

The Double-Entry Accounting System

INTRODUCTION

To prepare financial statements, a company must have a system that captures the vast numbers of business transactions in which it engages each year. The most widely used system, **double-entry accounting**, is so effective it has been in use for hundreds of years! This Appendix explains the rules for recording transactions using double-entry accounting.

DEBIT/CREDIT TERMINOLOGY

An account form known as a **T-account** is a good starting point for learning double-entry recording procedures. A T-account looks like the letter "T" drawn on a piece of paper. The account title is written across the top of the horizontal bar of the T. The left side of the vertical bar is the **debit** side, and the right side is the **credit** side. An account has been *debited* when an amount is written on the left side and *credited* when an amount is written on the right side. For any given account, the difference between the total debit and credit amounts is the **account balance**.

The rules for using debits and credits to record transactions in T-accounts are as follows.

			Claims				
Ass	ets	=	Liabi	lities	+	Equ	uity
Debit	Credit		Debit	Credit		Debit	Credit
+	_		-	+		_	+
	1			1			ı

Notice that a debit can represent an increase or a decrease. Likewise, a credit can represent an increase or a decrease. Whether a debit or credit is an increase or a decrease depends on the type of account (asset, liability, or stockholders' equity) in question. The rules of debits and credits are summarized as follows.

- 1. Debits increase asset accounts; credits decrease asset accounts.
- 2. Debits decrease liability and stockholders' equity accounts; credits increase liability and stockholders' equity accounts.

We now demonstrate the use of debits and credits in the double-entry accounting system.

The General Journal

Businesses find it impractical to record every individual transaction directly into accounts. Imagine the number of cash transactions a grocery store has each day. To simplify recordkeeping, businesses rely on **source documents** such as cash register tapes as the basis for entering transaction data into the accounting system. Other source documents include invoices, time cards, check stubs, and deposit tickets.

Accountants further simplify recordkeeping by initially recording data from source documents into **journals**. Journals provide a chronological record of business transactions. *Transactions are recorded in journals before they are entered into ledger accounts.* Journals are therefore **books of original entry.** Companies may use different **special journals** to record specific types of recurring transactions. For example, a company may use one special journal to record sales on account, another to record purchases on account, a third to record cash receipts, and a fourth to record cash payments. Transactions that do not fall into any of these categories are recorded in the **general journal**. Although special journals can be useful, companies can keep records without them by recording all transactions in the general journal. For simplicity, this appendix illustrates a general journal only.

At a minimum, the general journal shows the dates, the account titles, and the amounts of each transaction. The date is recorded in the first column, followed by the title of the account to be debited. The title of the account to be credited is indented and written on the line directly below the account to be debited. The dollar amount of the transaction is recorded in the Debit and Credit columns. For example, providing services for \$1,000 cash on August 1 would be recorded in general journal format as follows:

Date	Account Title	Debit	Credit
Aug. 1	Cash	1,000	
	Service Revenue		1,000

THE GENERAL LEDGER

The collection of all the accounts used by a particular business is called the **general ledger**. In a manual system, the ledger could be a book with pages for each account where entries are recorded by hand. In more sophisticated systems, the general ledger is maintained in electronic form. Data is entered into electronic ledgers using computer keyboards or scanners. Companies typically assign each ledger account a name and a number. A list of all ledger accounts and their account numbers is called the **chart of accounts**. As previously stated, accounting data are first recorded in journals. The data are then transferred to the ledger accounts through a process called **posting**. The posting process for the August 1, \$1,000 revenue transaction is shown below.



ILLUSTRATION OF RECORDING PROCEDURES

We use the following transactions data to illustrate the process of recording transactions into a general journal and then posting them into a general ledger. The transactions data

EXHIBIT A.1

Event No.	Account Title	Debit	Credit
1	Cash	28,000	
	Common Stock		28,000
2	Supplies	1,100	
	Accounts Payable		1,100
3	Prepaid Rent	12,000	
	Cash		12,000
4	Accounts Receivable	23,000	
	Consulting Revenue		23,000
5	General Operating Expenses	16,000	
	Accounts Payable		16,000
6	Cash	20,000	
	Accounts Receivable		20,000
7	Accounts Payable	13,000	
	Cash		13,000
8	Dividends	1,000	
	Cash		1,000
9	Rent Expense	900	
	Supplies		900
10	Rent Expense	3,000	
	Prepaid Rent		3,000
11	Salaries Expense	1,200	
	Salaries Payable		1,200

applies to the Mestro Financial Services Company. The journal entries are shown in Exhibit A.1. The general ledger after posting is shown in Exhibit A.2.

