## The Pros and Cons of Saving and Investing

## Activity by

Julie Kornegay, senior economic and financial education specialist, Federal Reserve Bank of Atlanta, Birmingham Branch

Jackie Morgan, senior economic and financial education specialist, Federal Reserve Bank of Atlanta, Nashville Branch

## Concepts

Savings account
Rule of 72
Inflation
Investing

Liquidity
Rate of return
Risk reward relationship
Risk tolerance

## Objectives

Students will be able to:

1. Define saving and investing.
2. Illustrate the pros and cons of saving and investing.
3. Examine the rate of return on savings and investing tools.
4. Apply the Rule of 72 to determine how long it will take for us to double our money.

## Materials

Infographic: "Why should you save and invest?"

1 bag of dried lima beans

Two clear containers or cups

Sticky notes: One sticky note labeled "saving" and another sticky note labeled "investing" plus additional sticky notes for group activities

Two dice


## Procedures

1. Prior to beginning, fill each container half full with the beans. Inform students that one container represents a savings account and the other represents an investment tool. Place the saving sticky note on one cup and the investing sticky note on the other cup.
2. Inform students that a savings account is a short-term tool that helps build emergency funds and achieve personal and financial goals while keeping funds secure.
3. Ask the students, "What interest rate do you think a savings account earns?" This will fluctuate over time and will depend on the account requirements. Currently, in 2016, savings accounts are earning 0.05 percent. You could add an additional step to this activity by having students explore Bankrate.com and examine account minimum requirements, interest rates, and fees.
4. Take a sticky note and write the current interest rate for savings accounts and put it on the container marked savings.
5. Ask the students, "If you deposit $\$ 1,000$ into this savings account (the beans in the cup), how long do you think it will take to double your money?" Answers will vary, but according to the Rule of 72, your investment will double to $\$ 2,000$ in about 1,440 years. Refer to the "Watch it grow" section of the infographic. To calculate the Rule of 72, divide the interest rate of your investment by 72 to determine the approximate number of years it will take for your investment to double $(72 / .05=1,440)$. Put a few beans in the savings cup to represent the interest earned from savings.
6. When identifying whether we want to put money into savings or investment tools, we need to factor in the impact of inflation. Inflation is the increase in the general price level of goods and services in an economy over a period of time. If the inflation rate is 2 percent and your savings account is earning 0.05 percent, your purchasing power is decreasing and you are essentially losing money.
7. Although savings accounts generally earn low levels of interest, there are some advantages to this type of account. Savings accounts are insured currently up to $\$ 250,000$ by the FDIC, Federal Deposit Insurance Corporation, or NCUA, National Credit Union Administration. This means that if the financial institution goes out of business, your money is still safe as long as the institution is FDIC or NCUA insured. Another advantage is that you can access your funds easily. The measure of how quickly account owners can access funds is called liquidity. Savings accounts are one of the most liquid forms of bank accounts.
8. On the board, draw two Venn diagrams, one representing saving and the other representing investing. For each Venn diagram, the left represents pros, the right represents cons, and the middle represents the overlap between pros and cons. Have students work in small groups to identify three to five additional pros or cons of savings accounts. Have groups record their answers on sticky notes and put them on the savings Venn diagram. Debrief with students about

their answers. (Answers may vary, but may include that pros are insured by FDIC and funds are easily accessible; cons have very low rate of return and interest earned may not keep up with inflation.)
9. Refer to the "What is the difference?" section of the infographic, specifically the section on investing. Now inform students that there are many tools that can be used for investing. Investing is a long-term commitment to put money away. It typically yields a higher rate of return, but also has greater risks.
10. Refer to the "Common investment tools" section of the infographic. There are several investment tools available such as stocks, bonds, mutual funds, and physical assets. For this activity, we will focus on stocks. The rate of return on the stock market is generally said to be approximately 8 percent over time.
11. Rate of return is the gain or loss on an investment over a specified time period.

- An easy way to illustrate this is to use two dice and inform students that each roll of the dice will represent the rate of return for your investment this year.
- Have a student record the results of each roll.
- Plan to roll the dice 10 times to represent 10 years of investment.
- Now, ask another student to pick a number between one and 10 . The number/year that student chose will now become negative. For example, if you rolled an eight that year, your gains are now losses.
- This illustrates the risk associated with investing.
- There is no insurance to protect you against losses.
- Now, have the student who was tracking each roll to add the 10 rolls and divide by 10 to find the average rate of return.
- Write this on the sticky note and put it on the investing cup.

12. Go back to the containers with the beans and remind students that it will take 1,440 years for the cup to fill with beans or for your money to double. Remind students that a few beans representing interest earned from savings were added earlier to the savings cup.
13. Now go to the investing cup. Again, refer to the "Watch it grow" section of the infographic. You can either figure this using the dice activity results or use the standard assumption of an 8 percent return. When you apply the Rule of 72 to an 8 percent return, you can fill the cup or double your money in about nine years ( $72 / 8=9$ ). Fill the rest of the investing cup to the top with beans or let it run over to represent that your money is doubling more quickly (or the cup is filling more quickly).
14. Stress to the students that although investment accounts earn a higher rate of interest, they have greater risk. The risk reward relationship essentially states that a riskier investment must offer greater reward to compensate investors for the increased risk of loss. Investment accounts are not covered by FDIC or NCUA, so a loss is a loss.

15. Have students work in small groups to identify three to five additional pros or cons of investment accounts. Have groups record their answers on sticky notes and put them on the investing Venn diagram. Debrief with students about their answers. (Answers may vary, but may include pros have higher rate of return, thus reaching financial goals faster; cons have possible negative rate of return, uninsured losses, or higher risks.)
16. Finally, reinforce the following ideas about the two different accounts. Savings accounts are a tool for short-term needs or emergency funds that may need to be accessed quickly. Investment accounts may yield a higher rate of return but also have a higher risk. You should invest for longterm goals and be aware of your risk tolerance, which is how much risk you are willing to assume.
