Balance Sheets

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WHAT'S COVERED

In this lesson, you will learn how to use a balance sheet as a financial management tool to track changes in assets, liabilities, and net worth. This can help you be more productive as you use your problem solving skills to plan for your future. Specifically, this lesson will cover:

1. Determining Your Net Worth
    - 1a. Assets
    - 1b. Liabilities
    - 1c. Net Worth
2. Financial Ratios: Guideposts Along Your Financial Journey
    - 2a. Current Ratio
    - 2b. Debt Ratio

1. Determining Your Net Worth

A **balance sheet** helps you organize what you own – **assets** – and what you owe – **liabilities**. Your assets less your liabilities equals your **net worth**:

FORMULA TO KNOW

$$\text{Assets} - \text{Liabilities} = \text{Net Worth}$$

TERMS TO KNOW

Balance Sheet
A document to organize what you own and what you owe.

Asset
Something of value you own.

Liability
Debts and other legal obligations that are owed to others.

Net Worth

Assets minus liabilities.

1a. Assets

As shown in the following table, you should list everything you own on the left side of the balance sheet.

HINT

You will likely need to add new categories for assets not listed. In this respect, a balance sheet is flexible. As you are starting out on your financial journey, that may be a relatively short list.

Later in your life, the list may grow to be very long. Grouping assets into categories, as shown in the table, provides a more efficient summary of your assets.

SKILLS 10

Technology: Skill Tip

Spreadsheets, like Excel, are the most common tool for creating and keeping balance sheets.

Monetary Assets	Market Value
Checking account(s)	
Savings account(s)	
Money market account(s)	
Certificates of deposit(s) (short-term)	
Other	
Total	
Investment Assets	**Market Value**
Mutual funds	
Exchange-traded funds	
Brokerage account(s)	
Stocks	
Bonds	
Rental real estate	
Cash value of insurance	
Certificates of deposit(s) (long-term)	

Total	
Retirement	**Market Value**
Employer plans	
IRA(s) / Roth IRA(s)	
Other	
Total	
Miscellaneous	**Market Value**
College savings accounts	
Hobby assets	
Other	
Total	
Total Assets	
Short-Term Liabilities	**Amount**
Personal loans	
Visa®	
MasterCard®	
Other credit card(s)	
Utilities	
Other	
Total	
Long-Term Liabilities	**Amount**
Mortgage	
Second mortgage	
Vehicle loan 1	
Vehicle loan 2	
Boat loan	
Student loan(s)	
Consumer loan(s)	
Installment loan(s)	
Other	

Total	
Total Liabilities	
Net Worth	**Amount**
Total assets	
Total liabilities	
Total Net Worth	

You may have noticed that the balance sheet is set up so that assets that you can sell quickly are at the top and the least sellable items are at the bottom.

10 SKILLS

Productivity: Skill Reflect

Can you think about why it would be wise to arrange your balance sheet as described above? What is it about this arrangement that could help you be more productive?

Once you have listed everything you own, you must place a value on the assets. You almost always want to show the **fair market value** of the things you own. The fair market value is the price someone would realistically pay you to buy the asset. It is not the price you paid for something or the price you would pay someone else.

- Some assets, like houses, will increase in fair market value over time. These are known as **appreciating assets**.
- Other assets, such as cars and computers, will fall in value over time. These are known as **depreciating assets**.

HINT

To be as productive as possible, you should strive to have most of your wealth tied up in appreciating rather than depreciating assets. You probably recognize that many of the “fun” things you buy are depreciating assets, so a balance needs to be achieved based on your preferences.

EXAMPLE Let’s look at Tommy’s balance sheet. Tommy just graduated from college and is preparing his balance sheet. He has been working for about six months and recently purchased a used car using a loan from the bank. He has started saving in his employer’s retirement plan. Along with his other personal belongings, the assets section of Tommy’s balance sheet is shown in the table below.

Monetary Assets	Market Value
Checking account(s)	$272

Savings account(s)	$1,321
Total	$1,593
Household Assets	**Market Value**
Tommy's car	$8,500
Furniture	$1,200
Electronics	$1,500
Other personal belongings	$500
Total	$11,700
Retirement	**Market Value**
Employer plans	$934
Total	$934
Total Assets ($1,593 + $11,700 + $934)	**$14,227**

TERMS TO KNOW

Fair Market Value
The price someone would realistically pay to buy an asset.

