payment might be authorized without a careful review of the invoice or, even worse, fictitious invoices might be approved for payment. When the responsibilities for ordering, receiving, and paying are assigned to different individuals, the risk of such abuses is much lower.

Related sales activities, such as making a sale, shipping (or delivering) the goods to the customer, and billing the customer, should also be assigned to different individuals. When one person is responsible for these related sales transactions, a salesperson could make sales at unauthorized prices to increase sales commissions, a shipping clerk could ship goods to himself or herself, or a billing clerk could understate the amount billed for sales made to friends and relatives. These abuses are less likely to occur when the sales tasks are divided: salespersons make the sale, shipping department employees ship the goods based on the sales order, and billing department employees prepare the sales invoice after comparing the sales order with the report of goods shipped.

Custody of Assets. To make the accountability for an asset in an accounting system valid, the accountant (as record keeper) should not have physical custody of the asset or access to it. Similarly, the custodian of the asset should not maintain or have access to the accounting records. **The custodian of an asset is not likely to convert the asset to personal use if another employee maintains the record which states that the asset should be on hand**. The separation of accounting responsibility from the custody of assets is especially important for cash and inventories, because these assets are attractive for unauthorized use or theft.

Documentation Procedures

Documents provide evidence that transactions and events have occurred. At the Granite Brewery in the feature story, the cash register tape is documentation for a sale and the amount of cash received. Similarly, a shipping document indicates that goods have been shipped, and a sales invoice indicates that the customer has been billed for the goods. By adding a signature (or initials) to a document, the individual responsible for the transaction or event can be identified.

Procedures should be established for documents. **First, whenever possible, documents should be prenumbered and all documents should be accounted for**. Prenumbering helps to prevent a transaction from being recorded more than once or, conversely, from not being recorded at all. Second, documents that are source documents (the original receipts) for accounting entries should be promptly forwarded to the accounting department to help ensure timely recording of the transaction. This control measure contributes directly to the accuracy and reliability of the accounting records.

Physical Controls

Physical controls include mechanical and electronic controls to safeguard assets and enhance the accuracy and reliability of the accounting records. Examples of these controls are shown in Illustration 7-2.

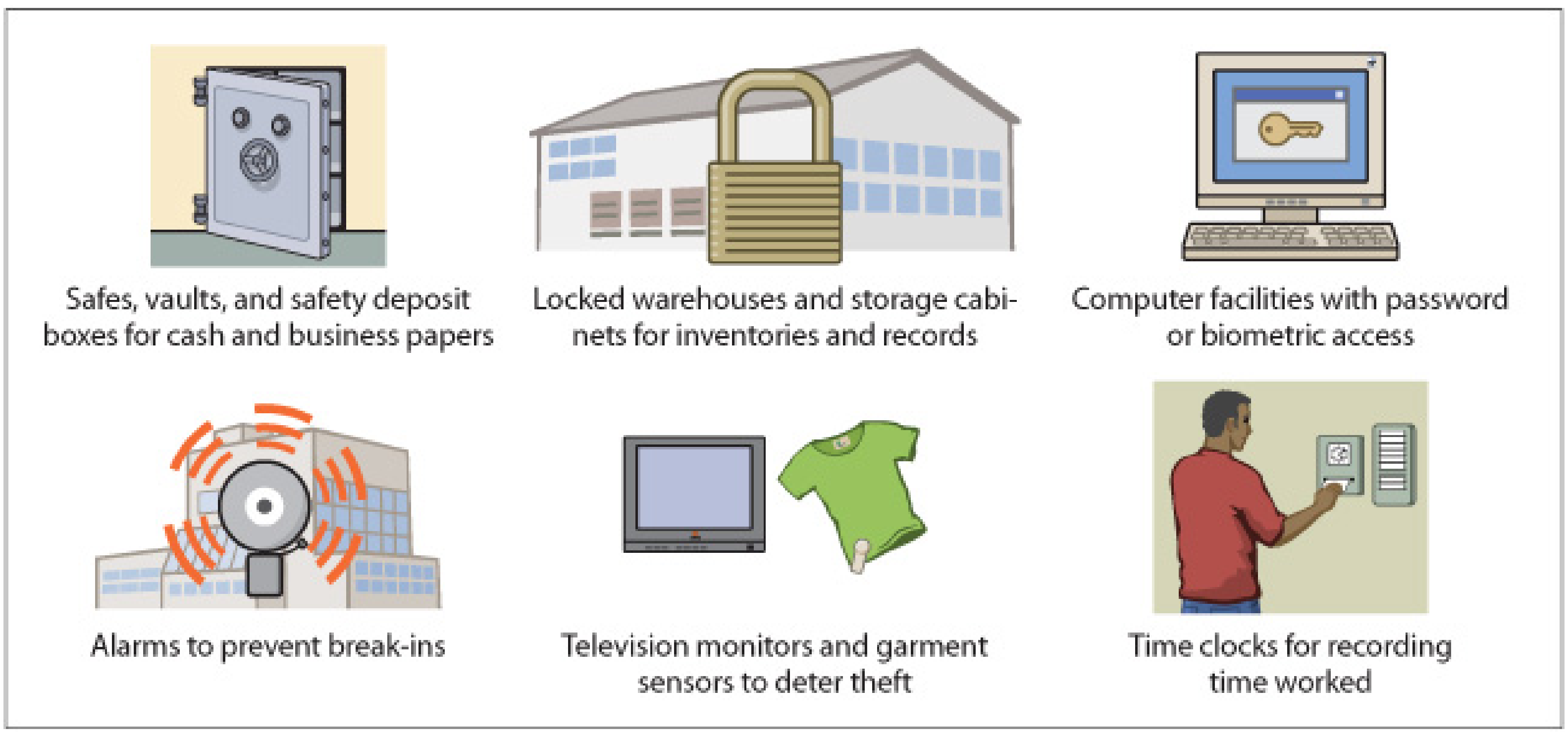


Illustration 7-2

Physical controls

Independent Verification

Most systems of internal control provide for independent internal and external verification. This principle involves the review, comparison, and reconciliation of data prepared by employees. Three measures are recommended to benefit fully from independent verification:

1. The verification should be done periodically or on a surprise basis.
2. The verification should be done by an employee who is independent of the personnel responsible for the information.
3. Discrepancies and exceptions should be reported to a management level that can take appropriate corrective action.

Internal Verification. Independent internal verification is especially useful in comparing accounting records with existing assets. The inventory count by the two bartenders in the feature story about the Granite Brewery is an example. Another common example is the reconciliation by an independent person of the cash balance per books with the cash balance per bank. We will learn more about bank reconciliations later in this chapter.

In large companies, independent internal verification is often assigned to internal auditors. **Internal auditors** are employees of the company who evaluate the effectiveness of the company's system of internal control. They periodically review the activities of departments and individuals to determine whether prescribed internal controls are being followed. The importance of this function is illustrated by the fact that most fraud is discovered by companies through internal mechanisms, such as existing internal controls and internal audits.

External Verification. It is useful to contrast independent *internal* verification with independent *external* verification. **External auditors**, in contrast to internal auditors, are independent of the company. They are professional accountants hired by a company to report on whether or not the company's financial statements fairly present its financial position and results of operations. As part of the evaluation, they also examine and report on internal control.

Other Controls

Other control measures can include the following:

1. **Bonding of employees who handle cash**. Bonding means having insurance protection against the misappropriation of assets by dishonest employees. This measure contributes to the safeguarding of cash in two ways: First, the insurance company carefully screens all individuals before adding them to the policy and may reject risky applicants. Second, bonded employees know that the insurance company will vigorously prosecute all offenders.
2. **Rotating employees' duties and requiring employees to take vacations**. These measures are designed to deter employees from attempting any thefts, since they will not be able to permanently conceal their improper actions. Many embezzlements, for example, have been discovered when the perpetrator was on vacation or assigned to a new position.

Limitations of Internal Control

A company's system of internal control is generally designed to provide **reasonable assurance** that assets are properly safeguarded and that the accounting records are reliable—in other words, that a reliable control system is maintained. The concept of reasonable assurance rests on the idea that the costs of establishing control procedures should not be more than their expected benefit.

To illustrate, consider shoplifting losses in retail stores. Such losses could be completely eliminated by having a security guard stop and search customers as they leave the store. Store managers have concluded, however, that the negative effects of this procedure cannot be justified. Instead, stores have attempted to "control" shoplifting losses by using less costly procedures such as (1) posting signs saying, "We reserve the right to inspect all packages" and "All shoplifters will be prosecuted," (2) using hidden TV cameras and store detectives to monitor customer activity, and (3) using sensor equipment at exits.

The **human element** is an important factor in every system of internal control. A good system can become ineffective as a result of employee fatigue, carelessness, or indifference. For example, a receiving clerk may not bother to count goods received or may just "fudge" the counts. Occasionally, two or more individuals may work together to get around prescribed controls. Such collusion can significantly lessen the effectiveness of a system because it eliminates the protection expected from segregating the employees' duties. If a supervisor and a cashier collaborate to understate cash receipts, the system of internal control may be defeated (at least in the short run).

