

# The Impact of Inflation





### CPI components

- Food and beverages
- Apparel
- Housing
- Transportation
- Medical care
- Education and communication
- Other goods and services

## What Is Inflation and Why Should You Care About It?

### Prices: Up, up and away

Inflation occurs when there is more money circulating than there are goods and services to buy. The process is like trying to attend a sold-out concert at the last minute; there is more demand for tickets than there are tickets to go around. As a result, tickets may trade hands for far more than their stated prices. When there's a lot of demand for goods and services, their prices usually go up. The law of supply and demand produces price inflation.

### Inflation cuts purchasing power

When some people say, "I'm not an investor," it's often because they worry about the potential for loss. It's true that investing involves risk as well as reward. However, there's also another type of loss to be aware of: the loss of purchasing power.

Inflation is painful enough when you experience a sharp jump in prices. However, the bigger problem with inflation is not just the immediate impact, but its effects over time. Because of inflation, each dollar you've saved will buy less and less as time goes on. At 3% annual inflation, something that costs \$100 today would cost \$181 in 20 years.

Time is Money		
	Now	In 20 years
House	\$275,500	\$497,584
Gallon of Milk	\$3.81	\$6.88
New Car	\$28,352	\$51,207

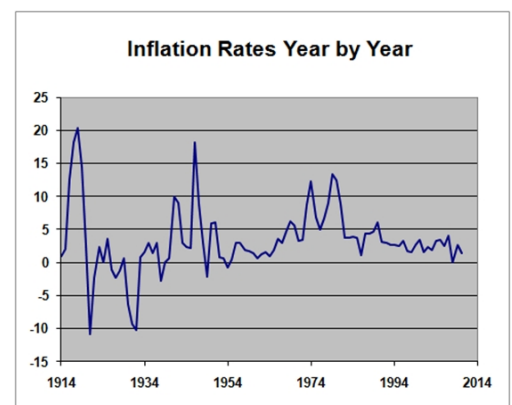
**Note:** If inflation averaged 3% annually, everyday objects could cost much more in the future.

### How is inflation measured?

- The Consumer Price Index (CPI). The most widely quoted inflation measure, this tracks the price change from month to month of a basket of goods and services used by the average consumer.
- Personal Consumption Expenditures (PCE). This statistic adjusts for the fact that

when the prices of some items rise, people and businesses may substitute others; for example, if steel prices are high, a car maker might make some parts from other substances. When setting target interest rates, the Federal Reserve Board takes into account so-called core PCE (which excludes food and energy because their prices can vary dramatically from month to month).

- Producer Price Index (PPI). This measures inflation from the standpoint of sellers rather than consumers.



Source: Bureau of Labor Statistics CPI

### How high is high?

The average inflation rate as measured by the CPI has been roughly 3% since 1914. Since the early 1980s, it has remained relatively stable, usually between 1.6% to 4.6% annually. However, the inflation rate has varied much more dramatically in the past. During the Great Depression, it often ran in the negative numbers. The country actually experienced deflation in 1921, when the inflation rate was -10.8%.

On the other hand, inflation also has been much higher than most of us have ever experienced. Just prior to 1920, the U.S. suffered from four back-to-back years of double-digit inflation. The worst was in 1918, when prices rose by an astounding 20.4%. More recently, in 1979 the annual inflation rate hit 13.3%, driven at least in part by higher gas prices.



### **Inflation and your savings**

*If you're saving the same amount each year, you're not really saving the same amount; you're saving that dollar figure minus what you've lost in purchasing power to inflation.*

## **How Can You Fight the Effects of Inflation?**

Inflation is one of the reasons people--especially those in their 20s and 30s--are often surprised by the amount they will need to save for their retirement. Inflation pushes future costs higher: as a result, the nest egg needed to produce the income you want would need to be bigger.

There are several ways to help combat the ravages of inflation on the value of your savings.

### **Invest to try to outpace inflation**

You should own at least some investments whose potential return exceeds the inflation rate. A portfolio that earns 2% when inflation is 3% actually loses purchasing power each year. Though past performance is no guarantee of future results, stocks historically have provided higher long-term total returns than cash equivalents or bonds. However, that potential for greater returns comes with greater risk of volatility and potential for loss. You can lose part or all of the money you invest in a stock. Because of that volatility, stock investments may not be appropriate for money you count on to be available in the short term. You'll need to think about whether you have the financial and emotional ability to ride out those ups and downs as you try for greater returns.