Appreciating Asset
An asset that will increase in fair market value over time.

Depreciating Asset
An asset that decreases in value over time.

1b. Liabilities

Now let's jump to the other side of the balance sheet. Here is where you list all your liabilities – the debts that you owe to others – such as credit card debt that has not been paid and any loans on items such as cars, jet skis, houses, and student loans. Determining how much you owe is easy.

- Find a recent account statement, such as a credit card bill, and enter the balance due (principal amount owed) on the balance sheet.
- For some loans, you may need to call the lender to get the amount. Be sure to put the total amount of the debt, not the payment you make each month.
- Liabilities are generally listed based on when the debt should be paid off. **Short-term liabilities**, such as utility bills, credit cards, and short-term installment loans, are due within a year. **Long-term liabilities** have a longer repayment schedule and would include student loans and money borrowed to purchase a house (i.e., a mortgage).

EXAMPLE Let's look at the liabilities section of Tommy's balance sheet. We know that he recently purchased a used car using a car loan. Tommy also has some credit card debt that he generally pays off monthly, but at the current moment he does have a balance on his credit card. He also has some student loans. Tommy pays his bills on time, and his utility bills and rent are due at the start of next month. The following table shows the liabilities section of Tommy's balance sheet.

Short-Term Liabilities	Amount
Visa® bank credit card	$622
Utilities	$480
Rent	$950
Total	$2,052
Long-term Liabilities	**Market Value**
Car loan	$8,245
Student loan	$7,129
Total	$15,374
Total Liabilities ($2,052+ $15,374)	**$17,426**

TERMS TO KNOW

Short-term Liability
Debts that should be repaid within one year.

Long-term Liability
Debts that are intentionally structured to be paid off over time periods that are greater than one year.

1c. Net Worth

Once you have values for all assets and liabilities, you can calculate your net worth using the formula:

Assets – Liabilities = **Net Worth**

Using this formula, changes in your assets or liabilities will also result in changes to your net worth.

BIG IDEA

This formula must always balance! For example, say that you buy a car for $14,000. You paid $4,000 as a down payment and borrowed the rest. You list this purchase on the balance sheet as follows:

- List $14,000 for the car as an asset.
- List $10,000 for the car loan as a liability.
- To keep the net worth equation in balance, the difference between the asset and liability ($4,000) shows up as your **equity** in the net worth section.

Although establishing financial goals is one of the first steps in your financial journey, knowing your net worth today is an important financial data point that marks the real beginning of your lifetime financial journey.

Do you have any financial problems you're trying to solve like Tommy? Maybe it's setting aside money to pay your taxes. Perhaps you're budgeting for a new car. Before you can use your problem solving skills to make a plan, be sure you understand your current financial picture.

So how is Tommy doing regarding his net worth? The table below shows his net worth based on his assets and liabilities. As you can see, Tommy has a negative net worth of $3,199 (see Hint). Negative net worth is not uncommon, especially for recent college graduates just starting their careers. It is important to remember that Tommy's largest and most important asset, his human capital, is not listed on the balance sheet. If his human capital was listed as an asset, his assets would far exceed his liabilities (this is why a bank was willing to give Tommy a car loan).

HINT

A negative net worth does not mean bankruptcy. It just means that someone owes more than she or he owns.

Net Worth	Amount
Assets	$14,227
Less: Liabilities	$17,426
Net Worth	**$(3,199)**

As you may have already guessed, your net worth estimate gives you a basic picture of how much money you would have if you sold all of your assets and paid off all your debts. This is the same as calculating what you are worth financially. The higher your net worth estimate, the better.

TERM TO KNOW

Equity

The value of the asset less any debt associated with that asset

2. Financial Ratios: Guideposts Along Your Financial Journey

Let's say that you have your net worth figure in hand. You are also committed to avoiding bad debt and paying off your liabilities as quickly as you can. If this is the case, then you are starting your financial journey wisely and in the most productive way. What you need now are guideposts that you can use to determine if you are on track to meeting your financial goals. Fortunately, you can use a **financial ratio**, which is a formula that tells you how well you are progressing financially, as a guideline.

TERM TO KNOW

Financial Ratio

A formula that tells you how well you are progressing financially by comparing your current situation to a preestablished benchmark.