The **size of the business** may impose limitations on internal control. In a small company, for example, it may be difficult to apply the principles of segregation of duties and independent internal verification because of the small number of employees. In situations such as this, it is often necessary for management to assume responsibility for, or to oversee, incompatible functions. For example, at a small gas station, it is not unusual for a cashier to receive the cash and also prepare and make the night deposit at the bank. If the cash register tape is locked so that the cashier cannot access it, internal control is strengthened when the manager later reconciles the bank deposit to the cash register tape.

Decision Toolkit

Decision Checkpoints	Info Needed for Decision	Tools to Use for Decision	How to Evaluate Results
Are the company's financial statements supported by adequate internal controls?	Auditor's report, statement of management responsibility, management discussion and analysis, articles in the financial press	The required measures of internal control are to (1) establish responsibility, (2) segregate duties, (3) document procedures,(4) employ physical controls, and (5) use independent verification.	If there is any indication that these or other controls are lacking, the financial statements should be used with caution.

Before You Go On . . .

Review It

1. What is internal control?
2. Identify and describe the principles of internal control.
3. What are the limitations of internal control?

Do It

Identify the appropriate internal control principle and state whether it has been supported or violated in each of the following situations:

(a) The purchasing department orders, receives, and pays for merchandise.
(b) All cheques are prenumbered and accounted for.
(c) The internal auditor performs surprise cash counts.
(d) Extra cash is kept locked in a safe that can only be accessed by the head cashier.
(e) Each cashier has their own cash drawer.

Action Plan

- Understand the principles of internal control: establishment of responsibility, segregation of duties, documentation procedures, physical controls, and independent verification.

Solution

(a) Violation of segregation of duties
(b) Support of documentation procedures
(c) Support of independent verification
(d) Support of physical controls
(e) Support of establishment of responsibility

Cash Controls

study objective 2
Apply internal control to cash receipts and disbursements.

Just as cash is the beginning of a company's operating cycle, it is usually the starting point for a company's system of internal control. Cash is easily concealed and transported, lacks owner identification, and is highly desired. Because of these characteristics, cash is highly susceptible to theft or misuse. In fact, the Association of Certified Fraud Examiners reports that cash is the asset targeted for theft 90 percent of the time. In addition, because of the large volume of cash transactions, errors may easily occur in executing and recording these transactions. To safeguard cash and to ensure the accuracy of the accounting records, effective internal control is essential.

Before we apply the internal control principles we learned in the last section to cash, let's look first at what cash is, and is not. **Cash** consists of coins, currency (paper money), cheques, money orders, and money on hand or on deposit in a bank or similar depository. The general rule is that if the bank will accept it for deposit, it is cash.

Debit card transactions and bank credit card receipts, such as VISA and MasterCard, are considered as cash but non-bank credit card receipts, such as Diner's Club, are not. In fact, debit and credit cards are used far more frequently than cash today. (We will learn more about accounting for debit and credit card transactions in Chapter 8.)

Cash does *not* include postdated (payable in the future) cheques, staledated (more than six months old) cheques, or returned cheques (due to insufficient funds). Nor are postage stamps or IOUs from employees cash, because these items are not the current medium of exchange or acceptable at face value on deposit.

Internal Control Over Cash Receipts and Disbursements

Cash receipts come from a variety of sources: cash sales; collections on account from customers; the receipt of interest, rents, and dividends; investments by shareholders; bank loans; and proceeds from the sale of assets. Generally, internal control over cash receipts is more effective when **cash receipts are deposited intact into the bank account on a daily basis**. Bank deposits should be made by an authorized employee, such as the head cashier or general manager.

The internal control principles explained earlier apply to cash receipt transactions as shown in Illustration 7-3. As might be expected, companies vary considerably in how they apply these principles.

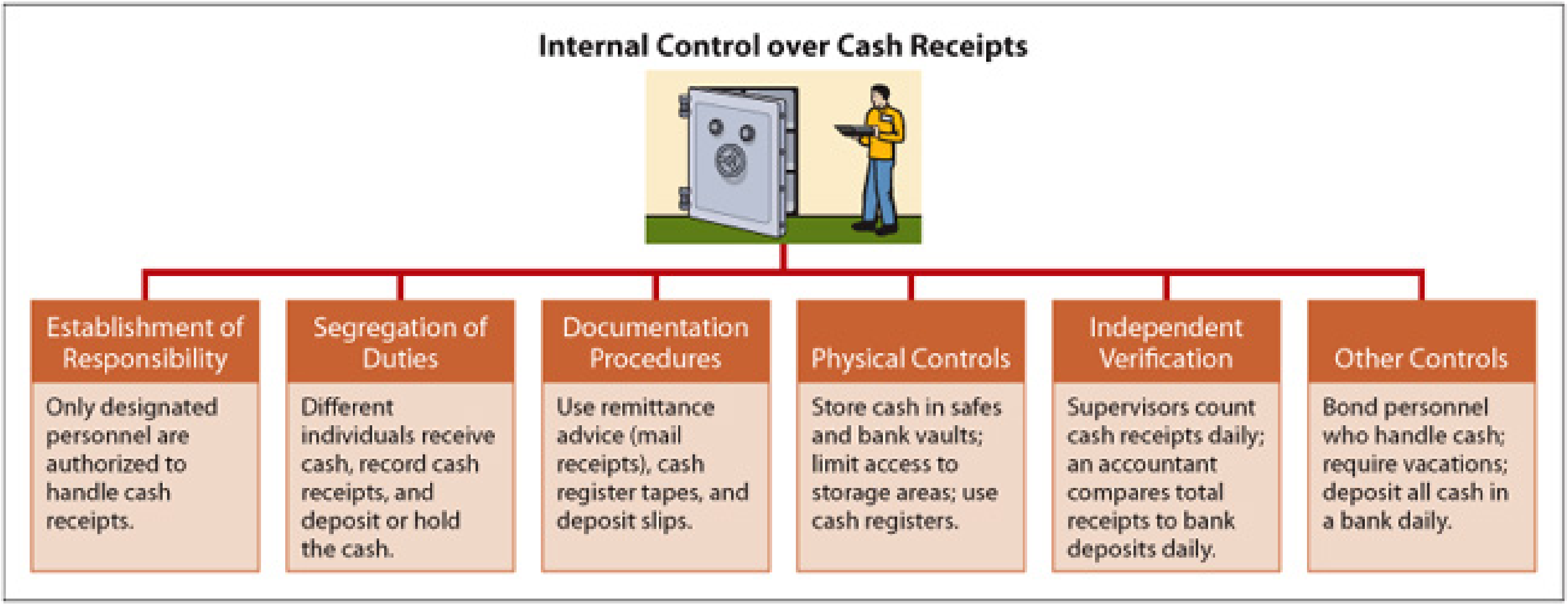


Illustration 7-3 ▲

Application of internal control principles to cash receipts

Cash is disbursed for a variety of reasons, such as to pay expenses and liabilities or to purchase assets. Generally, internal control over cash disbursements is more effective when **payments are made by cheque rather than in cash**. Other control procedures (not discussed here) are put in place for the few payments that cannot be made by cheque (e.g., for postage).

Internal control over cheques includes the signing of cheques by an authorized person or persons (cheques often require two signatures). The cheque signer(s) should carefully review the supporting documentation for the payment before signing the cheque. There should be a clear segregation of duties between the cheque-signing function and the accounts payable function. Cheques should be prenumbered and all cheque numbers must be accounted for in the payment and recording process. Cheques should never be pre-signed and blank cheques should be safeguarded.

The principles of internal control apply to cash disbursements as shown in Illustration 7-4.

