

In Chapter 2, you learned how to calculate the financial position of a company and to present it using a balance sheet. You found that assets, liabilities, and equity were constantly changing. In this chapter, you will begin a process to track these changes.

3.1 ► Business Transactions

On any given day, many events occur that cause the financial position of a business to change. Each of these events is called a **business transaction** which may be defined as a financial event that causes a change in financial position.

For example, suppose the business buys a truck for which it pays \$20 000 cash. This event is a transaction because it causes the financial position of the business to change. There would be an increase in assets of \$20 000 in the item Trucks. There would also be a decrease of \$20 000 in the asset Cash.

Suppose that the business owes \$7000 to City Finance and makes a payment of \$1000 against the debt. This event is also a transaction that causes the financial position to change. The amount in liabilities owed to City Finance would be reduced by \$1000. In assets, the cash on hand would be reduced by \$1000.

On the other hand, suppose that the city plumbing inspector inspects the building and leaves a letter suggesting some improvements. This is not a business transaction because no assets or liabilities have changed as a result of the activity.

Source Documents

When an asset, liability, or equity item is recorded for accounting purposes, a business paper or document is required to verify the dollar amount. The business paper is called a **source document**. It is the original record of the transaction—which is why it is called the source—and it provides accounting personnel with the information they need to process the transaction properly.

Examples of source documents include hydro bills, telephone bills, cheque copies, store receipts, cash register summaries, and credit card slips. They provide proof of payment, proof of purchase, and reference. Depending on the size of the business, source documents may move from person to person and from department to department. They are eventually filed because owners, managers, auditors, and others may want to ask questions. In Chapter 6, a full discussion is devoted to source documents, with illustrations. For now, remember

1. accounting entries are made from business papers known as source documents
2. source documents are kept on file for reference purposes and are proof of transactions

Accounting Standards—The Objectivity Principle

Objectivity is a long-standing accounting principle related to source documents. The **objectivity principle** requires that a business's accounting be recorded on the basis of clear, verifiable evidence. This principle means that different people looking at the evidence will arrive at the same values for the transaction. Simply put, this means that transactions will be recorded on fact, not on personal opinion or feelings.

Objectivity Principle: accounting data should be verifiable.

All accounting transactions must be supported by business papers called source documents.

Source Documents: business forms (papers) that give evidence of business transactions on a certain date.

The source document for a transaction is almost always the best objective evidence available. For example, the best objective evidence for the purchase of a new desk used in the business is the bill received from the retailer. The source document shows the amount agreed to by the buyer and the seller, who are usually independent of each other.

Homework

Section 3.1

Review Questions #1-7

Exercises 1-5

SECTION 3.1 REVIEW QUESTIONS (page 59)

1. A business transaction is a financial event that causes a change in financial position.
2. Answers will vary. An example of a transaction could be a new office desk that is purchased and paid for in cash.
3. Answers will vary. An example of an event that is not a transaction could be the owner examining some new computer equipment that is demonstrated by a salesperson.
4. A source document is the original record of a transaction that provides the accounting department with the information it needs related to the transaction.
5. Examples of source documents include hydro bills, telephone bills, cheque copies, store receipts, cash register tapes, and credit card slips.
6. After the accounting entries have been completed, the source documents are filed for future reference.
7. The objectivity principle states that accounting will be recorded on the basis of objective evidence. This means that transactions will be recorded based on facts not on personal opinions or feelings. For example, the best objective evidence for the cost of cellphone use is the bill from the cellphone company.

