

5.3: Tracking the changes in assets.

Learning Objectives

At the end of this section, students will be able to identify changes in assets come from the following types of transactions:

- Exchange of assets
- Incurring a liability
- Direct investment from stockholders
- Earning by providing goods or services

Question: What business events change assets and how are these reflected in the expanded accounting equation?

ASSETS =	LIABILITIES +	STOCKHOLDERS EQUITY
----------	------------------	------------------------

Given that the above accounting equation must stay in balance or stay equal, we can reason that if an company is going to add to its assets and thus grow its ability to make revenues – there are a limited number of ways or business events that can make that happen. Those are:

- The business exchanges one asset for another (then total assets do not change and the equation stays in balance).
- The business can obtain control of the asset by incurring a liability (borrowing money)
- The business can get assets directly from the stockholders (this was illustrated in the last section)
- The business can earn assets by providing goods or services

Together, we will look at a couple of examples of each of the these that we have not yet considered. First exchanges of assets for other assets. Let's say the Lincoln Company used cash of \$2,500 to purchase an insurance policy that will cover the company for the next year. They also use \$8,000 in cash to purchase a machine for use in their business.

ASSETS		=	LIABILITIES +		STOCKHOLDERS EQUITY
CURRENT			LONG-TERM		
CASH	PREPAID INSURANCE		MACHINERY		
Decrease 2,500	Increase 2,500				
Decrease 8,000			Increase 8,000		

See the changes and how the total assets did not change for either transaction or business event. For the insurance transaction, we note that while one current asset went down another went up thus leaving current assets unchanged in total. The prepaid insurance is a current asset because the benefit to the business for the insurance will last only one year. For the second transaction, it also reduced cash (a current asset) and increased a long-term asset by the same amount. So for the second current assets are reduced and long term assets are increased while total assets still do not change. We can also start to see the value of recording each business event like this along with all other business events. Because both events affected cash, we see using the column for the cash account we can track the cumulative amount of cash spent to see what our new balance would be after the business transactions. So if cash was 20,000 prior to these events, then we could know its new balance after the transactions by subtracting the total decreases from the 20,000.

ASSETS			=	LIABILITIES +		STOCKHOLDERS EQUITY
CURRENT		LONG-TERM		CURRENT	LONG – TERM	
CASH	INVENTORY	BUILDING		ACCOUNTS PAYABLE	NOTES PAYABLE	

	Increase 3,000		Increase 3,000		
		Increase \$80,000		Increase \$80,000	

We will use the equation above to consider the following two examples. The Lincoln company purchased inventory but instead of paying cash they purchased it on credit for \$3,000 (that means that whoever Lincoln purchased it from was willing to sell the inventory now in return for Lincoln paying for it later). Lincoln also purchased a building for \$80,000 and instead of paying cash for it, signed a note (a legal document) promising to pay back the current owner of the building over the next 20 years with interest.

Note in the equation above that the increases took place on the left side of the equal sign as well as on the right side – thus keeping the equation in balance. Inventory is a current asset because we intend to sell it in the next year while the building is long-term because the benefit will extend well beyond the next year. Accounts payable is the term we generally use for purchases on credit because buying on credit means we have an account with our supplier and we are going to pay them for the inventory in the future. That obligation to pay is due most likely in the next couple of months so it is a current liability. The loan or note we borrowed to buy the building will be paid back over several years and thus it is a long-term liability. Notice that we do not record interest at the beginning of the loan rather we will record it in future periods as time goes by.

Our first four examples showed changes to assets that did not in any way affect stockholders equity and certainly did not affect retained earnings. Our last examples will illustrate this type of business transaction. Say for instance that Lincoln Company provided services to a customer in exchange for the customer paying Lincoln \$1,500 in cash. For another customer, Lincoln also provided services which while completed now, the customer and Lincoln agree that the customer will pay \$1,200 to Lincoln 60 days from now.

ASSETS =		LIABILITIES	+ STOCKHOLDERS EQUITY		
CURRENT			CAPITAL STOCK	RETAINED EARNINGS	
CASH	ACCOUNTS RECEIVABLE			REVENUES	-EXPENSES DIVIDENDS
Increase 1,500				Increase 1,500	
	Increase 1,200			Increase 1,200	

So for the first transaction above, there was an increase to current assets (and total assets) along with an increase in revenues that increased stockholders equity. The second transaction did the same because the revenue has been earned even if the cash has not been received. When a customer owes us money in return for providing them with goods or services, that is referred to as accounts receivable and since we hope to collect well before 1 year that future benefit is a current asset. Again we see that we can use the columns to summarize the transactions and show that we have earned a total of \$2,700 during this accounting period.

But what about more complicated transactions, could there be combinations of the above transactions?

So we will use the following examples to illustrate how these types of transactions are combined but can still be recorded and summarized in the accounting equation.

Lincoln purchased machinery that cost \$8,000 by paying \$2,000 as a down payment and financed the remaining \$6,000 with a note with interest due in 5 years.

Lincoln sold inventory items that originally cost \$500 (Lincoln paid 500 for them) for \$900 to a customer who paid in cash.

ASSETS =		LIABILITIES	+ EQUITY	STOCKHOLDERS
----------	--	-------------	----------	--------------

CURRENT		LONG TERM	LONG-TERM	CAPITAL STOCK	RETAINED EARNINGS		
CASH	INVENTORY	MACHINERY	NOTE PAYABLE		REVENUES	-EXPENSES	- DIVIDENDS
Decrease 2,000		Increase 8,000	Increase 6,000				
Increase 900	Decrease 500				Increase 900	Increase 500	

When we record the purchase of machinery we both decrease another asset (exchange) and incur a liability (borrow money) but the increase in total assets (\$6,000) is the same as the increase in liabilities. The equation is still in balance because the change was the same on both sides of the equal sign. But we also communicate that we have less cash or current assets. For the sale of inventory, we increase cash for the amount received in exchange or the sales price. This also increases revenues on the right side of the equation by the same amount since that is what has been earned. Because we sold the customer some of the items we had as part of inventory, the current asset inventory goes down by the cost. These items sold (since the benefit is now in the past and no longer in the future) become an expense rather than an asset. We increase expenses but because they are subtracted to get net income that increase in expenses reduces stockholders equity. The result is an increase of 400 in current assets and an increase in stockholders equity of 400 in retained earnings because of this transaction.

Key Takeaways

Business transactions can affect several different accounts on different sides of the accounting equation. The key is that the change on the left or assets side of the equation must equal the change on the right or liability/equity side of the equation.

Check yourself

Uwe Company purchased supplies (current asset) on credit for \$700 in the current month. Which of the following is a result of this transaction?

- a. Current assets decrease \$700
 - b. Stockholders Equity increases \$700
 - c. Current liabilities increase \$700
 - d. Long-term liabilities decrease \$700
- C. is the answer – both current assets and current liabilities will increase by \$700 keeping the equation in balance – there is no effect on stockholders equity.

Uwe Company purchased a machine to be used in their business for \$9,000 by paying cash. Which of the following is a result of this transaction?

- a. Current assets decrease \$9,000
- b. Total assets do not change
- c. Stockholders equity increases by \$9,000
- d. A and B

D is the correct answer. Because this is an exchange of assets (cash for machinery) current assets goes down and long term assets go up but total assets and thus stockholders equity does not change.