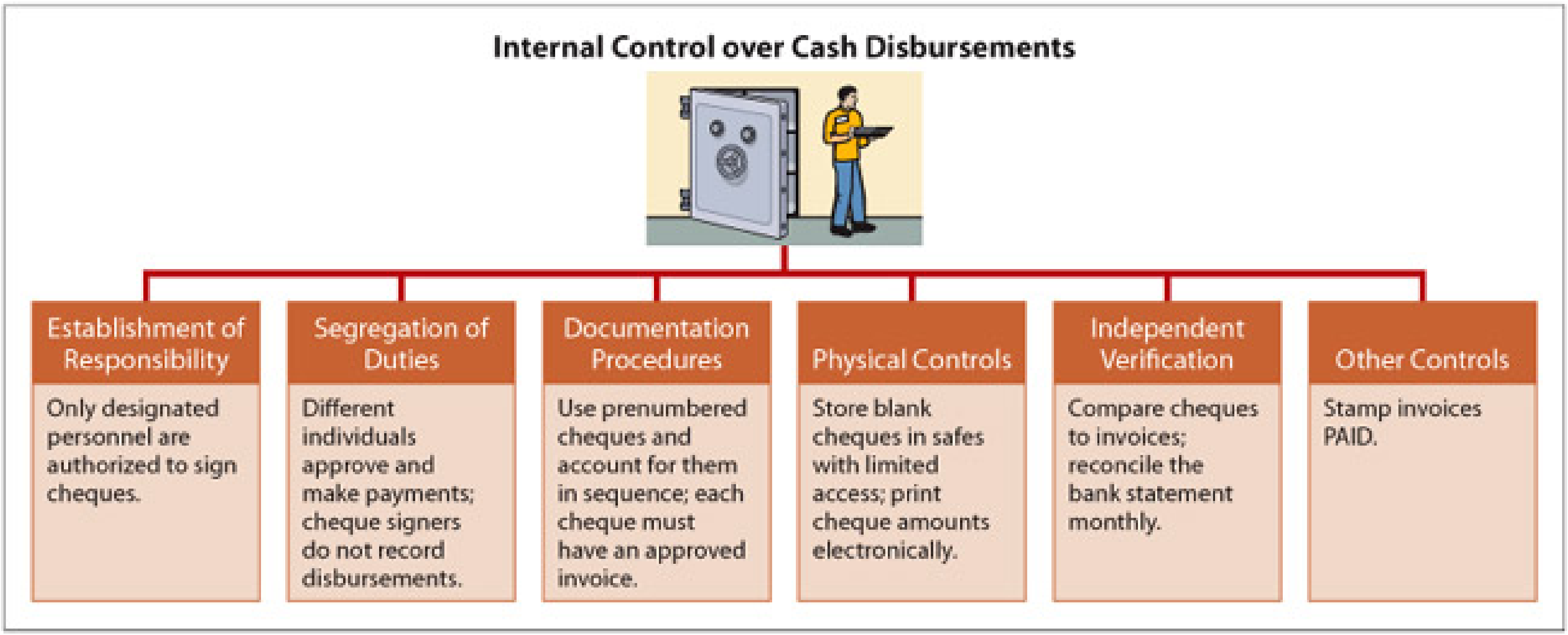


Illustration 7-4 ▲

Application of internal control principles to cash disbursements

Use of a Bank

study objective 3

Prepare a bank reconciliation.

The use of a bank contributes significantly to good internal control over cash. A company can safeguard its cash by using a bank as a depository and clearing house for its cash and cheques received and cheques written. The use of a bank minimizes the amount of currency that must be kept on hand. And, if all receipts are deposited intact into the bank account and all payments are made by cheque, internal control is strengthened because a double record is maintained of all bank transactions—one by the company and the other by the bank. It should be possible to **reconcile these accounts**—make them agree—at any time.

Each month, the bank sends the company a bank statement showing the company's bank transactions and balances. For example, in Illustration 7-5, the statement for Laird Ltd. shows the following: (1) cheques paid and other debits that reduce the balance in the depositor's account, (2) deposits and other credits that increase the balance in the depositor's account, and (3) the account balance after each day's transactions.

Bank of Montreal Banque de Montréal

505 King Street
Fredericton, NB
E3B 1E7

Transit No de dom	Date D/J M/M Y/A	Account Title Désignation de compte	Account Type Type de compte	Account No. No de compte	Page
0123	30 04 06	Operating Account	FBOA	1050-800	58

Laird Ltd.
500 Queen Street
Fredericton, NB E3B 5C2

TRANSACTION CODES*
*CODES DE TRANSACTIONS**

AD Adjustments *Rectification*
CB Cheque Posted By Branch *Chèque inscrit par la succ.*
CC Certified Cheque *Chèque certifié*
CD Customer Deposit *Dépôt*
CK Cheque *Chèque*
CM Credit Memo *Avis de Crédit*
CW Telephone Banking *Services bancaires par téléphone*
DC Other Charges *Autres frais*
DD Direct Deposit/ Pre-authorized Debit *Dépôt au débit direct*
DM Debit Memo *Avis de débit*
DN Not Service Chargeable *Sans frais de gestion*
DR Overdraft *Découvert*
DS Service Chargeable *Avec frais de gestion*
EC Error Correction *Correction d'erreur*
FX Foreign Exchange *Change*
GS Tax *Taxe*

	Date	
BALANCE FORWARD SOLDE REPORTÉ	03 31	13,256.90

CODE	Description/Message justificatif	Debits/Débits	Credits/Crédits	Mo. Day Jour	Balance/Solde
CK	NO. 435	644.95		04 01	12,611.95
CD			4,276.85	04 01	16,888.80
DD			2,137.50	04 04	19,026.30
CK	NO. 438	776.65		04 04	18,249.65
CK	NO. 437	1,185.79		04 05	17,063.86
CK	NO. 436	3,260.00		04 05	13,803.86
CD			1,350.47	04 06	15,154.33
CD			982.46	04 07	16,136.79
CK	NO. 440	1,487.90		04 07	14,648.89
CK	NO. 439	1,781.70		04 08	12,867.19

Charge

GS Tax
Taxe

IB Instabank
Instabanque

IN Interest
Intérêt

LI Loan Interest
Intérêt sur prêt

LN Loan Payment
Versement sur prêt

LP Loan Advance
Avance sur prêt

LT Large Volume Account
List Total
Liste de chèques - compte superactif

MB Multi-Branch Banking
Inter-Service

NR Non-Resident Tax
Impôt de non-résident

NS Cheque returned NSF
Chèque retourné - provision insuffisante

NT Nesbitt Burns Entry
Transaction de Nesbitt Burns

OM Other Machine
Autre machine

PR Purchase at Merchant
Achat chez le commerçant

RC NSF Charge
Frais pour provision insuffisante

RN Merchandise Return
Retour de marchandise

RT Returned Item
Article retourné

RV Merchant Reversal
Correction - Commerçant

SC Service Charge
Frais de gestion

SD Standing Order
Ordre de virement

ST Merchant Deposit
Dépôt du commerçant

TF Transfer of Funds
Virement

TX Tax
Taxe

WD Withdrawal
Retrait

Please see the reverse side for the Account Types
Les types de compte figurent au verso.

CK	NO. 440	1,487.90		04 07	14,648.89
CK	NO. 439	1,781.70		04 08	12,867.19
CK	NO. 442	2,420.00		04 08	10,447.19
CD			2,355.28	04 11	12,802.47
CK	NO. 441	1,585.60		04 11	11,216.87
CD			2,720.00	04 12	13,936.87
CK	NO. 443	1,226.00		04 12	12,710.87
CD			757.41	04 14	13,468.28
CD			1,218.56	04 15	14,686.84
CD			715.42	04 15	15,402.26
RC		425.60		04 18	14,976.66
CK	NO. 444	3,477.11		04 22	11,499.55
CD			1,578.90	04 25	13,078.45
CM			1,350.55	04 27	14,429.00
DM		30.00		04 28	14,399.00
CD			2,128.60	04 29	16,527.60
CK	NO. 447	659.91		04 29	15,867.69
IN			39.76	04 29	15,907.45

Prompt notification of any change of address would be appreciated. / *Prière de signaler à la Banque tout changement d'adresse.*

Please check this statement and report any errors or omissions within 30 days of its delivery
Prière de vérifier ce relevé de compte et de signaler toute erreur ou omission dans les 30 jours suivant sa réception.

Illustration 7-5 ▲

Bank statement (reproduced with permission of the Bank of Montreal)

Helpful Hint

Bank	Company
Credit	*Debit*
Debit	*Credit*

At first glance, it may appear that the debits and credits reported on the bank statement are backward. How can a cheque be a debit? And how can a deposit be a credit? Debits and credits are not really backwards because the asset account Cash maintained by the company (depositor) is the opposite of the bank's liability account for each depositor. To the company, Cash is an asset account. Assets are increased by debits (e.g., for cash receipts) and decreased by credits (e.g., for cash payments). To the bank, on the other hand, the cash in your bank account is a liability account—an amount it must repay to you upon request. Liabilities are increased by credits and decreased by debits. When you deposit money in your bank account, the bank's liability to you increases. That is why the bank shows deposits as credits. When you write a cheque on your account, the bank pays out this amount and decreases (debits) its liability to you.

Cheques Paid and other Debits

A cheque is a written order signed by the depositor that instructs the bank to pay a specific sum of money to a designated recipient. Personal cheques are now being used much less than they used to be. In fact, many retailers—including Loblaw, Sobeys, Wal-Mart, Sears, The Bay, and Zellers—no longer accept personal cheques. Although personal chequing is on the decline, cheques for businesses are still the reality. It is difficult to pay most corporate creditors any other way.

Other disbursements may appear on the bank statement, such as payments using electronic funds transfers. For example, many companies pay their employees' salaries using a direct deposit option. When this occurs, the cash is instantly transferred from the company's bank account to each employee's bank account. No cheques are issued. In addition, pre-authorized payments, for things like loans and interest paid on a recurring basis, are often made electronically.

All paid cheques are listed in chronological order on the bank statement along with the date the cheque was paid and its amount. Upon paying a cheque, the bank stamps the cheque “Paid”; a paid cheque is sometimes referred to as a **cancelled cheque**. Electronic payments, or funds transfers, are normally indicated directly on the bank statement without any supporting documentation.

The bank also includes memoranda with the bank statement that explain other debits made by the bank to the depositor's account. **Debit memoranda (DM)** are issued for service charges and fees assessed by the bank and other amounts that are deducted from the depositor's account.

