Discovering the benefits of investing early

Students use an online calculator and answer questions to learn about the value of investing early.

Learning goals

Big idea

Investing early can mean more money for your financial future.

Essential questions

- How can investing early help my money grow?
- How can investing early help me meet my financial goals?

Objectives

- Understand the importance of investing as early as possible
- Learn how investing early pays off over time

What students will do

- Use an online calculator to discover how investments grow over time.
- Identify reasons to start investing as early in life as possible.

KEY INFORMATION

Building block:

Financial habits and norms

Grade level: High school (9–12)

Age range: 13–19

Topic: Save and invest (Investing)

School subject: CTE (Career and technical education), English or language arts, Math, Social studies or history

Teaching strategy: Blended learning, Direct instruction

Bloom's Taxonomy level: Apply, Analyze

Activity duration: 15–20 minutes

STANDARDS

Council for Economic Education
Standard V. Financial investing

Jump$tart Coalition
Investing - Standards 1 and 2

Preparing for this activity

- ☐ Print copies of all student materials for each student, or prepare for students to access them electronically.
- ☐ While it's not necessary, completing the activities "Comparing saving and investing" and/or "Investigating investing" before this one will make it more meaningful.
- ☐ Take time to practice using this online calculator so you're familiar with how it works: https://www.investor.gov/additional-resources/free-financial-planning-tools/compound-interest-calculator.
- ☐ Secure access to the Internet and computers or tablets so students can use the online calculator.
  - Note: This also can be done as a whole-class activity by projecting the calculator on a screen from a computer.

What you'll need

THIS TEACHER GUIDE

- **Discovering the benefits of investing early** (guide)
  cfpb_building_block_activities_discovering-benefits-investing-early_guide.pdf

STUDENT MATERIALS

- **Discovering the benefits of investing early** (worksheet)
  cfpb_building_block_activities_discovering-benefits-investing-early_worksheet.pdf
- **Computers or tablets (if available)**

Exploring key financial concepts

Investing can help people reach long-term financial goals such as buying a home, starting a business, or retiring. Investments can increase in value over the years, and generally, the earlier you invest, the more time your investment has to grow. One important advantage that young people have is time. They usually have more time to allow an investment to increase in value than older people.

TIP

Because financial products, terms, and laws change, students should be encouraged to always look for the most up-to-date information.

Time also can help manage the risks of investing. An investment's value can rise and fall over time — and it's possible to lose some or all of the money invested. But investors who hold on to an investment for the long term tend to come out ahead. Investing early can be a helpful strategy young people can use to meet their financial goals.

> **Note**
>
> It's important to emphasize that all investments, even savings products, have some level of risk. These risks include how readily investors can get their money when they need it; how fast their money will grow; whether they can lose some, all, or in some cases, more than their initial investment; and how inflation, taxes, market conditions, and other external factors may affect the value of their investment.

Teaching this activity

Whole-class introduction

TIP

Visit CFPB's financial education glossary at consumerfinance.gov/financial-education-glossary/.

- Distribute the "Discovering the benefits of investing early" worksheet to each student.
- Be sure students understand key vocabulary:
  - **Annual return:** The profit or loss on an investment over a one-year period.
  - **Invest:** To commit money to earn a financial return; the strategic purchase or sale of assets to produce income or capital gains.
  - **Investment:** Something you spend money on that you expect will earn a financial return.
  - **Rate of return:** The profit or loss on an investment expressed as a percentage.
  - **Return:** The profit or loss on an investment.
  - **Risk:** Exposure to danger, harm, or loss.
- Tell students that they'll use an online calculator to explore how starting to invest at different ages affects the investment's value over time.
- Go to the U.S. Securities and Exchange Commission's (SEC's) free compound interest calculator to show students what they can expect: https://www.investor.gov/additional-resources/free-financial-planning-tools/compound-interest-calculator.

- Explain that while the SEC tool is called a "compound interest calculator," it also can be used to calculate the returns in the worksheet scenario.
- Be sure to clarify that the calculations are oversimplified in order to illustrate how investments can grow over time. In the real world, investment values rise and fall and returns are affected by many factors, including inflation, investment fees, and taxes.
- Tell students that they'll calculate results for the three people in the worksheet scenario, assuming an annual return of 7 percent.

Individual or group work

- Students can work individually, in pairs, in a small group, or as a class, but they should complete their own worksheet.
- They will enter each person's information into the compound interest calculator one at a time.
- Be sure students are familiar with what they're expected to do in each step:
    - **Step 1.** Initial investment: Enter $500 for each person in the calculator.
    - **Step 2a.** Contribute: Enter $25 as the amount each person plans to add to their investment each month.
    - **Step 2b.** Length of time: Enter the number of years each person has to invest until they turn 65: 50 for Maria, 40 for Jai, and 30 for Alex.
    - **Step 3.** Interest rate: Enter 7 percent as the interest rate. Make sure students understand that:
        - While the calculator uses the term "interest rate," they should consider it to be "rate of return" for the purposes of this activity.
        - For most investments, the rate of return isn't guaranteed. Most investments involve risk, and it's possible to lose some or all of your money.
        - To keep the activity focused on a 7 percent return, students should skip the "Range of interest rates" entry.
    - **Step 4.** Compounding: Select "annually" for a 7 percent annual return.
- Students will enter each person's results on their worksheet and calculate the differences in each person's rate of return.
- To synthesize their understanding, students will answer the reflection questions.

Wrap-up

Bring students back together and ask for volunteers to share their calculations and answers to the reflection questions.

Suggested next steps

Consider searching for other CFPB activities that address the topic of investing.

Measuring student learning

Students' responses can give you a sense of their understanding. **Keep in mind that students' answers may vary.** The important thing is for students to have reasonable justification for their answers.

This answer guide provides possible answers for the "Discovering the benefits of investing early" worksheet.

Answer guide

A. Maria would earn $136,687.19. Jai would earn $67,377.76. Alex would earn $32,144.36.

B. Maria would earn $104,542.83 more than Alex.

C. Maria would earn $69,309.43 more than Jai.

D. Jai would earn $35,233.40 more than Alex.