SECTION 3.1 EXERCISES (page 59)**Exercise 1, p. 59**

- | | |
|-----------------------------|-----------------------------|
| A. <u>transaction</u> | E. <u>transaction</u> |
| B. <u>transaction</u> | F. <u>not a transaction</u> |
| C. <u>not a transaction</u> | G. <u>transaction</u> |
| D. <u>transaction</u> | H. <u>not a transaction</u> |

Exercise 2, p. 59

- | | |
|-----------------------------|-----------------------------|
| A. <u>transaction</u> | E. <u>not a transaction</u> |
| B. <u>not a transaction</u> | F. <u>transaction</u> |
| C. <u>not a transaction</u> | G. <u>transaction</u> |
| D. <u>transaction</u> | H. <u>not a transaction</u> |

Exercise 3, p. 60

- A. Campbell & Associates issued the bill.
- B. Smokey Valley Ski Club received the bill.
- C. The bill was issued July 22, 20-.
- D. Campbell and Associates issued the bill because they audited the records of Smokey Valley Ski Club and also prepared financial statements for them.
- E. Yes, the bill represents good objective evidence because it originates from a source independent of the business.

Exercise 4, p. 60

- A. *The Davey Company issued the bill.* _____
- B. *Smokey Valley Ski Club received the bill.* _____
- C. *The bill was issued December 5, 20-.* _____
- D. *The goods were delivered December 5, 20-. They were delivered by CPX.* _____
- E. *The bill is due for payment 30 days from December 5, 20-, which would be the following January 4.* _____
- F. *The bill was issued as evidence of the transaction to be used in the accounting records of both the purchaser and the vendor.* _____
- G. *No, this was not a cash sale transaction. It is a sale on credit.* _____
- H. *The bill represents good objective evidence because it comes from an independent source.* _____

Exercise 5, p. 61

- A. *The memorandum is not good objective evidence because it does not come from an independent source.* _____
- B. *The best objective evidence for this transaction would be the bill from the supplier.* _____

Equation Analysis Sheet

3.2

Your next step in the study of accounting is to learn how various business transactions affect and change the financial position. To begin, look at Figure 3.1, the simplified balance sheet of Metropolitan Movers of Windsor, Ontario.

METROPOLITAN MOVERS BALANCE SHEET SEPTEMBER 29, 20–			
<i>Assets</i>		<i>Liabilities</i>	
Cash	\$13 500	Accounts Payable	
Accounts Receivable		– Central Supply	\$ 1 750
– B. Cava	1 300	Bank Loan	18 370
– K. Lincoln	2 500	Total Liabilities	\$20 120
Equipment	11 500	<i>Owner's Equity</i>	
Trucks	24 500	J. Hofner, Capital	33 180
Total Assets	<u>\$53 300</u>	Total Liabilities and Equity	<u>\$53 300</u>

Figure 3.1
The balance sheet of Metropolitan Movers

The balance sheet of Metropolitan Movers shows the values of the assets, liabilities, and equity at the end of the business day on September 29th. As business transactions occur on September 30th, there will be changes in the values of assets, liabilities, and equity. The balance sheet is not a suitable type of record on which to record these changes. Therefore, let us arrange the balance sheet items in a different manner. We will transfer the assets, liabilities, and capital from the balance sheet onto what we will call an equation analysis sheet. An **equation analysis sheet** is a tool for displaying individual transactions and the new financial position resulting from each transaction. At this stage of your accounting studies, the equation analysis sheet is ideal for analyzing and recording changes in financial position. In Chapter 4, you will modify your recording methods.

Figure 3.2 shows the balance sheet items for Metropolitan Movers entered on an equation analysis sheet. Note that this arrangement is in the form of the fundamental accounting equation.

	ASSETS					=	LIABILITIES		+	OWNER'S EQUITY
METROPOLITAN MOVERS	Cash	A/R B. Cava	A/R K. Lincoln	Equipment	Trucks		A/P Central Supply	Bank Loan		J. Hofner, Capital
Sep 29 Balances	13 500	1 300	2 500	11 500	24 500		1 750	18 370		33 180

Figure 3.2
Equation analysis sheet for Metropolitan Movers

Updating the Equation Analysis Sheet

Accounts Receivable and Accounts Payable may be abbreviated A/R and A/P for now. You will learn the standard format for listing these terms in Chapter 8.

Let us now examine how transactions affect financial position.

TRANSACTION 1: Metropolitan Movers pays \$1200 cash to reduce the Bank Loan.