A debit memorandum is also used by the bank when a previously deposited customer's cheque bounces because of insufficient funds. In such a case, the cheque is marked **NSF (not sufficient funds)** by the customer's bank, or **RC (returned cheque)**, as in the case of the Bank of Montreal, and is returned to the depositor's bank. The bank then debits (decreases) the depositor's account, as shown by the symbol RC on the bank statement in Illustration 7-5, and returns the NSF cheque and debit memorandum to the depositor as notification of the charge.

The company (depositor) advises the customer who wrote the NSF cheque that the payment was ineffective and that payment is still owed on the account. The company also usually passes the bank charges on to the customer by adding them to the customer's account balance. In summary, the overall effect of an NSF cheque to the depositor is to create an account receivable and to reduce the cash in the depositor's bank account.

An account receivable is recorded on the assumption that the customer will honour the account due by replacing the bounced cheque with a valid cheque, or with cash. This happens in most cases. In the next chapter, we will discuss how to account for uncollectible accounts receivable when customers are unable to pay their accounts.

Deposits and other Credits

Deposits to a company's bank account can be made by an authorized employee, and documented by a deposit slip. Deposits can also be made by direct deposit, through an automated banking machine, or through an electronic funds transfer. In these cases, the notification is on the bank statement.

The bank also includes memoranda with the bank statement that explain other credits made by the bank to the depositor's account. **Credit memoranda (CM)** identify interest earned on the bank account and other amounts added to the depositor's account. For example, some retailers allow electronic payments for merchandise sold on account. Funds are electronically transferred from the customer's account to the retailer's account in payment of the bill.

In summary, **debit memoranda result in debits on the bank's books and credits on the company's books. Credit memoranda result in credits on the bank's books and debits on the company's books**.

Reconciling the Bank Account

Because the bank and the company keep independent records of the company's chequing account, you might assume that the balances in both records will always agree. In fact, the two balances are seldom the same at any specific time. It is therefore necessary to make the balance per books agree with the balance per bank—a process called reconciling the bank account.

The lack of agreement between the balances has two causes:

1. **Time lags** that prevent one of the parties from recording the transaction in the same period as the other party
2. **Errors** by either party in recording transactions

Except in electronic banking transactions, time lags occur often. For example, several days will normally pass between the time a company mails a supplier a cheque and the date the supplier presents the cheque to the bank for payment. Cheques recorded by a company that have not yet cleared (been paid by) the bank are called **outstanding cheques**.

Similarly, when a company uses the bank's night depository to make its deposits, there will be a difference of one day (or more, if holidays intervene) between the time the receipts are recorded by the company and the time they are recorded by the bank. Deposits recorded by the company that have not yet been recorded by the bank are called **deposits in transit**. A time lag also occurs whenever the bank mails a debit or credit memorandum to the company.

Errors can also occur. How often errors occur depends on the effectiveness of the internal controls maintained by the company and the bank. Bank errors are infrequent. However, either party could accidentally record a $450 cheque as $45 or $540. In addition, the bank might mistakenly charge a cheque to the wrong account if the code is missing or if the cheque cannot be scanned.

Accounting Matters! Management Perspective

Bank errors may be infrequent, but they can involve a story more suitable for Ripley's Believe It or Not than an accounting textbook. Scotiabank's discount brokerage arm accidentally put $17.1 million of somebody else's money into a Toronto doctor's Scotiabank account. It took four months to find and correct the error. Stories about banks misplacing customers' funds are a dime a dozen. But they usually involve misplaced debits, and rarely amounts as high as this.

Source: John Partridge, "Bank Error in Your Favour: Collect $17 Million," *Globe and Mail*, April 11, 2000, A1.

Reconciliation Procedure. To get the most benefit from a bank reconciliation, the reconciliation should be prepared by an employee who has no other responsibilities related to cash. When the internal control principle of segregation of duties is not followed in preparing the reconciliation, cash embezzlements may go unnoticed. For example, a cashier who prepares the reconciliation can steal cash and hide the theft by misstating the reconciliation. Thus, the bank accounts would reconcile and the theft would not be detected.

In reconciling the bank account, it is customary to reconcile the balance per bank (found on the bank statement provided by the bank) and the balance per books (found in the cash account in the general ledger) to their adjusted (correct) cash balances. Both the books and the bank balance will likely change as a result of the reconciliation process. The reconciliation is usually divided into two sections—one per the bank statement and one per the books—as shown in Illustration 7-6 on the following page.

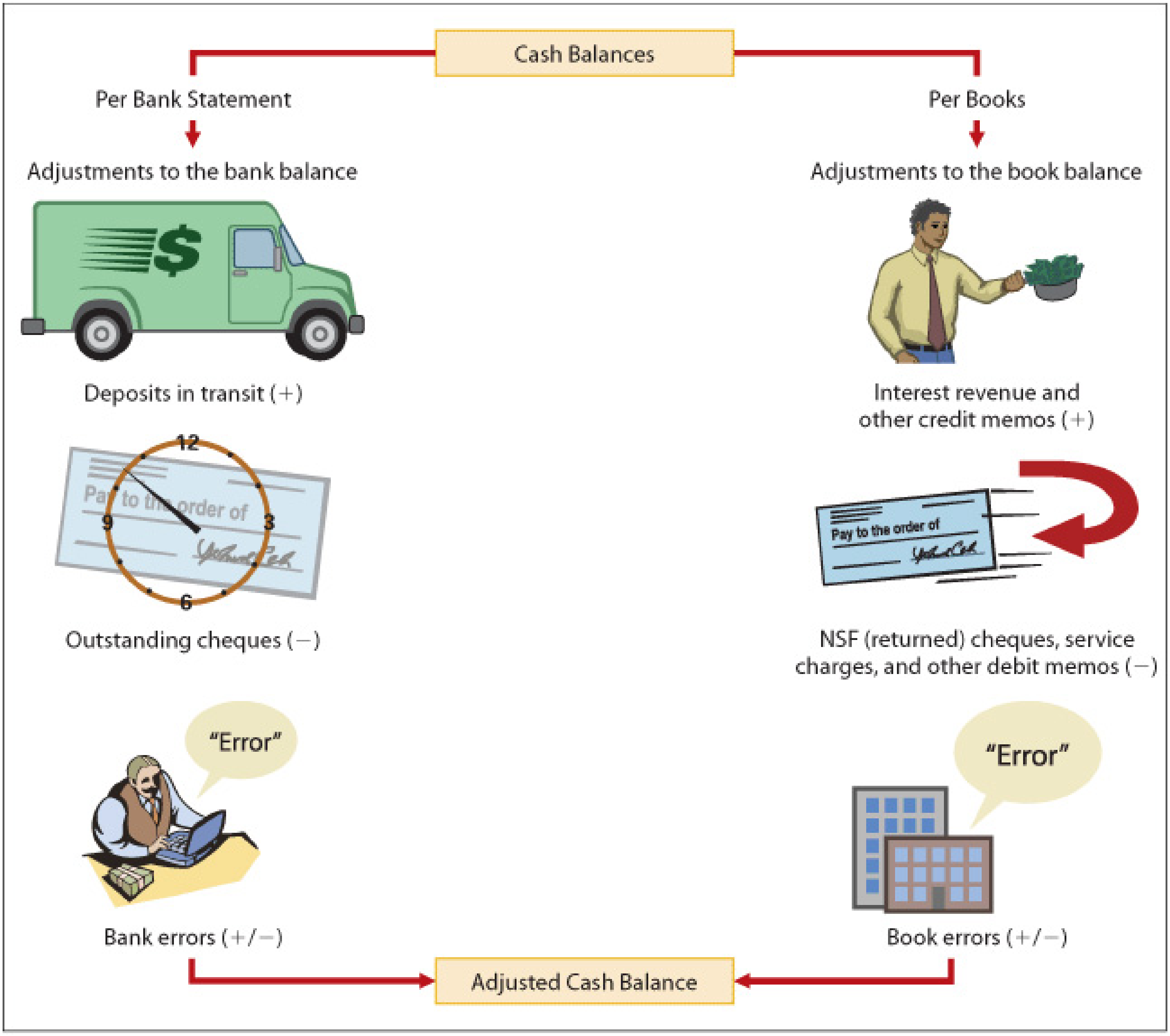


Illustration 7-6 ▲

Bank reconciliation procedures

The starting point in preparing the reconciliation is to enter the balance per bank statement and balance per books. The following steps should reveal all the reconciling items that cause the difference between the two balances:

1. **Reconciling Items per Bank**. On the bank side of the reconciliation, the items to reconcile are deposits in transit (amounts added) and outstanding cheques (amounts deducted).

    - **Deposits in transit**. Compare the individual deposits on the bank statement with (1) the deposits in transit from the preceding bank reconciliation and (2) the deposits recorded in the books. Deposits in transit are already recorded on the company's books but the bank does not know about them yet. Therefore, they must be added to the balance per bank in the reconciliation process.

      Before determining the deposits in transit for the current period, you must check whether all deposits in transit that are outstanding from a prior period have cleared. For example, assume that Laird Ltd. used a night deposit slot to deposit $2,201.40 on April 28. Because April 30 falls on a Sunday in 2006, the bank will not receive or record this deposit until Monday, May 1. This amount would be treated as a deposit in transit at the end of April and would be added to the balance per bank in the reconciliation process. However, this outstanding deposit will clear the bank in May and will therefore no longer be a deposit in transit at the end of May. As at the end of May, this amount will have been recorded by both the company and the bank.