- 1. Acquired \$28,000 cash by issuing common stock on January 1, 2009.
- **2.** Purchased \$1,100 of supplies on account.
- 3. Paid \$12,000 cash in advance for a one-year lease on office space.
- **4.** Earned \$23,000 of consulting revenue on account.
- **5.** Incurred \$16,000 of general operating expenses on account.
- **6.** Collected \$20,000 cash from receivables.
- 7. Paid \$13,000 cash on accounts payable.
- 8. Paid a \$1,000 cash dividend to stockholders.

Information for Adjusting Entries

- 9. There was \$200 of supplies on hand at the end of the accounting period.
- 10. The one-year lease on the office space was effective beginning on October 1, 2009.
- 11. There was \$1,200 of accrued salaries at the end of 2009.

EXF	IIBIT A	1.2									
		MES	STRO I	INA	NCIAL			CON	/IPANY		
					T-Accou	nts, 20	09				
	Ass	ets	:	=	Liabi	lities	-	+	Equ	uity	
Cash				Accounts	Payab	le		Common Stock			
1. 6.	28,000 20,000	3. 7.	12,000 13,000	7.	13,000	2. 5.	1,100 16,000			1. Bal.	28,000
	20,000	8.	1,000	_		Bal.	4,100			Dai.	20,000
Bal.	22,000								Divid	lends	
Δ	Accounts I	Receiva	able		Salaries			8.	1,000		
4.	23,000	6.	20,000			11. Bal.	1,200		Compultin	, Dave	
Bal.	3,000	0.	20,000			Dai.	1,200		Consulting	- 	
										4.	23,000
	Supp	olies						Ge	neral Opera	ting Ex	penses
2.	1,100	9.	900					5.	16,000		
Bal.	200									_	
	Prepai	d Rent							Salaries	Expens	se
3.	12,000	10.	3,000					11.	1,200		
Bal.	9,000								Supplies	Expen	se
								9.	900		
									Rent E	xpense	
								10.	3,000		

Trial Balance

To test accuracy, accountants regularly prepare an internal accounting schedule called a **trial balance**. A trial balance lists every ledger account and its balance. Debit balances are listed in one column and credit balances are listed in an adjacent column. The columns are totaled and the totals are compared. Exhibit A.3 displays the trial balance for Mestro Financial Services Company after the adjusting entries have been posted to the ledger.

If the debit total does not equal the credit total, the accountant knows to search for an error. Even if the totals are equal, however, there may be errors in the accounting records. For example, equal trial balance totals would not disclose errors like the following: failure to record transactions; misclassifications, such as debiting the wrong account; or incorrectly recording the amount of a transaction, such as recording a \$200 transaction as \$2,000. Equal debits and credits in a trial balance provide evidence rather than proof of accuracy.

Financial Statements

Supplemented with details from the Cash and Common Stock ledger accounts, the trial balance (Exhibit A.3) provides the information to prepare the financial statements shown in Exhibit A.4.

EXHIBIT A.3

	SERVICES CO Balance er 31, 2009	MPANY
Account Titles	Debit	Credit
Cash	\$22,000	
Accounts receivable	3,000	
Supplies	200	
Prepaid rent	9,000	
Accounts payable		\$ 4,100
Salaries payable		1,200
Common stock		28,000
Dividends	1,000	
Consulting revenue		23,000
General operating expenses	16,000	
Salaries expense	1,200	
Supplies expense	900	
Rent expense	3,000	
Totals	<u>\$56,300</u>	<u>\$56,300</u>

EXHIBIT A.4

MESTRO FINANCIAL SERVICES COMPANY

Financial Statements
For 2009

Income Statement

For the Year Ended December 31, 2009

Consulting revenue		\$23,000
Expenses		
General operating expenses	\$16,000	
Salaries expense	1,200	
Supplies expense	900	
Rent expense	3,000	
Total expenses		(21,100)
Net income		\$ 1,900

Statement of Changes in Stockholders' Equity For the Year Ended December 31, 2009

Beginning common stock Plus: Common stock issued	\$ 0 _28,000	
Ending common stock		\$28,000
Beginning retained earnings	0	
Plus: Net income	1,900	
Less: Dividends	(1,000)	
Ending retained earnings		900
Total stockholders' equity		\$28,900
		continued