After this payment is made, the financial position shown in Figure 3.2 will no longer be correct. Two changes are necessary: Cash must be reduced by \$1200 and the amount owed to the bank must also be reduced by \$1200. These changes are recorded on the equation analysis sheet shown in Figure 3.3 below.

ASSETS						=	LIABILITIES		+	OWNER'S EQUITY
METROPOLITAN MOVERS	Cash	A/R B. Cava	A/R K. Lincoln	Equipment	Trucks		A/P Central Supply	Bank Loan		J. Hofner, Capital
Sep 29 Balances	13 500	1 300	2 500	11 500	24 500		1 750	18 370		33 180
Trans. 1	-1200							-1200		
Balance	12300	1300	2500	11500	24500		1750	17170		33180
	<u>52100</u>						<u>52100</u>			

- ① Cash ↓ 1200 , Bank Loan ↓ 1200
- ② All other accounts remained the same
- *③ The accounting equation is in balance.

TRANSACTION 2: K. Lincoln, who owes Metropolitan Movers \$2500, pays \$1100 in partial payment of the debt.

Can you figure out the changes to be made on the equation analysis sheet? Try to do this mentally before looking at Figure 3.4 below.

	ASSETS					=	LIABILITIES	+	OWNER'S EQUITY
METROPOLITAN MOVERS	Cash	A/R B. Cava	A/R K. Lincoln	Equipment	Trucks		A/P Central Supply	Bank Loan	J. Hofner, Capital
Sep 29 Balances	13 500	1 300	2 500	11 500	24 500		1 750	18 370	33 180
Transaction 1	-1 200							-1 200	
New Balances	12 300	1 300	2 500	11 500	24 500		1 750	17 170	33 180
Trans 2	+1100		-1100						
Balance	13400	1300	1400	11500	24500		1750	17170	33180
	52100						52100		

TRANSACTION 3: Equipment costing \$1950 is purchased for cash.

Again, try to make the changes mentally before looking at the entries recorded in Figure 3.5 below.

	ASSETS					=	LIABILITIES	+	OWNER'S EQUITY
METROPOLITAN MOVERS	Cash	A/R B. Cava	A/R K. Lincoln	Equipment	Trucks		A/P Central Supply	Bank Loan	J. Hofner, Capital
Sep 29 Balances	13 500	1 300	2 500	11 500	24 500		1 750	18 370	33 180
Transaction 1	-1 200							-1 200	
New Balances	12 300	1 300	2 500	11 500	24 500		1 750	17 170	33 180
Transaction 2	1 100		-1 100						
New Balances	13 400	1 300	1 400	11 500	24 500		1 750	17 170	33 180
Trans 3	-1950			+1950					
Balance	11450	1300	1400	13450	24500		1750	17170	33180
	52100						52100		

TRANSACTION 4: A pick-up truck is purchased at a cost of \$18 000. Metropolitan Movers pays \$10 000 cash and arranges a loan from its bank to cover the balance of the purchase price.

(Note: This is considered to be a single transaction. The bank will pay \$8000 directly to the truck dealer, who will be paid in full.) Again, try to work out the changes mentally before looking at the equation analysis sheet in Figure 3.6.

	ASSETS					=	LIABILITIES	+	OWNER'S EQUITY
METROPOLITAN MOVERS	Cash	A/R B. Cava	A/R K. Lincoln	Equipment	Trucks		A/P Central Supply	Bank Loan	J. Hofner, Capital
Sep 29 Balances	13 500	1 300	2 500	11 500	24 500		1 750	18 370	33 180
Transaction 1	-1 200							-1 200	
New Balances	12 300	1 300	2 500	11 500	24 500		1 750	17 170	33 180
Transaction 2	1 100		-1 100						
New Balances	13 400	1 300	1 400	11 500	24 500		1 750	17 170	33 180
Transaction 3	-1 950			1 950					
New Balances	11 450	1 300	1 400	13 450	24 500		1 750	17 170	33 180
Trans 4	-10000				+18000			+8000	
Balances	1450	1300	1400	13450	42500		1750	25170	33180
	60160						60100		

TRANSACTION 5: Metropolitan Movers completes a storage service for B. Cava at a price of \$1500. A bill is sent to Cava to indicate the additional amount that is owed.

