Planning for Retirement

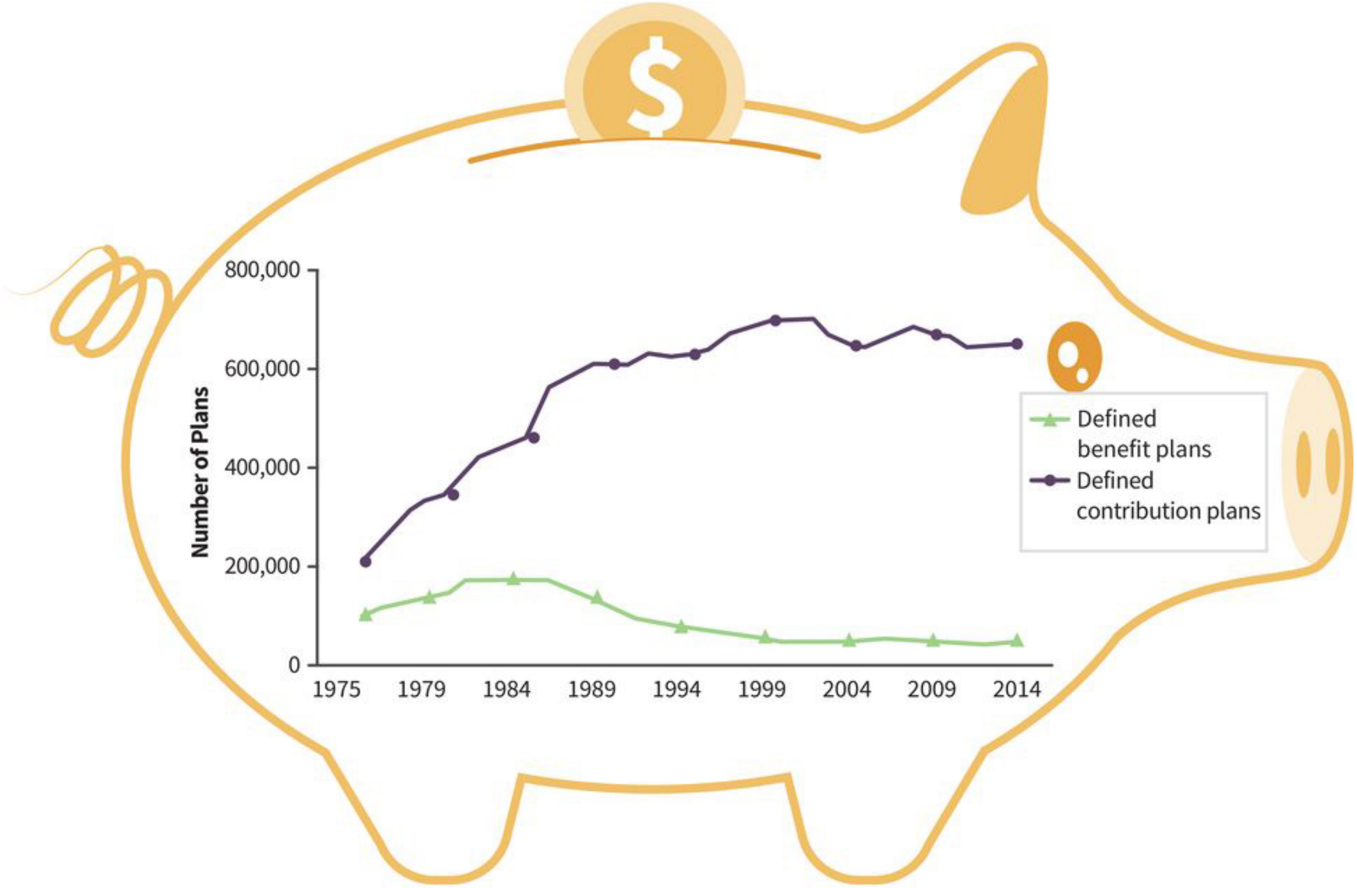
by Sophia

WHAT'S COVERED

In this lesson, you will discuss the need and responsibility for retirement planning. You will see how problem solving skills can help you make investment decisions so you are as productive as possible. Specifically, this lesson will cover:

1. Overview of Retirement Planning

Unfortunately, the days of employer-provided guaranteed income for life are quickly disappearing. Take a look at the long-term declining trend of **pension plans** (defined benefit plans) in the line graph below. Over time, the number of firms offering a pension has declined significantly. As this trend is continuing today, you will most likely retire with no pension.