    - **Outstanding cheques**. Compare the paid cheques shown on the bank statement or returned with the bank statement with (a) cheques outstanding from the preceding bank reconciliation and (b) cheques issued by the company. Outstanding cheques are already recorded on the company's books but the bank does not know about them yet. Therefore, they must be deducted from the balance per bank in the reconciliation process.

      Note that an outstanding cheque from a prior period means that the cheque was deducted from the books in the prior period, but not paid by the bank. If the cheque was paid by the bank in the current month, both sides (book and bank) are now reconciled, the cheque is no longer outstanding, and no further reconciling item is required. If the cheque has still not been presented to the bank for payment, it will continue to be outstanding.

    - **Errors**. Note any errors made by the depositor that have been discovered in the previous steps. For example, if a paid cheque written by the company for $1,226 was mistakenly recorded by the company as $1,262, the error of $36 ($1,262 – $1,226) is added to the balance per books.

      Note that errors can be made by either party—the company or the bank—and can be in any direction (increases or decreases). Make sure that you only include errors made by the bank as reconciling items in determining the adjusted cash balance per bank. Errors made by the company should be included as reconciling items per books, as we will discuss in the next section.

2. **Reconciling Items per Books**. Reconciling items on the book side include adjustments from credit memoranda (amounts added) and debit memoranda (amounts deducted).

    - **Bank memoranda**. Any unrecorded debit or credit memoranda should be recorded in the book section of the reconciliation. For example, a $25 debit memorandum for bank service charges is deducted from the balance per books, and a $3 credit memorandum for interest earned is added to the balance per books.

    - **Errors**. Note any errors made by the bank that have been discovered in the previous steps. Note, as above, that errors can be made by either party—the company or the bank—and can be in any direction (increases or decreases). Make sure that you only include errors made by the company as reconciling items in determining the adjusted cash balance per books.

Bank Reconciliation Illustrated. The bank statement for Laird Ltd. was shown in Illustration 7-5. It shows a balance per the bank of $15,907.45 on April 30, 2006. On this date the cash balance per books is $11,234.14. From the foregoing steps, the following reconciling items are determined:

1. **Deposits in transit**: After comparing the deposits recorded in the books with the deposits listed in the bank statement, it was determined that the April 28 deposit of $2,201.40 was not recorded by the bank until May 1.	$2,201.40
2. **Outstanding cheques**: After comparing the cheques recorded in the books with the cheques listed in the bank statement, it was determined that three cheques were outstanding: No. 445, $3,000.00; No. 446, $1,401.30; and No. 448, $1,502.70.	5,904.00
3. **Error**: Cheque No. 443 was correctly written by Laird for $1,226.00 and was correctly paid by the bank. However, it was recorded as $1,262.00 on Laird's books.	36.00
4. **Bank memoranda**:	
(a) Credit—Electronic payment by customer on account	1,350.55
(b) Credit—Interest earned	39.76
(c) Debit—Returned or NSF cheque	425.60
(d) Debit—Bank service charge re NSF cheque	30.00

The bank reconciliation follows:

LAIRD LTD.
Bank Reconciliation
April 30, 2006

Cash balance per bank statement		$15,907.45
Add: Deposits in transit		2,201.40
		18,108.85
Less: Outstanding cheques		
No. 445	$3,000.00	
No. 446	1,401.30	
No. 448	1,502.70	5,904.00
Adjusted cash balance per bank		$12,204.85
Cash balance per books		$11,234.14
Add: Electronic payment by customer on account	$1,350.55	
Error in recording cheque No. 443	36.00	
Interest earned	39.76	1,426.31
		12,660.45
Less: Returned (NSF) cheque	$ 425.60	
Bank service charge	30.00	455.60
Adjusted cash balance per books		$12,204.85

Entries for Bank Reconciliation. Each reconciling item which arises from determining the adjusted cash balance per books should be recorded by the depositor. If these items are not journalized and posted, the Cash account will not show the correct balance. The adjusting entries for Laird Ltd.'s bank reconciliation on April 30 are as follows:

Electronic Payment on Account. A payment of an account by a customer is recorded in the same way, whether the cash is received through the mail or electronically. The entry is:

A	=	L	+	SE
+1,350.55 −1,350.55				

Cash flows: +1,350.55

Apr.	30	Cash Accounts Receivable (To record electronic collection of account)	1,350.55	 1,350.55

Book Error. An examination of the general journal shows that incorrectly recorded cheque No. 443 was a payment on account to a supplier. The correcting entry is:

A	=	L	+	SE
+36.00		+36.00		

Cash flows: +36.00

Apr.	30	Cash Accounts Payable (To correct error in recording cheque No. 443)	36.00	 36.00

Interest Earned. The entry to record the credit memorandum for the interest earned on the bank account for the month of April is:

A	=	L	+	SE
+39.76				+39.76

Cash flows: +39.76

Apr.	30	Cash Interest Revenue (To record interest earned)	39.76	 39.76

NSF Cheque. As indicated earlier, an NSF (RC) cheque becomes an account receivable to the depositor. The entry is:

A	=	L	+	SE
+425.60 −425.60				

Cash flows: −425.60

Apr.	30	Accounts Receivable Cash (To record returned cheque)	425.60	 425.60

Bank Service Charges. Bank service charges are normally debited to the expense account Bank Charges. Some companies use the account Interest Expense; others use Miscellaneous Expense if charges are nominal in amount. However, because the bank service charge in this instance relates to processing the NSF cheque, this charge will be passed on to the customer and added to its account balance. The entry is:

A	=	L	+	SE
+30.00 −30.00				

Cash flows: −30.00

Apr.	30	Accounts Receivable Cash (To record bank service charge for processing NSF cheque)	30.00	 30.00

All of the entries above could also be combined into one compound entry. Our presentation assumes that all adjustments are made at the end of the month. In practice, a company may also make journal entries during the month as it receives information from the bank regarding its account, or as the company checks its bank account balances on-line.

After the entries are posted, the Cash account will appear as in the T account which follows. The adjusted cash balance in the ledger should agree with the adjusted cash balance per books in the bank reconciliation shown on page 321.

Cash			
Apr. 30 Bal.	11,234.14	Apr. 30	425.60
30	1,350.55	30	30.00
30	36.00		
30	39.76		
Apr. 30 Bal.	12,204.85		

What entries does the bank make? **The bank cannot correct your errors on its books and you cannot correct the bank's errors on your books**. If any bank errors are discovered in preparing the reconciliation, the bank should be notified so it can make the necessary corrections on its records. The bank does not make any entries for deposits in transit or outstanding cheques. Only when these items reach the bank will it record them.

Before You Go On . . .

Review It

1. How does a bank reconciliation strengthen internal control?
2. How are deposits in transit and outstanding cheques treated in the reconciling process from the current period? From a prior period?

Do It

The Cash account of Zhizhi Corporation showed a balance of $16,333 on December 31. The bank statement as of that date showed a balance of $18,084. After comparing the bank statement with the company records, the following information was determined:

1. The bank returned an NSF cheque in the amount of $239 that Zhizhi had deposited on December 20. The cheque was a payment on a customer's account.
2. Electronic receipts received from customers on the last day of the month in payment of their accounts totalled $2,300. These receipts have not yet been recorded by the company.
3. The bank issued a credit memo for $9 for interest earned on Zhizhi's account.
4. The bank issued a debit memo for bank service charges of $37. Of this amount, $25 was for processing the NSF cheque (see No. 1 above) and $12 was for the rental of a safety deposit box.
5. The company made an error in recording a customer's deposit. The company recorded the payment on account as $209, when it should have been $290. The bank correctly recorded the deposit as $290.
6. Deposits in transit as at December 31 amounted to $3,643.
7. Outstanding cheques for the month of December amounted to $3,000. Cheques still outstanding from the month of November totalled $280.

Prepare a bank reconciliation and any required journal entries for Zhizhi at December 31.

Action Plan

- Prepare the bank reconciliation in two sections: one for the company and one for the bank.
- Determine which reconciling items each side knows about and adjust the other side accordingly.
- Be careful when you determine the direction of an error correction.
- Prepare journal entries only for the book side; not the bank side.

- The adjusted cash balances must agree with each other when complete, and with the general ledger account after the journal entries are posted.

Solution

ZHIZHI CORPORATION
Bank Reconciliation
December 31

Cash balance per bank statement		$18,084
Add: Deposits in transit		3,643
		21,727
Less: Outstanding cheques ($3,000 1 $280)		3,280
Adjusted cash balance per bank		$18,447
Cash balance per books		$16,333
Add: Electronic receipts from customers on account	$2,300	
Interest earned	9	
Deposit error correction ($290 2 $209)	81	2,390
		18,723
Less: NSF cheque	$239	
Bank service charges ($25 1 $12)	37	276
Adjusted cash balance per books		$18,447

Dec. 31	Cash	2,300	
	Accounts Receivable		2,300
	(To record electronic receipts on account)		
31	Cash	9	
	Interest Revenue		9
	(To record interest earned on bank account)		
31	Cash	81	
	Accounts Receivable ($290 2 $209)		81
	(To correct deposit error)		
31	Accounts Receivable ($239 1 $25)	264	
	Cash		264

	(To re-establish accounts receivable for NSF cheque)		
31	Bank Charges Expense	12	
	Cash		12
	(To record bank service charges)		

Check:

Cash

16,333	
2,300	264
9	12
81	
18,447	

Reporting Cash

study objective 4

Explain the reporting of cash.