Work out the changes necessary and compare them with the equation analysis sheet in Figure 3.7 (on the next page).

METROPOLITAN MOVERS	ASSETS					=	LIABILITIES		+	OWNER'S EQUITY
	Cash	A/R B. Cava	A/R K. Lincoln	Equipment	Trucks	A/P Central Supply	Bank Loan		J. Hofner, Capital	
Sep 29 Balances	13 500	1 300	2 500	11 500	24 500	1 750	18 370		33 180	
Transaction 1	-1 200						-1 200			
New Balances	12 300	1 300	2 500	11 500	24 500	1 750	17 170		33 180	
Transaction 2	1 100		-1 100							
New Balances	13 400	1 300	1 400	11 500	24 500	1 750	17 170		33 180	
Transaction 3	-1 950			1 950						
New Balances	11 450	1 300	1 400	13 450	24 500	1 750	17 170		33 180	
Transaction 4	-10 000				18 000		8 000			
New Balances	1 450	1 300	1 400	13 450	42 500	1 750	25 170		33 180	
Trans 5		+1500							+1500	
Balance	1450	1800	1400	13450	42500	1750	25170		34680	

Understanding changes like the ones in Transaction 5 is vital to becoming a good accountant. Transaction 5 may be analyzed as follows:

1. B. Cava owes \$1500 more to Metropolitan Movers. Therefore the figure for Accounts Receivable—B. Cava is increased by \$1500.
2. No other asset or liability is affected.
3. J. Hofner’s capital is increased by \$1500, as explained below.

There are two ways to explain this increase in capital. First, be aware that Metropolitan Movers is in the business of providing a service to earn profit. When the service to B. Cava has been completed, the \$1500 is legally owed and a gain has been made. Metropolitan Movers has earned this money. This gain is recorded by increasing the capital of the owner, J. Hofner. **Revenue**

Second, in Section 2.3 you learned that equity is a residual claim. In other words, the owner gets to claim the “leftovers.” Mathematically, the Total Assets figure has increased by \$1500. Since there are no additional liabilities, the owner claims this extra \$1500, keeping the accounting equation in balance.

* Revenues represent an increase to owner's equity

TRANSACTION 6: J. Hofner, the owner, withdraws \$500 for personal use.

Work out the necessary changes and then check your work against the equation analysis sheet in Figure 3.8 below.

	ASSETS					=	LIABILITIES		+	OWNER'S EQUITY
METROPOLITAN MOVERS	Cash	A/R B. Cava	A/R K. Lincoln	Equipment	Trucks		A/P Central Supply	Bank Loan		J. Hofner, Capital
Sep 29 Balances	13 500	1 300	2 500	11 500	24 500		1 750	18 370		33 180
Transaction 1	-1 200							-1 200		
New Balances	12 300	1 300	2 500	11 500	24 500		1 750	17 170		33 180
Transaction 2	1 100		-1 100							
New Balances	13 400	1 300	1 400	11 500	24 500		1 750	17 170		33 180
Transaction 3	-1 950			1 950						
New Balances	11 450	1 300	1 400	13 450	24 500		1 750	17 170		33 180
Transaction 4	-10 000				18 000			8 000		
New Balances	1 450	1 300	1 400	13 450	42 500		1 750	25 170		33 180
Transaction 5		1 500								1 500
New Balances	1 450	2 800	1 400	13 450	42 500		1 750	25 170		34 680
Trans 6	-500									-500
Balance	950	2800	1400	13450	42500		1750	25170		34180

In analyzing Transaction 6, observe that

1. Cash is decreased by \$500, the amount withdrawn.
2. No other asset or liability is affected.
3. Capital is decreased by \$500. Assets have been withdrawn from the business. There is less to claim. Obviously, the creditors' claims are unaffected by the drop in assets. The owner must assume a smaller claim, leaving the accounting equation in balance.