Source: Department of Labor; https://www.dol.gov/sites/default/files/ebsa/researchers/statistics/retirement-bulletins/private-pension-plan-bulletin-historical-tables-and-graphs.pdf.

Instead, you will probably be offered a **defined contribution plan**.

- A defined contribution plan sets how much you and your employer will deposit into your retirement account.
- There is no promise of what that money will be worth when you retire.

THINK ABOUT IT

If you can't rely on a pension, what do you need to do to fund your retirement needs later in life? The answer is simple: you need to start saving money today. Logically, the next question is: what percentage of your income will you need to save each year to fund the expected duration of your retirement years? To answer this question, you need to break down the answer into two parts:

1. Estimate how much you will need on the day you retire to maintain your desired standard of living throughout your remaining life.
2. Estimate how much of your current income you should save each year to reach your financial goal.

10 SKILLS

Problem Solving: Why Employers Care

You may need to show your partner or children how you plan to increase your retirement contributions over time or demonstrate to your manager how one of your team members has improved their performance in sales. No matter the situation, it's more effective to present this information in visual form rather than handing people pages of numbers in a spreadsheet. By honing your problem solving skill to analyze and represent your financial data, you'll help yourself and others quickly grasp the most important takeaway from any data set.

TERMS TO KNOW

Pension Plan

Provides a retiree with a guaranteed payment from his or her employer for the remainder of the retiree's life. Also known as a *defined benefit plan*.

Defined Contribution Plan

A retirement account funded primarily by the employee; defines how much your employer will deposit into your retirement account.

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2. Estimating Your Financial Retirement Needs

To estimate your financial needs during retirement, you need to make a few calculations. Let's look at these estimates next.

HINT

Each of the calculations shown in this topic can be modified based on retiring at, before, or after age 65. For example, the retirement age for Social Security purposes is 67.

2a. Career Average Income

What do you think your average income will be over your career? Think of this number in today's dollars. The table in section 2b shows four incomes, representing typical U.S. salaries (the calculations in the table factor in inflation and time value of money).

1. Below-median income: $23,000.
2. Median income: $50,000.
3. Above-median income (consistent with a college graduate): $78,000.
4. High-median income: $120,000.

Based on these numbers, you can estimate where you think you will be, on average, over your working years.

2b. Wage Replacement Rate for Retirement Living

Column B of the table includes an estimated wage replacement rate. The **wage replacement rate** is a percentage, usually between 70% and 80%, which represents a consistent standard of living between pre- and post-retirement. We have used 75% in the estimates in the table. Here are more details about the wage replacement rate:

HINT

Every person should estimate his or her own wage replacement rate based on individual goals and circumstances.

- The wage replacement rate is typically less than 100% because you won't need to replace all your income in retirement. For example, you will no longer be saving 15–20% of your income for retirement. You will also not be paying FICA taxes (7.65%) or have work-related expenses (e.g., buying work clothes and commuting). Depending on where you live, you may have also paid off your mortgage and other debts by the time you retire.
- All these items, added together, suggest that you will have fewer financial outlays during retirement. However, some expenses will increase, like medical and travel. The actual increase will be different for everyone.

Table: Estimate of Total Amount of Savings Needed at Age 65 for Retirement (in current dollars)

(A) Average Annual Career Income	(B) Wage Replacement Rate	(C) Income Replaced by Social Security*	(D) Percentage of Income You Need to Replace (B − C)	(E) Amount of Income You Need to Replace (A × D)	(F) Amount of Money Needed at Retirement (E ÷ 0.04)
1. $23,000	75%	44%	31%	$7,130	$178,250
2. $50,000	75%	32%	43%	$21,500	$537,500
3. $78,000	75%	27%	48%	$37,440	$936,000
4. $120,000	75%	21%	54%	$64,800	$1,620,000

* Social Security is designed to replace a larger percentage of lower-income workers' pay. Estimates for Social Security replacement rates were adapted from M. Clingman, K. Burkhalter, and C. Chaplain, Replacement Rates for Hypothetical Retired Workers (ACTUARIAL NOTE Number 2014.9) (Baltimore, MD: Social Security Administration, 2014).

TERM TO KNOW

Wage Replacement Rate

Percentage, usually between 70% and 80%, which represents a constant standard of living between pre- and post-retirement.

2c. Social Security

Column C of the previous table shows an estimate of what you can expect in terms of an annual benefit from Social Security. The figure represents the percentage of your current income that will be replaced through

Social Security.