Cash is reported in two different financial statements: the balance sheet and the cash flow statement. The balance sheet reports the amount of cash available at a specific point in time. The cash flow statement shows the sources and uses of cash during a period of time. The cash flow statement was introduced in Chapters 1 and 2 and will be discussed in detail in Chapter 13.

Because it is the most liquid asset owned by a company, cash is listed first in the current assets section of the balance sheet. Many companies combine cash with cash equivalents. You will recall from Chapter 1 that **cash equivalents** are short-term, highly liquid (easily sold) investments. These investments include short-term deposits, short-term investments such as treasury bills and money-market funds, and short-term notes that normally have maturities of three months or less when purchased. All are typically purchased with cash that is not currently needed. More than 75 percent of Canadian public companies combine cash and cash equivalents for reporting purposes. As shown in Appendix A at the end of this textbook, Loblaw combines its cash with cash equivalents on its balance sheet.

Some companies may be in a cash deficit or overdraft position at year end. Bank overdrafts occur when a cheque is written for more than the amount in the bank account. This, in effect, is a short-term loan from the bank. Most companies have overdraft protection up to a certain amount with their banks. In an overdraft situation, the cash account will show a credit balance in the general ledger and is reported as a current liability called bank indebtedness.

A company may have cash that is not available for general use because it is restricted for a special purpose. For example, landfill companies are often required to maintain a fund of restricted cash to ensure that they will have adequate resources to cover closing and cleanup costs at the end of a landfill site's useful life. Cash that has a restricted use should be reported separately on the balance sheet as **restricted cash**. If the restricted cash is expected to be used within the next year, the amount should be reported as a current asset. When this is not the case, the restricted funds should be reported as a noncurrent asset.

In making loans to depositors, banks commonly require borrowers to maintain minimum cash balances. These minimum balances, called **compensating balances**, provide the bank with support for the loans. They are a form of restriction on the use of cash. Similar to other restricted cash, compensating balances are reported as a noncurrent asset.

The following presentation in Illustration 7-7 by Help the Aged Canada, a not-for-profit corporation, shows the reporting of both cash and cash equivalents (called short-term investments by Help the Aged Canada) and restricted cash.

HELP THE AGED CANADA
Statement of Financial Position (partial)
March 31, 2004

Current assets	
Cash and short-term investments	$165,982
Accounts receivable	88,530
Prepaid expenses	21,641
	276,153
Restricted cash and short-term investments	140,445

Illustration 7-7 ▲

Presentation of cash

Decision Toolkit

Decision Checkpoints	Info Needed for Decision	Tools to Use for Decision	How to Evaluate Results
Is all of the company's cash available for general use?	Balance sheet and notes to financial statements	Does the company report any cash as being restricted?	A restriction on the use of cash limits management's ability to use those resources for general obligations. This might be considered when assessing liquidity.

Before You Go On . . .

Review It

1. Why is it that cash can sometimes be reported as a current asset, sometimes as a noncurrent asset, and sometimes as a current liability?
2. What was Loblaw's balance in cash and cash equivalents as at January 3, 2004? How did Loblaw define cash equivalents (see Note 1)? The answers to these questions are provided at the end of this chapter.

Show Answer

ANSWER

...between restricted cash and compensating balances.

Loblaw reported $618 million of cash and cash equivalents as at January 3, 2004. Loblaw's cash equivalents are defined in note 1 as "highly liquid investments with a maturity of 90 days or less."

Managing and Monitoring Cash

study objective 5

Identify ways to manage and monitor cash.

Corporate management must perform a difficult balancing act to properly manage cash. On one hand, it is critical to ensure that enough cash is available to pay bills as they come due, to buy goods, and to take advantage of opportunities as they present themselves. On the other hand, cash itself is an unproductive asset unless it is invested in other assets (e.g., investments, inventory, and property, plant, and equipment). Too much cash on hand may indicate that management is not maximizing its return on assets.

In the next sections, we will look at the basic principles of cash management and budgeting.

Basic Principles of Cash Management

Many companies struggle, not because they cannot generate sales, but because they cannot manage their cash. A real-life example of this is a clothing manufacturing company owned by Sharon McCollick. McCollick gave up a stable, high-paying marketing job with Intel Corporation to start her own company. Soon she had more clothing orders than she could fill. Yet she found herself on the brink of financial disaster, owing three mortgage payments on her house and $2,000 in income tax. Her company could generate sales, but it was not collecting cash fast enough to support its operations. The bottom line is that a business must have cash.

To understand cash management, consider the operating cycle of Sharon McCollick's clothing manufacturing company. First, it purchases cloth. Let's assume that it purchases the cloth on credit provided by the supplier, so the company owes its supplier money. Next, employees make the cloth into clothing. Now the company also owes its employees money. Then, it sells the clothing to retailers, on credit. McCollick's company will have no money to repay suppliers or employees until its customers pay. In a manufacturing operation, there may be a significant lag between the original purchase of raw materials and the ultimate receipt of cash from customers.

Managing the often precarious balance created by the ebb and flow of cash during the operating cycle is one of a company's greatest challenges. Any company can improve its chances of having adequate cash by following five basic principles of cash management:

1. **Increase the speed of collection on receivables**. Money owed to Sharon McCollick by her customers is money that she cannot use. The faster customers pay her, the faster she can use those funds. Thus, rather than have an average collection period of 30 days, she may want an average collection period of 20 days. However, any attempt to force her customers to pay earlier must be carefully weighed against the possibility that she may anger or alienate customers. Perhaps her competitors are willing to provide a 30-day grace period. As noted in Chapter 5, a common way to encourage customers to pay more quickly is to offer cash discounts for early payments under such terms as 2/10, n/30.

2. **Keep inventory levels low**. Maintaining a large inventory of cloth and finished clothing is costly. It ties up large amounts of cash, as well as warehouse space. Increasingly, companies are using techniques to reduce the inventory on hand, thus conserving their cash. Of course, if Sharon McCollick has inadequate inventory, she will lose sales. The proper level of inventory is an important decision.
3. **Delay payment of liabilities**. By keeping track of when her bills are due, Sharon McCollick's company can avoid paying bills too early. Let's say her supplier allows 30 days for payment. If she pays in 10 days, she has lost the use of cash for 20 days. Therefore, she should use the full payment period, but she should not “stretch” payment past the point that could damage her credit rating (and future borrowing ability).
4. **Plan the timing of major expenditures**. To maintain operations or to grow, all companies must make major expenditures which normally require some form of outside financing. In order to increase the likelihood of obtaining outside financing, McCollick should carefully consider the timing of major expenditures in light of her company's operating cycle. If at all possible, the expenditure should be made when the firm normally has excess cash—usually during the off-season.
5. **Invest idle cash**. Cash on hand earns nothing. Excess cash should be invested, even if it is only overnight. Many businesses, such as Sharon McCollick's clothing company, are seasonal. During her slow season, when she has excess cash, she should invest it. To avoid a cash crisis, however, it is very important that these investments be liquid and risk-free. A liquid investment is one with a market in which someone is always willing to buy or sell the investment. A risk-free investment means there is no concern that the party will default on its promise to pay its principal and interest.

For example, using excess cash to purchase shares in a small company because you heard that it was probably going to increase in value in the near term is inappropriate. First, the shares of small companies are often illiquid. Second, if the shares suddenly decrease in value, you might be forced to sell them at a loss in order to pay your bills as they come due. A common liquid, risk-free investment is treasury bills or money-market funds.

The five principles of cash management are summarized in Illustration 7-8 on the following page.

