## Accumulating More Than You Spend

## by Sophia

## : $\equiv$ WHAT'S COVERED

In this lesson, you will learn how to create wealth through increasing income, limiting expenses, and investing in your human capital. This can help you both solve and prevent potential problems. It may take some agility, but it can be done. Specifically, this lesson will cover:

1. Creating Wealth

1a. Using an Income Surplus to Create Wealth
1b. The Dangers of an Income Deficit
2. Saving Your Income Surplus

2a. Targeted Savings Ratio
2b. Targeted Savings Rate
3. Escaping the Perils of Debt

## 1. Creating Wealth

To accumulate wealth, you need to generate a surplus. As the formula in the table shows, a surplus is simply the money left over after all your expenses have been paid-that is, income $(\$ 47,000)$ less living expenses $(\$ 42,000)$. Your goal should be to always generate an income surplus. This is the primary way for you to build wealth over your lifetime, as you can invest your surplus to make even more money.

| Sustainable Living |  |
| :---: | :---: |
| Income | $\$ 47,000$ |
| - Living Expenses | $-\$ 42,000$ |
| - Surplus (available for saving \& investing) | $=\$ 5,000$ |

## - TERM TO KNOW

## Surplus

The money left over after all expenses have been paid.

## 1a. Using an Income Surplus to Create Wealth

Let's take a look at how a surplus generates wealth accumulation.

## IN CONTEXT

Suppose you earned $\$ 47,000$ last year. After calculating all your fixed and variable expenses for the year-using a budget-you estimate that you spent $\$ 42,000$ (including taxes and savings into an emergency fund and retirement plan). This means that you have an income surplus of $\$ 5,000$.

## $\backsim \quad$ HINT

Although the size of the surplus certainly matters, the most important thing is that you have extra money that can be saved and invested.
The flow chart below shows how you can take your surplus, invest it, and earn interest. As the interest adds up and as you add future surpluses, your wealth will grow even larger. This is how wealth not only accumulates but actually also accelerates over time. (We will discuss your targeted savings ratio in the next section, which can help you determine how much of an income surplus you should have and what to do with it.)


The results associated with coupling the power of time and savings can be powerful. Take a look at the following line chart.

- If you save $\$ 5,000$ at the start of each year from age 25 to age 65 (that is, for 40 years) at a return of $8 \%$ annually, you will accumulate $\$ 1,398,905$.
- Now look at the red line to see what happens if you wait until age 30 to start saving $\$ 5,000$ per year at a return of $8 \%$ annually. You'll only accumulate $\$ 930,511$, which is $\$ 468,394$ less than if you began saving at age 25.


## BIG IDEA

The takeaway is this: Strive to generate a surplus, begin saving the surplus as early as possible, and keep your money working for you as long as possible.


## $\frac{\text { SKILLs }}{\text { Kin }}$ <br> Agility: Skill Reflection

Can you think of ways you may be able to generate a surplus? What changes could you make today to start saving more than you are spending?

## 1b. The Dangers of an Income Deficit

Let's now consider the flipside-failing to generate a surplus.
$\curvearrowright$ EXAMPLE Paul makes $\$ 94,000$ but has expenses of $\$ 97,000$. As shown in the following table, Paul will run a deficit (when expenses exceed income) of \$3,000.

- Continuously incurring deficits is unsustainable and can lead to extreme financial stress, such as bankruptcy.
- When deficits occur in your budget for schooling, training, transportation, etc., action should be taken. You need to increase income and/or decrease spending to cover the deficit. Be sure that deficits do not continue to occur and derail you from building financial wealth. Emergency savings should be in place to minimize these types of deficits.

| Deficit Living |  |
| :---: | :---: |
| Income | $\$ 94,000$ |
| - Living Expenses | $-\$ 97,000$ |
| - Deficit (reduces future consumption \& opportunities) | $=\$(3,000)$ |

Like many people, Paul funds his income deficit by racking up charges on his credit card, which in turn leads to more debt. The flowchart below depicts this downward-spiral process.

1. Overspending leads to more borrowing, whether as a loan or as credit card charges.
2. Rather than earning interest on savings from an income surplus, borrowers will end up paying more interest each month.
3. This interest, plus the continued overspending, will require more borrowing, more interest payments, and so on.
4. This will quickly deplete wealth over time and make it more difficult to achieve long-term financial goals.


Paul has created problems for himself by spending more than he has. This could lead to conflict with friends or family if he needs to borrow money. It can also lead to poor health outcomes if he is stressed all the time about money. To improve his situation, Paul needs to be agile and make some changes. By using his problemsolving skills, he can reflect on his income and spending to decide where those changes can occur.

Keep this in mind as you move forward on your lifetime financial journey: The combination of earning more income (which often comes with more training, education, and work experience), while keeping your expenses steady or falling, helps you build larger income surpluses.

## $\square$ HINT

Simply increasing income does not build wealth if your expenses increase as well.

## - TERM TO KNOW

Deficit
When expenses exceed income.

## 2. Saving Your Income Surplus

Remember that you can accelerate wealth accumulation by saving your income surplus. In this section, we discuss how to make that happen through:

- Targeted savings ratios
- Targeted savings rates


## 2a. Targeted Savings Ratio

How much of your surplus should you be saving to be prepared for the future? One good method is to estimate your savings ratio on a regular basis. The savings ratio indicates the percentage of income that you are actively saving, as calculated by the following formula:

## $\triangleleft$ FORMULA TO KNOW

## Savings Ratio

Savings Ratio = Savings $\div$ Income * 100

- Savings includes contributions to a retirement plan, regular planned savings, and any surplus that you definitely will save.
- Income consists of wages, salaries, interest, dividends, child support, and other sources of regular income (before taxes have been paid).
- If you are younger than age 30, learn to save as much as possible. A minimum targeted savings ratio of $12 \%$ is typically recommended to help you reach future retirement needs. This means that you should be saving 12 cents of every dollar you earn for retirement.