2a. Current Ratio

Nearly every financial planner would argue that you should strive to be financially secure enough that you could pay off all your current (short-term) debts with your monetary assets.

HINT

Monetary assets can be easily converted into a specified amount of cash. Long-term investments and accounts subject to penalty for early withdrawal are not monetary assets.

- This means that you should be able to take your cash and money in the bank and pay off your credit card debts and other liabilities that are due within a year.
- In an ideal world, you will also have money left over.
- At a minimum, you should have at least $1 in liquid savings (bank or checking account assets) for every $1 of short-term debt.

The **current ratio** is the proportion of current assets to current liabilities. This ratio tells you if you are managing your short-term financial situation prudently.

TERM TO KNOW

Current Ratio

The proportion of current assets to current liabilities.

2b. Debt Ratio

The **debt ratio** is a broader measure of your financial health. This ratio shows your proportion of total liabilities (debts) to total assets. You should strive to limit debt to no more than 40% of the value of your assets (see Hint). For example, if you have $100 in assets, you should have $40 or less in total liabilities.

HINT

It may take a while for you to achieve these benchmarks, but by striving to meet or do better than these guidelines, your financial journey will become easier over time.

This table summarizes these two important ratios based on information from a balance sheet.

Financial Ratio	Formula	Standard Benchmark
Current Ratio	Monetary Assets/Current Liabilities	Ratio > 1.0 or 100%
Debt Ratio	Total Liabilities/Total Assets	Ratio < 0.40 or 40%

TRY IT

Tiago and Louise, both age 37, have been married for 9 years. Over the past few years, they have focused their efforts on saving more money, investing wisely, and paying off debt. Their current financial situation is as follows:

Asset	Value	Liability	Amount
Checking account	\$2,400	Credit cards	\$4,000
Savings account	\$9,000	Mortgage	\$224,000
Brokerage account	\$34,000	Car loans	\$30,000
Home	\$285,000	Student loans	\$18,000
Cars	\$32,000		
Household Items	\$20,000		
Retirement plans	\$123,000		
Other Assets	\$89,000		

Use this information to answer the following questions.

What is their net worth? +

Net Worth $= \$318{,}400\ (\$594{,}400 - \$276{,}000)$

What is their current ratio? +

Current Ratio $= 2.85\ [(\$2{,}400 + \$9{,}000) / \$4{,}000]$

What is their debt ratio? +

Debt Ratio $= 46.43\%\ (\$276{,}000 / \$594{,}400)$

Given your analysis of their financial situation, how are Tiago and Louise doing financially? +

Given their current age, Tiago and Louise appear to be doing quite well financially. Their net worth is positive and high. Additionally, their current ratio exceeds the recommended benchmark. However, their debt ratio is higher than the benchmark, and it may benefit them financially to reduce some of their debt.

TERM TO KNOW

Debt Ratio

A ratio that shows your proportion of total debts to total assets.

SUMMARY

A balance sheet is a tool for **determining your net worth**. Strong technology skills can allow you to use common tools, like Excel, for this important task. It includes **assets**, or items of value, and **liabilities**, or money owed. The difference between your assets and liabilities is your **net worth** which gives an indication of your financial health.

A related indicator of financial health is a **financial ratio**. Ratios represent useful **guideposts along your financial journey**. Two types were covered in this tutorial: the **current ratio** is a measure of your short-term financial situation while the **debt ratio** is a broader, long-term measure. This data can help you be as productive as possible as you look to solve financial problems and plan for the future.

TERMS TO KNOW

Appreciating Asset
An asset that will increase in fair market value over time.

Asset
Something of value you own.

Balance Sheet
A document to organize what you own and what you owe.

Current Ratio
The proportion of current assets to current liabilities.

Debt Ratio
A ratio that shows your proportion of total debts to total assets.

Depreciating Asset
An asset that decreases in value over time.

Equity
The value of the asset less any debt associated with that asset.

Fair Market Value
The price someone would realistically pay to buy an asset.

Financial Ratio

A formula that tells you how well you are progressing financially by comparing your current situation to a preestablished benchmark.

Liability

Debts and other legal obligations that are owed to others.

Long-Term Liability

Debts that are intentionally structured to be paid off over time periods that are greater than one year.

Net Worth

Assets minus liabilities.

Short-Term Liability

Debts that should be repaid within one year.