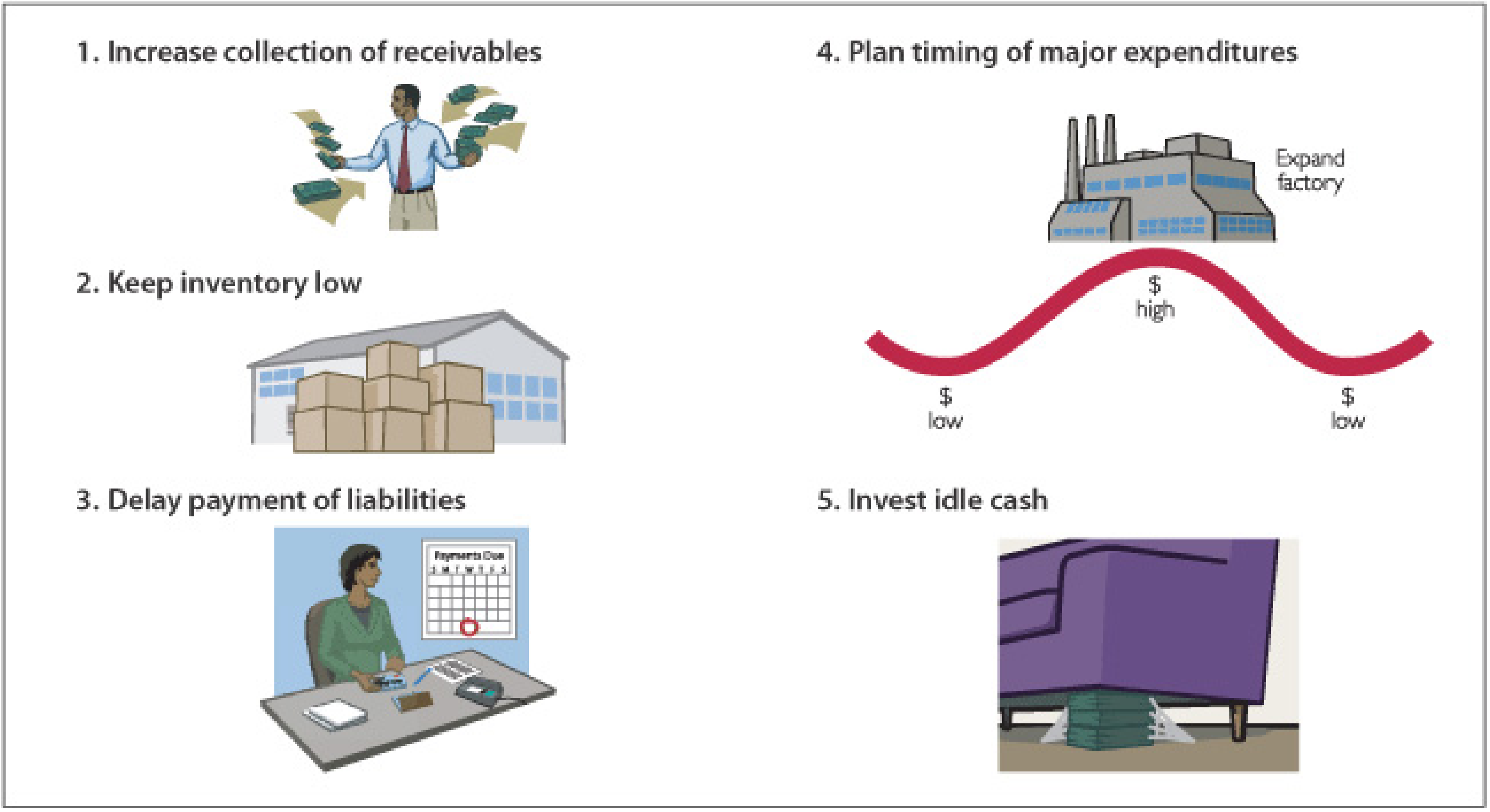


Illustration 7-8 ▲

Five principles of cash management

Cash Budgeting

Because cash is so vital to a company, planning the company's cash needs is a key business activity. It enables the company to plan ahead to cover possible cash shortfalls and to invest idle funds. The **cash budget** shows anticipated cash flows, usually over a one- to two-year period. In this section, we introduce the basics of cash budgeting. More advanced discussions of cash budgets and budgets in general are found in managerial accounting texts.

As shown below, the cash budget contains three sections—cash receipts, cash disbursements, and financing—and the beginning and ending cash balances.

ANY COMPANY LTD.
Cash Budget

Beginning cash balance	$x
Add: Cash receipts (itemized)	x
Total available cash	x
Less: Cash disbursements (itemized)	x
Excess (deficiency) of available cash over cash disbursements	x
Financing needed	x
Ending cash balance	$x

The **cash receipts section** includes expected receipts from the company's main sources of revenue, such as cash sales and collections from customers on credit sales. This section also shows anticipated receipts of interest and dividends, and proceeds from planned sales of investments, property, plant, and equipment, and the company's share capital.

The **cash disbursements section** shows expected payments for purchases of merchandise, and operating expenses. This section also includes projected payments for income taxes, dividends, investments, and property, plant, and equipment.

The **financing section** shows expected borrowings and the repayment of the borrowed funds plus interest. This is needed when there is a cash deficiency or when the cash balance is less than management's minimum required balance.

Data in the cash budget must be prepared in sequence because the ending cash balance of one period becomes the beginning cash balance for the next period. Data for preparing the cash budget are obtained from other budgets and from information provided by management. In practice, cash budgets are often prepared for the year, detailing cash receipts and disbursements by month or by quarter.

In the following example, we will assume that Hayes Ltd. prepares a quarterly cash budget. Preparing a cash budget requires making some assumptions about things like the collection of accounts receivable, sales of investments, payments for merchandise and salaries, and purchases of property, plant, and equipment. The accuracy of the cash budget depends on the accuracy of these assumptions.

The cash budget for Hayes Ltd. is shown in Illustration 7-9. The budget indicates that $33,000 of financing will be needed in the second quarter to maintain a minimum cash balance of $5,000. Since there is an excess of available cash over disbursements of $47,700 at the end of the third quarter, the borrowing is repaid in this quarter.

HAYES LTD.
Cash Budget
Year Ended December 31, 2006

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Beginning cash balance	$ 18,000	$ 5,500	$ 5,000	$ 14,700
Add: Receipts				
Collections from customers	168,000	198,000	263,200	258,000
Sale of investments	2,000	0	0	0
Total receipts	170,000	198,000	263,200	258,000
Total available cash	188,000	203,500	268,200	272,700
Less: Disbursements				
Purchases of merchandise	23,200	27,200	31,200	35,200
Salaries	62,000	72,000	82,000	92,000
Other operating expenses	94,300	99,300	104,300	109,300
Purchase of truck	0	30,000	0	0
Income tax expense	3,000	3,000	3,000	3,000
Total disbursements	182,500	231,500	220,500	239,500
Excess (deficiency) of available cash over disbursements	5,500	(28,000)	47,700	33,200
Financing				
Borrowings	0	33,000	0	0
Repayments	0	0	33,000	0
Ending cash balance	$ 5,500	$ 5,000	$ 14,700	$ 33,200

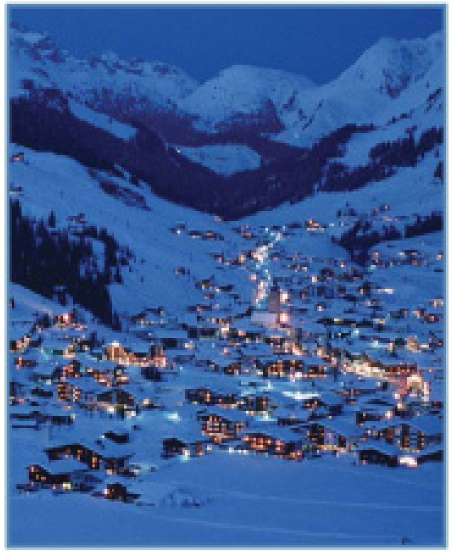
Illustration 7-9 ▲

Cash budget

A cash budget contributes to more effective cash management. For example, it can show when additional financing will be necessary well before the actual need arises. Conversely, it can indicate when excess cash will be available for the repayment of debts, for investments, or for other purposes. Consequently, creditors find a cash budget to be a critical tool for assessing a company's ability to repay its debts.

Accounting Matters! Investor Perspective

Over the last five years, Intrawest Corporation, North America's largest ski resort developer, appeared to be in good financial health, as it reported more than $900 million in earnings before interest, tax, and amortization. Yet, during the same period, the company has been cash flow negative, outspending its revenue by $604 million.



The company addressed the cash budget problem with a plan to offload the cost of future resort development to third-party financiers. Intrawest said this arrangement was expected to free up $250 million in cash in fiscal 2004 and reduce overall debt by $300 million. Investors responded positively to this plan and the company's share price climbed faster than a quad chairlift to trade at a P-E ratio of 25 times earnings.

Source: Mark Anderson, “Subject: Intrawest Corp., Case Study” *National Post Business Magazine*, January 1, 2004, 22.

Decision Toolkit

Decision Checkpoints	Info Needed for Decision	Tools to Use for Decision	How to Evaluate Results

Will the company be able to meet its projected cash needs?	Cash budget (typically available only to management)	The cash budget shows projected sources and uses of cash. If cash uses exceed internal cash sources, then the company must look for outside sources.	Two issues: (1) Are management's projections reasonable? (2) If outside sources are needed, are they available?

Before You Go On . . .

Review It

1. What are the five basic elements of cash management?
2. What are the three sections of the cash budget?

Do It

The management of Staudinger Ltd. wants to maintain a minimum monthly cash balance of $5,000. At the beginning of March, the cash balance is $13,500; expected cash receipts for March are $210,000; and cash disbursements are expected to be $220,000. How much cash, if any, must be borrowed to keep the desired minimum monthly balance?

Action Plan

- Insert the dollar data into the basic form of the cash budget.
- Recall that there are three sections in the cash budget: cash receipts, cash disbursements, and financing.