2d. Your Responsibility

Column D of the previous table shows the estimate of that portion of your retirement income that Social Security will not provide. If you then multiply that percentage by your average career income (Column A × Column D), you can estimate the amount of retirement income that will need to be generated from your own savings. The bottom line question is this: how much money will you need at retirement to generate the income shown in Column F of the table?

- The answer can be calculated by dividing the income you need to generate by 4% (Column E ÷ 0.04).

  HINT

  A 4% withdrawal rate from your portfolio is a common guideline that financial planners use when advising retirees.

- The last thing you want is to run out of money in the middle of your retirement years. The 4% guideline helps ensure that your money lasts as long as you do. If you want even less risk of running out of money, use a smaller number such as 3.5%.

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3. Saving for Retirement

Now that you have an idea of how much you need to save to fund your retirement, you can estimate how much you should be saving out of each paycheck to reach your retirement goal.

3a. Required Retirement Savings Rate

The table below provides examples of required retirement saving rate estimates based on the numbers you saw earlier. A **retirement savings rate** is just the percentage of your income that you need to put aside for retirement.

Table: Required Savings Rate for Various Retirement Needs and Starting Ages (in current dollars)

Amount Needed at Retirement	Average Career Income	Required Retirement Savings Rate to Reach Retirement Goal*		
		Start Saving at Age 25	Start Saving at Age 35	Start Saving at Age 45
$178,250	$23,000	7.2%	12.7%	24.7%
$537,500	$50,000	10.0%	17.6%	34.3%
$936,000	$78,000	11.2%	19.7%	38.3%
$1,620,000	$120,000	12.6%	22.1%	43.0%

* Assumes that the individual has not yet saved any money for retirement, plans to retire at age 65, and will realize a real rate of return on investments of 4.5%.

The savings rates shown in the previous table may shock you, especially if you are older. Here are some takeaways from the illustration:

HINT

Don’t let these numbers scare you. You can take advantage of employer-defined contribution plans (discussed later), as well as other retirement savings options to help you reach your retirement goals.

TERM TO KNOW

Retirement Savings Rate

The percentage of your income that you are putting aside for retirement.

3b. Retirement and Savings Income Life Cycle

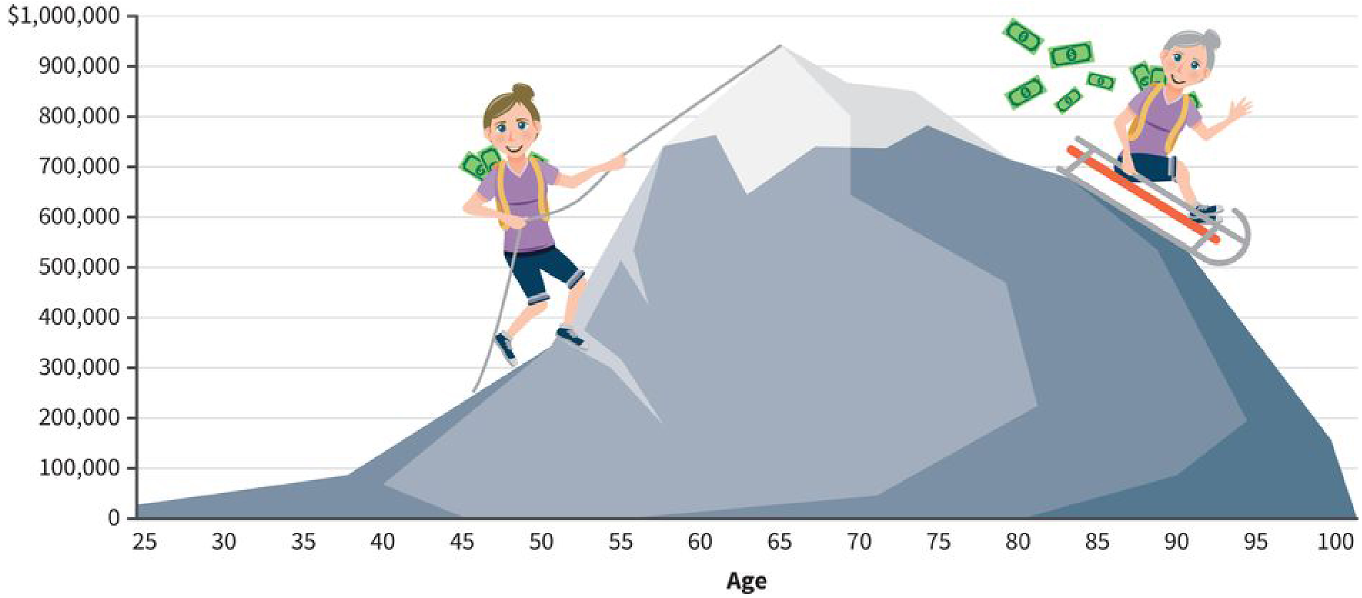
The following line graph shows how savings are accumulated over your working life and eventually distributed during your retirement years. Note that as your income increases, the actual dollar amount you need to save will increase as well, but your retirement savings rate will remain a relatively constant percentage of your income.