## $\backsim \quad$ HINT

To make any value into a percent, make sure you multiply by 100. For example, if you calculated a savings ratio of 0.15 , that is the same as $0.15 \times 100$, or $15 \%$.

## - TERM TO KNOW

## Savings Ratio

The percentage of income that you are setting aside on a regular basis (Savings Ratio = Savings $\div$ Income).

## 2b. Targeted Savings Rate

Targeted savings rates help to keep you progressing toward long-term goal achievement. A targeted savings rate is the savings ratio applied over a specific time period.

- If you are younger than age 30, your target should be to save $12 \%$ of income per year toward retirement.
- If you are between ages 30 and 40 , your targeted savings rate should be at least $15 \%$ of income per year.
- If you wait to start saving for retirement until you are age 40, you will need a targeted retirement savings rate of $20 \%$ of income per year for each year until age 65 .

If you want to be financially independent earlier than the general retirement age，then you will need to save even more of your annual income．

## 日 TERMS TO KNOW

## Targeted Savings Rate

The savings ratio（Savings $\div$ Income）applied over a specific time period．

## 3．Escaping the Perils of Debt

As you begin your financial journey，you may find that you are carrying a lot of debt．Some of this debt might be unavoidable，such as the need to pay for education and transportation．These are things you cannot change． However，too much debt can slow you down on your financial journey．When you have a lot of debt，you need to devote a large portion of your income to repay the debt and interest．This means that you have less income to save．In other words，too much debt can limit your saving options．Strong problem－solving skills will help you be able to tackle the issue and get on the right path．

The total debt－to－income ratio shows the percentage of your income that you are spending to pay down your debts．The ratio is calculated as follows：

## $』$ FORMULA TO KNOW

## Debt－to－Income Ratio

Debt－to－Income Ratio $=($ Total Required Debt Payments $\div$ Gross Income）$* 100$
Although the formula looks daunting，it is actually easy to use．

## 路 STEP BY STEP

1．Add up all of your monthly debt payments．This includes minimum payments for credit cards，car loans， student loan debts，rent or mortgage payments（including the principal，interest，insurance，and property tax portions），and any other required debt payments you might have．

2．Figure out your gross monthly income．This is your income before any taxes or other expenses have been deducted from your paycheck．

3．Divide the total monthly payments by your gross monthly income and multiply the result by 100.

Your monthly debt payments should not exceed $36 \%$ of your gross income．If the ratio is higher，then you may lack the financial flexibility necessary to save and build financial wealth，as well as respond to unexpected events．However，sometimes you may need to take on debt in the short term to increase your future financial wealth later．

## Q TRY IT

Tom is 29 and has the following income and expenses on a monthly basis．

| Item Description | Amount |
| :--- | :--- |
| Income | $\$ 6,000$ |
| Retirement Savings | $\$ 500$ |
| Housing | $\$ 1,000$ |
| Transportation | $\$ 450$ |
| Food | $\$ 600$ |
| Taxes | $\$ 900$ |
| Credit Card Payments | $\$ 350$ |
| Car Payment | $\$ 430$ |
| Entertainment | $\$ 1,400$ |
| Surplus/Deficit |  |

Estimate Tom's income surplus or deficit.

Tom has an income surplus of $\$ 370$ per month $(\$ 6,000-\$ 5,630)$.

Estimate Tom's savings ratio

Tom has $\$ 870$ in savings for the month ( $\$ 370$ income surplus + $\$ 500$ retirement savings) and $\$ 6,000$ in income. Therefore, Tom's savings ratio is $\$ 870 \div \$ 6,000=14.50 \%$.

Estimate Tom's total debt-to-income ratio.

Tom has $\$ 1,780$ in debt payments, which includes housing, credit card payments, and the car payment. So, Tom's total debt-to-income ratio is $(\$ 1,780 \div \$ 6,000) \times 100=29.67 \%$.

Overall, how is Tom doing?

Overall, Tom is doing well. He is saving more (14.5\%) than the benchmark amount (12\%), given his age. Additionally, the level of his debt payments (29.67\%) is below the recommended benchmark (36\%).

## - TERM TO KNOW

## Total Debt-to-Income Ratio

The percentage of your income that you are spending to pay down your debts.

Creating wealth is one of the first steps toward achieving your financial goals and escaping the perils of debt. You create wealth by using an income surplus and avoiding the dangers of an income deficit, or shortage. Doing this can help you both solve and prevent problems. You can track your progress toward saving income by maintaining a targeted savings ratio and targeted savings rate. If you're under 30 , your targeted savings ratio is $12 \%$. That is, you should be saving 12 cents of every dollar you earn. You should also save 12\% of your income to put toward retirement in order to create wealth. Over time, circumstances may change. It is important to be agile when needed and adjust to stay on track.

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## TERMS TO KNOW

## Deficit

When expenses exceed income.

## Savings Ratio

The percentage of income that you are setting aside on a regular basis (Savings Ratio = Savings $\div$ Income).

## Surplus

The money left over after all expenses have been paid.

## Targeted Savings Rate

The savings ratio (Savings $\div$ Income) applied over a specific time period.

## Total Debt-to-Income Ratio

The percentage of your income that you are spending to pay down your debts.