Solution

Beginning cash balance	$ 13,500
Add: Cash receipts	210,000
Total available cash	223,500
Less: Cash disbursements	220,000
Excess of available cash over cash disbursements	3,500
Financing	1,500
Ending cash balance	$5,000

To maintain the desired minimum cash balance of $5,000, Staudinger needs to borrow $1,500.

Using the Decision Toolkit

Sparks Basketball (SB) is a not-for-profit organization whose main purpose is to promote healthy living through sport. Its members are basketball associations throughout the province, and they benefit from a variety of services. These services include insurance coverage, the organization of provincial tournaments, and discounts from sponsor organizations. It is a volunteer organization with only one paid position—that of executive director. While the executive director was on parental leave, this position was filled by the vice-president of finance, John Stevens.

Unfortunately, some financial irregularities occurred while Mr. Stevens was acting as executive director. The board of directors learned about the irregularities at an unofficial board meeting. As the acting executive director, Mr. Stevens was responsible for paying invoices, making deposits, signing cheques, completing the bank reconciliation, and preparing financial statements for the annual general meeting.

One irregularity was that several cheques with the president's signature on them were actually forged. It was also discovered that Mr. Stevens handled all deposits and cash disbursements by himself for a national basketball tournament hosted by SB. He had promised to have an independent treasurer for the tournament but did not get one. He also coached a basketball team in a near by city, and had full access to the team's bank account. During this time, to save on bank fees, Mr. Stevens had also stopped having the bank return SB's cancelled cheques.

A forensic accountant was brought in to investigate further. He discovered many problems. The financial records were a mess, and there was almost no “paper trail” for the many expenditures that were made. There were instances of “double dipping”—where one individual was reimbursed several times for the same expense claim. There were also several cheques made out to the team coached by Mr. Stevens. There was even a cheque where the payee's name had been scratched out and Mrs. Stevens' name was inserted.

Instructions

(a) Identify the main weakness in internal control at Sparks Basketball.

(b) Discuss what steps should be taken to ensure that this situation does not happen again.

(c) Discuss the trade-off between implementing an extensive internal control system and the cost of having such a system for a volunteer organization that has limited funds.

Solution

(a) The main weakness in internal control at Sparks Basketball (SB) was the lack of segregation of duties. While the executive director was on parental leave, one person was responsible for all financial matters. There was also no review of Mr. Stevens' work, so he could make fraudulent transactions without anyone knowing about them.

(b) SB should require proper segregation of duties. Although it is often difficult to have proper segregation of duties in a not-for-profit organization such as this, at least two people should be involved in all financial transactions. SB should require monthly bank reconciliations to be prepared by someone other than the bookkeeper. The cancelled cheques should be returned each month so that they can be reviewed as well. In addition, independent verification could be done by having the board of directors review transactions and financial statements regularly.

(c) Implementation of extensive control systems is very expensive. Not-for-profit organizations must carefully choose what control measures are most important for their specific needs. However, the value of some internal controls, such as segregation of duties, often offsets the cost, as we saw in the situation above. In addition, the organization should use as many free controls as it can. Examples include proper screening of possible volunteers and employees, written policies for how transactions should be processed, and requiring employees and volunteers to sign a formal statement of ethical guidelines.

Summary of Study Objectives

1. ***Identify the principles of internal control.*** The principles of internal control are establishment of responsibility; segregation of duties; documentation procedures; physical controls; independent verification; and other controls.

2. ***Apply internal control to cash receipts and disbursements.*** Internal controls over cash receipts include (a) designating only personnel such as cashiers to handle cash; (b) assigning the duties of receiving cash, recording cash, and having custody of cash to different individuals; (c) obtaining remittance advices for mail receipts, cash register tapes for over-the-counter receipts, and deposit slips for bank deposits; (d) using company safes and bank vaults to store cash, with access limited to authorized personnel, and using cash registers in executing over-the-counter receipts; (e) depositing all cash intact daily in the bank account; (f) making independent daily counts of register receipts and daily comparisons of total receipts with total deposits; and (g) bonding personnel who handle cash and requiring them to take vacations.

   Internal controls over cash disbursements include (a) making all payments by cheque; (b) having only specified individuals authorized to sign cheques; (c) assigning to different individuals the duties of approving items for payment, paying the items, and recording the payments; (d) using prenumbered cheques and accounting for all cheques; (e) storing each cheque in a safe or vault with access restricted to authorized personnel, and using electronic methods to print amounts on cheques; (f) comparing each cheque with the approved invoice before issuing the cheque, and making monthly reconciliations of bank and book balances; and (g) after payment, stamping each approved invoice "Paid."

3. ***Prepare a bank reconciliation.*** In reconciling the bank account, it is customary to reconcile the balance per books and the balance per bank to their adjusted balances. Reconciling items may include deposits in transit, outstanding cheques, errors by the depositor or the bank, and unrecorded bank memoranda. Adjusting entries must be made for any errors by the depositor and unrecorded bank memoranda.

4. ***Explain the reporting of cash.*** Cash is listed first in the current assets section of the balance sheet. Cash is often reported together with cash equivalents. Cash restricted for a special purpose is reported separately as a current asset or as a noncurrent asset, depending on when the cash is expected to be used. Compensating balances are a form of restriction on the use of cash and are reported as a noncurrent asset.

5. ***Identify ways to manage and monitor cash.*** The five basic principles of cash management are to (a) increase collection of receivables, (b) keep inventory levels low, (c) delay payment of liabilities, (d) plan timing of major expenditures, and (e) invest idle cash. A cash budget also helps a company manage its cash.

Decision Toolkit—A Summary

Decision Checkpoints	Info Needed for Decision	Tools to Use for Decision	How to Evaluate Results
Are the company's financial statements supported by adequate internal controls?	Auditor's report, statement of management responsibility, management discussion and analysis, articles in the financial press	The required measures of internal control are to (1) establish responsibility, (2) segregate duties, (3) document procedures, (4) employ physical controls, and (5) use independent verification.	If there is any indication that these or other controls are lacking, the financial statements should be used with caution.
Is all of the company's cash available for general use?	Balance sheet and notes to financial statements	Does the company report any cash as being restricted?	A restriction on the use of cash limits management's ability to use those resources for general obligations. This might be considered when assessing liquidity.

Will the company be able to meet its projected cash needs?	Cash budget (typically available only to management)	The cash budget shows projected sources and uses of cash. If cash uses exceed internal cash sources, then the company must look for outside sources.	Two issues: (1) Are management's projections reasonable? (2) If outside sources are needed, are they available?

Demonstration Problem

Trillo Corporation reports the following condensed information from its general ledger Cash account and bank statement at June 30, 2006:

Cash

June 1 Bal.	18,290		
June deposits	17,000	Cheques written	20,510
June 30 Bal.	14,780		

TRILLO CORPORATION
Bank Statement
June 30, 2006

	Cheques and Other Debits	Deposits and Other Credits	Balance
Balance, June 1			17,690
Deposits		15,248	32,938
Cheques cleared	18,100		14,838
EFT insurance payment	500		14,338
NSF cheque ($150 + $25)	175		14,163
Service charge	12		14,151
Interest earned		35	14,186

Additional information:

1. There was a deposit in transit of $600 at May 30, the preceding month, that cleared the bank in June. There were no outstanding cheques at the end of May.
2. The EFT payment for insurance is a pre-authorized monthly payment.
3. The NSF cheque was for $150, from Massif Corp., a customer, in payment of its account. The bank added a $25 processing fee.

Instructions

(a) Prepare a bank reconciliation at June 30.

(b) Journalize the entries required by the reconciliation.

Action Plan

- Compare the deposits on the bank statement with the deposits recorded in the books to determine the deposits in transit.
- Compare the cheques that cleared the bank statement with the cheques recorded in the books to determine the outstanding cheques.
- Identify any items recorded on one side that are unrecorded on the other and adjust accordingly.
- All the journal entries should be based on the reconciling items per books.
- Make sure the Cash ledger account balance, after posting the reconciling items, agrees with the adjusted cash balance per books.

Solution to Demonstration Problem

(a)

TRILLO CORPORATION
Bank Reconciliation
June 30, 2006

Cash balance per bank statement		$14,186
Add: Deposits in transit [$17,000 − ($15,248 − $600)]		2,352
		16,538
Less: Outstanding cheques ($20,510 − $18,100)		2,410
Adjusted cash balance per bank		$14,128
Cash balance per books		$14,780
Add: Interest earned		35
		14,815
Less: EFT insurance payment	$500	
NSF cheque ($150 + $25)	175	
Bank service charge	12	687
Adjusted cash balance per books		$14,128

	Date	Account	Debit	Credit
(b)	June 30	Cash	35	
		Interest Revenue		35
		(To record bank interest earned)		
	30	Insurance Expense	500	
		Cash		500
		(To record monthly insurance payment)		
	30	Accounts Receivable	175	
		Cash		175
		(To re-establish accounts receivable for Massif Corp. for NSF cheque and related service charge)		
	30	Bank Charges Expense	12	
		Cash		12
		(To record bank service charges)		

Check:

Cash

June 30 Bal.	14,780	June 30	500
	35		175
			12
June 30 Bal.	14,128		