

## Savvy Strategies for Long-Term Goals

When we plan to use dollars is important as we consider different saving and investing strategies. For example, I plan to buy groceries this week; that's a very short-term goal. I will likely buy a new car in the next 1-5 years; that's also a short-term goal. Goals that are 10, 15, 20 or even 30 years away are long-term goals.

When saving for long-term goals it's useful to understand two financial concepts: compounded returns and inflation risk.

**Compounded returns happen when you reinvest returns from saving (or investing).** These compounding returns add up over time and especially make a difference for long-term goals.

Take a look at the example in Table 1. In the example, someone deposits \$100 in a savings or investment account that pays 5% return each year. (For the example, we assume that the return is an even 5% each year with no volatility; this isn't true of all investments.)

YEAR	Interest Earned	Money in Account	
Beginning of Year		\$100.00	
1			in More
End year 1	\$5.00	\$105.00	mterest was
2	\$5.25	\$110.25	earned in vo
3	\$5.51	\$115.76	Chan Year 1
4	\$5.79	\$121.55	4' 1. Why?
5	\$6.08	\$127.63	
TOTAL		\$127.63	

## Table 1: Compounded Returns

After one year, \$5 in interest (or return) has been added to the account. However, in Year 2, \$5.25 is added to the account. More interest is earned because there is interest earned on the original \$100 deposit plus the interest earned in Year 1 (\$5). This pattern of more interest/return each year continues; this is the miracle of compounding returns.

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## **Compounding Returns Add Up for Long-Term Goals**

Let's consider saving for a child's college education. For example, Ryan just had a baby. If Ryan saves \$100.00 per month and invests it (assuming a 6% annual rate of return) the savings would grow to \$38,567 after 18 years. This assumes Ryan

doesn't withdraw any money from the account. \$21,700 is from the returns on the money Ryan invested – not money Ryan deposited (\$16,867). This is the miracle of compounding returns.

The trick is starting early when college savings is still a long-term goal. If Ryan waited until the child is 16 years old and they have only two years until college monies are needed, then (with 6% annual rate of return) Ryan needs to deposit \$36,289 to reach the same \$38,567. There's just not enough time to fully take advantage of compounding returns.

Try similar calculations using calculators at <u>Bankrate</u>, <u>Nerd Wallet</u>, or other financial websites.

## **Inflation Affects Long-Term Goals**

An added complication when saving for a long-term goal is taking into consideration the effect of inflation. **Inflation affects the purchasing power of our dollars.** For example, today I need \$153 dollars to buy something that cost \$100 in 1999 (20 years ago).

In the USA, we use the Consumer Price Index (CPI) to describe the average change over time in the prices paid by consumers for consumer goods and services. According to the Bureau of Labor Statistics, in the past year the CPI increased 1.7%. Year-after-year of increases means that our dollars don't buy as much over time. At the relatively low rate of 1.7% increase, this

CPI Inflation Calculator				
\$ 1.00 in October ~ 2018 ~				
has the same buying power as \$1.02				
in October v 2019 v Calculate				

effect is much more important for our long-term goals plans than short-term goals.

You can see how the CPI has changed historically since 1958 on the BLS website, <u>https://go.illinois.edu/BLSinflation</u>. We don't have a crystal ball to tell us what inflation will be in the future, but looking at past data shows how volatile inflation rates can be.



Let's consider the long-term goal of retiring at 65 years old and living off savings and investments until death. For planning, this could be a 20 to 30 year goal. In order to keep the purchasing power of savings from eroding, a person's savings must have a return rate greater than inflation.

For example, savings accounts pay approximately 0.5 - 2.2% currently. With an inflation rate of 2.1% this year, the purchasing power of dollars in a savings account may be decreasing in the long-term. Purchasing power risk (inflation risk) is just one variable to consider when making long-term goal investment decisions, but it is important to include it in your decision-making.

Source: CPI Inflation Calculator, Bureau of Labor Statistics, <u>https://www.bls.gov/data/inflation\_calculator.htm</u>. Written by: Kathy Sweedler, Consumer Economics Educator, University of Illinois Extension 2019, reviewed 2022.