HINT

If you stay proactive with managing the percentage of income needed to be saved, you should stay on track no matter what your income later in life turns out to be.

Let’s look at an example. The dollar amounts in the graph show what the retirement and savings income life cycle situation looks like for Kelly, who is just entering the workforce.

- As Kelly saves from age 25 to age 65 during her working life, the value of her retirement account grows.
- Around age 65, her assets peak and then slowly fall as she uses her savings to fund retirement income needs.
- In this illustration, Kelly’s assets last to about age 100.



In actuality, Kelly's retirement accumulation and distribution path will not be this smooth and predictable. She must account for the following factors:

- Investment returns could be higher or lower than expected. This means that Kelly may need to adjust her savings up or down based on the performance of her investments.
- During retirement, Kelly may also need to pull less from her investment accounts if her investments perform poorly. If she does not make adjustments, she could run out of money before age 100 in retirement.
- If Kelly lives a lot longer than expected, she could run out of money. This is known as longevity risk.
- Remember that the opposite of all these statements could also happen. Kelly could be pleasantly surprised with the amount of money she has in retirement and have a large surplus of assets remaining at the time of her death.

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4. Getting Your Employer's Help: Matching Contributions

As mentioned previously, many companies offer their employees the opportunity to participate in a defined contribution plan. Unlike a pension plan that is funded by an employer, a defined contribution plan is a retirement account that is funded primarily by the employee (you). If your employer provides such a plan, you should definitely consider participating.

- Some plans, for instance, will match your contribution using a predetermined formula based on the amount you contribute to the plan. Let's say that your employer offers a 100% match on the first 6% of your pay contributed to the plan. This means that if you put in 6%, your employer will also put in 6% for a total contribution of 12% of your pay. If you start early and take advantage of the match, you will be on your way to reaching your retirement goal.
- Some employers require employees to work a certain amount of time before the employee has unconditional rights to the employer contributions; this is referred to as vesting.

- Employee and employer contributions are excluded from current taxable income. Instead, the retirement distributions are taxed in the future.

HINT

Employees can also choose to have contributions taxed now and then enjoy partially tax-free distributions from the plan in retirement. These types of plans are commonly referred to as “Roth 401(E)” plans.

- Some employers do not offer retirement plans. If this is the case for you, you should open traditional or Roth IRAs to save for retirement. (IRAs are covered in another lesson.)

KEY CONCEPT

If you take money from your account earlier than age 59½, you will generally pay a 10% penalty and income tax on the distribution. This means that you should only use a defined contribution plan for retirement saving purposes.

SKILLS 10

Productivity: Skill Reflect

Based on what you’ve learned in this lesson, what is something you can do to increase your savings for retirement? How can you be as productive as possible?

SUMMARY

In this lesson, you went through an **overview of retirement planning**. **Estimating your financial retirement needs** involves problem solving skills and a couple steps. First, you should estimate your **average income during your career**. Next, determine the **wage replacement rate for retirement living**. Remember, you typically will not need to replace all of your wages, so this number is often less than 100%. **Social Security** may fulfill part of your retirement savings, but the balance is **your responsibility**, so be sure to save for retirement as early as you can!

Your **required retirement savings rate** is based on the amount you wish to have at retirement and your career average income. A typical **retirement and savings income life cycle** shows us that savings generally peak around age 65 and gradually decline thereafter. A strong savings plan usually starts by **getting your employer’s help**. They will sometimes **match contributions** you make to a defined contribution plan. The key is to be as productive as possible!

ATTRIBUTIONS

- **Replacement Rates for Hypothetical Retired Workers (Actuarial Note Number 2014.9)** | **Author:** M. Clingman, K. Burkhalter, and C. Chaplain; Baltimore, MD: Social Security Administration | **License:** Public Domain
- **Private Pension Plan Bulletin** | **Author:** U.S. Department of Labor | **License:** Public Domain

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