FINANCE AT A GLANCE

Insights into accounting entries (2)

Lesson 43

In this lesson, we will see that even for transactions that affect both side of the balance sheet-income statement relationship equation, this equation remains valid.
Once again, we shall use the following definitions.

1. An increase in an Asset	is called a	*debit*
2. A decrease in an Asset	is called a	*credit*
3. An Expense or a Dividend	is called a	*debit*
4. A reversal of an Expense or a Dividend	is called a	*credit*

5. An increase in a Liability or Equity	is called a	*credit*
6. A decrease in a Liability or Equity	is called a	*debit*
7. A Revenue	is called a	*credit*
8. A reversal of a Revenue	is called a	*debit*

Recall the Transactions 3, 4 and 5 of Lesson 41 and their accounting entries. We shall situate the accounting entries in the equation.
We will be using these symbols in our discussion:

Dr_L - a debit entry on the left side of the equation
Cr_L - a credit entry on the left side of the equation
Dr_R - a debit entry on the right side of the equation
Cr_R - a credit entry on the right side of the equation

The subscripts “L” and “R” are not actually used in accounting. However, we need to prove a point later in the lesson, and that requires the use of these subscripts.

Transaction 3: The company buys merchandise for its Inventories worth $50,000. Half of that is paid with Cash. The rest is on credit.

Dr	Inventories		50,000	
Cr		Cash		25,000
Cr		Accounts payables		25,000

The Dr Inventories and Cr Cash entries both fall under Box 1, and are both on the left side of the equation, hence, the subscript L. The Cr Accounts payable entry falls under Box 3 and is on the right side of the equation, hence, the subscript R.

1. Changes in Assets	+	2. Expenses and Dividends	=	3. Changes in Liabilities	+	4. Changes in Equity (other than Retained Earnings)	+	5. Revenues
Dr_L *Inventories* (an increase) 25,000	+	0	=	Cr_R *Accounts payable* (a decrease) 25,000	+	0	+	0
Cr_L *Cash* (an decrease) -50,000								
NET 25,000	=			25,000				

Observe that in this transaction, the equality is upheld, because both sides have a net of 25,000.

Transaction 4: The owners of the Company invest an additional $200,000. Of this amount $80,000 is used to buy office equipment and $50,000 is used to pay off some of the Long-term debt.

Cr	Capital stock	200,000
Dr	Net fixed assets	80,000
Dr	Long-term debt	50,000
Dr	Cash	70,000

The Cr Capital stock entry falls under Box 4 on the right side of the equation. The Dr Net fixed assets entry in under Box 1 as well as the Dr Cash entry, and they are on the left side. The Dr Long-term debt entry is under Box 3 on the right side.

1. Changes in Assets	+	2. Expenses and Dividends	=	3. Changes in Liabilities	+	4. Changes in Equity (other than Retained Earnings)	+	5. Revenues
Dr$_L$ *Net fixed assets* (an increase) 80,000 **Dr**$_L$ *Cash* (an increase) 70,000	+	0	=	**Dr**$_R$ *Long-term debt* (a decrease) -50,000	+	**Cr**$_R$ *Capital stock* (an increase) 200,000	+	0
NET 150,000			=			150,000		

Observe that in this transaction, the equality is upheld, because both sides have a net of 150,000.

Transaction 5: The Company sells $30,000 worth of merchandise for $40,000. The buyer will pay after 60 days from the invoice date.

	Cr	Sales		40,000
Dr		Account receivables	40,000	
	Cr	Inventories		30,000
Dr		Cost of goods sold	30,000	

The Cr Sales entry is under Box 5 on the right side. The Dr Accounts receivables entry is under Box 1 on the left. The Cr Inventories entry is under Box 1 on the left. The Dr Cost of goods sold is under Box 2 on the left.

1. Changes in Assets	+	2. Expenses and Dividends	=	3. Changes in Liabilities	+	4. Changes in Equity (other than Retained Earnings)	+	5. Revenues
Dr$_L$ *Accounts receivables* (an increase) 40,000 **Cr**$_L$ *Inventories* (a decrease) -30,000	+	**Dr**$_L$ *Cost of goods sold* 30,000	=	0	+	0	+	**Cr**$_R$ *Sales* 40,000
NET 40,000	=			40,000				

Observe that in this transaction, the equality is upheld, because both sides have a net of 40,000.

At this point, we can see clearly that even in transactions that involve multiple debit and credit entries on both sides of the equation, the balance sheet-income statement relationship equation remains valid.

Now, there is another point we need to make. In all of the five transactions that we situated in the equation, notice that:

all left-side debits, DR_L are positive in value;
all left-side credits, CR_L are negative in value;
all right-side credits, CR_R are positive in value; and
all right-side debits, DR_L are negative in value,

and that they sum up to have equal net values for the left side and the right side of the equation.

Symbolically, we can put these as follows:

(1) $\mathbf{DR_L - CR_L = CR_R - DR_R}$

From basic algebra, we know that an equation such as

(2) $\mathbf{w - x = y - z}$

can be rewritten as:

(2) $\mathbf{w + z = y + x}$

Applying the logic of (2) and (3) to (1), we get

(4) $\mathbf{DR_L + DR_R = CR_R + CR_L}$

Equation (4) shows the other point we want to make: In any transaction, the total of the debits equals the total of the credits.