Drawings represent a decrease in Owner's equity

TRANSACTION 7: One of the trucks requires an engine adjustment costing \$375. The repair is paid for in cash when the truck is picked up.

Work out the necessary changes and then check your work against the equation analysis sheet in Figure 3.9 below.

METROPOLITAN MOVERS	ASSETS					=	LIABILITIES		+	OWNER'S EQUITY
	Cash	A/R B. Cava	A/R K. Lincoln	Equipment	Trucks	A/P Central Supply	Bank Loan		J. Hofner, Capital	
Sep 29 Balances	13 500	1 300	2 500	11 500	24 500	1 750	18 370		33 180	
Transaction 1	-1 200						-1 200			
New Balances	12 300	1 300	2 500	11 500	24 500	1 750	17 170		33 180	
Transaction 2	1 100		-1 100							
New Balances	13 400	1 300	1 400	11 500	24 500	1 750	17 170		33 180	
Transaction 3	-1 950			1 950						
New Balances	11 450	1 300	1 400	13 450	24 500	1 750	17 170		33 180	
Transaction 4	-10 000				18 000		8 000			
New Balances	1 450	1 300	1 400	13 450	42 500	1 750	25 170		33 180	
Transaction 5		1 500							1 500	
New Balances	1 450	2 800	1 400	13 450	42 500	1 750	25 170		34 680	
Transaction 6	-500								-500	
New Balances	950	2 800	1 400	13 450	42 500	1 750	25 170		34 180	

In analyzing Transaction 7, observe that

1. Cash is decreased by \$375, the amount paid for the repair.
2. No other asset or liability is affected. The value of the truck on the equation analysis sheet is not increased because the engine received a tune-up.
3. Capital is decreased by \$375. Cash paid has decreased the amount of Total Assets. Since there is a smaller amount of assets to claim, and the creditors' claims are unaffected, the owner's claim must decrease in response to the reduction of assets.
4. After the changes are recorded, the accounting equation is still in balance.

Updating the Balance Sheet

The figures for an updated balance sheet for Metropolitan Movers are taken from the last line of the equation analysis sheet. Figure 3.10 below shows the new balance sheet.

METROPOLITAN MOVERS BALANCE SHEET SEPTEMBER 30, 20–			
<i>Assets</i>		<i>Liabilities</i>	
Cash	\$ 575	Accounts Payable	
Accounts Receivable		– Central Supply	\$ 1 750
– B. Cava	2 800	Bank Loan	<u>25 170</u>
– K. Lincoln	1 400	Total Liabilities	\$26 920
Equipment	13 450	<i>Owner's Equity</i>	
Trucks	42 500	J. Hofner, Capital	<u>33 805</u>
Total Assets	<u>\$60 725</u>	Total Liabilities and Equity	<u>\$60 725</u>

Summary of Steps in Analyzing a Transaction

The following steps will help you to analyze any transaction:

Step 1 *Identify all asset and liability items that must be changed and make all necessary changes.*

When thinking about the transaction, try to be logical and use common sense.

- Carefully analyze the information given for any transaction.
- Classify each item affected as an asset or a liability.
- Decide whether each item affected is to be increased or decreased.

Step 2 *See if the owner's equity has changed.*

Remember the accounting equation. For example, if assets decrease and there is a corresponding liability decrease, the owner's equity will not change. However, if assets decrease and liabilities are unchanged, the equation must be balanced by a decrease in owner's equity. Eventually, you will come to recognize whether or not owner's equity has changed. Generally, if a business is better off after a transaction, owner's equity has increased. If a business is worse off after a transaction, owner's equity has decreased.

Step 3 *Make certain that at least two of the individual items have changed.*

It is possible for several items—assets, liabilities, or owner's equity—to change, but there can never be only one change.

Step 4 *Make sure that the equation is still in balance.*

The fundamental accounting equation must be respected: assets must equal liabilities plus owner's equity.

Homework