Balance As of Decemb					
Assets Cash	¢22.000				
Accounts receivable	\$22,000 3,000				
Supplies	200				
Prepaid rent	9,000				
Total assets		<u>\$34,200</u>			
Liabilities Accounts payable	\$ 4,100				
Salaries payable	1,200				
Total liabilities		\$ 5,300			
Stockholders' equity Common stock	28,000				
Retained earnings	900				
Total stockholders' equity		28,900			
Total liabilities and stockholders' equity		\$34,200			
Statement of (For the Year Ended D					
Cash flows from operating activities					
Inflow from customers	\$20,000				
Outflow for expenses Net cash flow for operating activities	(25,000)	\$ (5,000)			
Cash flows from investing activities		\$ (5,000) 0			
Cash flows from financing activities					
Inflow from issue of common stock Outflow for dividends	28,000				
Net cash flow from financing activities	_(1,000)	27,000			
Net change in cash		22,000			
Plus: Beginning cash balance		0			
Ending cash balance		\$22,000			

KEY TERMS

Account balance 661	Double-entry	Posting 662
Books of original entry 662	accounting 661	Source documents 661
Chart of accounts 662	General journal 662	Special journals 662
Credit 661	General ledger 662	T-account 661
Debit 661	Journals 662	Trial balance 664

EXERCISES

Appendix 1-1 Debit/credit terminology

Required

For each of the following independent events, identify the account that would be debited and the account that would be credited. The accounts for the first event are identified as an example.

Event	Account Debited	Account Credited
а	Cash	Common Stock

- a. Received cash by issuing common stock.
- b. Received cash for services to be performed in the future.
- c. Provided services on account.
- **d.** Paid accounts payable.
- e. Paid cash in advance for one year's rent.
- f. Paid cash for operating expenses.
- g. Paid salaries payable.
- h. Purchased supplies on account.
- i. Paid cash dividends to the stockholders.
- **i.** Recognized revenue for services completed; previously collected the cash in Event b.
- k. Received cash in payment of accounts receivable.
- I. Paid salaries expense.
- **m.** Recognized expense for prepaid rent that had been used up by the end of the accounting period.

Appendix 1-2 Recording transactions in general journal and T-accounts

The following events apply to Pearson Service Co. for 2009, its first year of operation.

- 1. Received cash of \$50,000 from the issue of common stock.
- 2. Performed \$90,000 worth of services on account.
- 3. Paid \$64.000 cash for salaries expense.
- 4. Purchased supplies for \$12,000 on account.
- 5. Collected \$78,000 of accounts receivable.
- **6.** Paid \$8.500 of the accounts payable.
- 7. Paid a \$5,000 dividend to the stockholders.
- **8.** Had \$1,500 of supplies on hand at the end of the period.

Required

- a. Record these events in general journal form.
- b. Post the entries to T-accounts and determine the ending balance in each account.
- c. Determine the amount of total assets at the end of 2009.
- d. Determine the amount of net income for 2009.

Appendix 1-3 Recording events in the general journal, posting to T-accounts, and preparing a trial balance

The following events apply to Complete Business Service in 2010, its first year of operations.

- 1. Received \$30,000 cash from the issue of common stock.
- 2. Earned \$25,000 of service revenue on account.
- 3. Incurred \$10,000 of operating expenses on account.
- 4. Received \$20,000 cash for performing services.
- 5. Paid \$8,000 cash to purchase land.
- 6. Collected \$22,000 of cash from accounts receivable.
- 7. Received a \$6,000 cash advance for services to be provided in the future.
- **8.** Purchased \$900 of supplies on account.
- **9.** Made a \$7,500 payment on accounts payable.
- 10. Paid a \$5,000 cash dividend to the stockholders.
- **11.** Recognized \$500 of supplies expense.
- 12. Recognized \$5,000 of revenue for services provided to the customer in Event 7.

Required

- a. Record the events in the general journal.
- **b.** Post the events to T-accounts and determine the ending account balances.
- c. Test the equality of the debit and credit balances of the T-accounts by preparing a trial balance.

Appendix 1-4 One complete accounting cycle

The following events apply to Paradise Vacations' first year of operations.

- 1. Acquired \$20,000 cash from the issue of common stock on January 1, 2009.
- 2. Purchased \$800 of supplies on account.
- 3. Paid \$4,200 cash in advance for a one-year lease on office space.
- 4. Earned \$28,000 of revenue on account.
- **5.** Incurred \$12,500 of other operating expenses on account.
- 6. Collected \$24,000 cash from accounts receivable.
- 7. Paid \$9,000 cash on accounts payable.
- 8. Paid a \$3,000 cash dividend to the stockholders.

Information for Adjusting Entries

- 9. There was \$150 of supplies on hand at the end of the accounting period.
- 10. The lease on the office space covered a one-year period beginning November 1.
- 11. There was \$3,600 of accrued salaries at the end of the period.

Required

- a. Record these transactions in general journal form.
- **b.** Post the transaction data from the journal to ledger T-accounts.
- c. Prepare a trial balance.
- d. Prepare an income statement, statement of changes in stockholders' equity, a balance sheet, and a statement of cash flows.