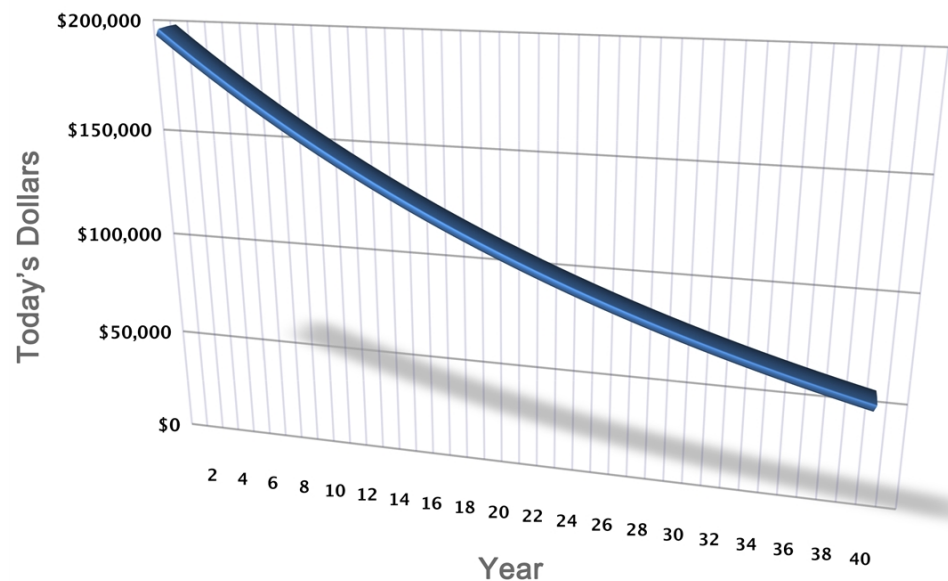
Bonds can also help, but since 1926, their inflation-adjusted return has been less than that of stocks. Treasury Inflation Protected Securities (TIPS), backed by the U.S. government, guarantee that your return will keep pace with inflation. The principal is automatically adjusted every six months to reflect increases or decreases in the CPI; as long as you hold a TIPS to maturity, the dollar amount of its principal will never be less than the initial amount.

### **Diversify your portfolio**

Though diversification does not guarantee a profit or ensure against a loss, studies have shown that over the long term, a diversified portfolio typically has outperformed one with only a single asset class. Examples of diversification possibilities include:

- U.S. stocks (growth/value, income-producing, large/midcap/small)
- U.S. bonds (various maturities, taxable/tax-free)
- Real estate (U.S. stocks/REITS, international stocks/REITS, land holdings, commercial real estate)
- Commodities (stocks and commodity futures)

**The Impact of 3% Yearly Inflation on the Purchasing Power of \$200,000**





- Precious metals (stocks and bullion)
- International stocks (developed/emerging markets)
- International bonds (varying maturities)
- Alternative investments (private equity, hedge funds, natural resources, and collectibles)
- Cash/cash alternatives (money market funds, CDs, money-market accounts)

### Save more

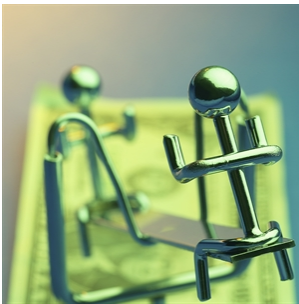
If you're saving the same amount each year, you're not really saving the same amount; you're saving that dollar figure minus what you've lost in purchasing power to inflation. Consider increasing the amount you save each year by at least the rate of inflation if you want to keep a constant savings rate.

**Example:** For every \$1,000 you saved last year, consider saving \$1,030 this year (\$1,000 x the 3% average historical rate of inflation). To continue at that inflation-adjusted rate, you would save \$1,061 the following year.

### Consider paying off credit card debt

When inflation goes up, interest rates typically do, too. You may suddenly find that purchases not only cost more when you check out; they also cost more over time if you finance them and must pay interest on that amount. Factor interest costs into any credit card purchase, especially if rates are rising.

However, inflation isn't bad for all debt. If you have a fixed-rate mortgage on your house, the mortgage payments may have seemed huge when you first took out the loan. However, as your income and other expenses increase over time, those payments will probably represent a lower percentage of your costs. Also, because inflation tends to reduce the value of each dollar, payments made 10 years from now would be made in dollars with less buying power.



## Inflation and Bonds: The Ups and Downs

### The price/rate seesaw

Inflation has an impact on most securities, but it can particularly affect the value of your bonds. Why? Because bond yields are closely tied to interest rates, and when interest rates and bond yields rise, bond prices fall.

When the Federal Reserve Board gets concerned that the rate of inflation is rising, it may decide to raise its target interest rate. That makes borrowing money more expensive, which in turn tends to slow the economy. When the Fed raises its rate, bond yields typically rise as well. That's because bond issuers must pay a competitive interest rate to get people to buy their bonds.

When yields rise, bond prices fall. That's why bond prices can drop even though the economy may be growing. An overheated economy can lead to inflation, and investors often begin to worry that the Fed will raise interest rates, which would hurt bond prices.

### Falling rates: good news, bad news

Just the opposite occurs when interest rates are falling; bonds issued today will typically pay a lower interest rate than similar bonds that were issued when rates were higher.

Older bonds with better yields become more valuable to investors, who will pay a higher price to get that greater income stream. As a result, prices for those higher-yield bonds tend to rise.

**Example:** Jane buys a newly issued 10-year corporate bond that has a 4% coupon rate--its annual payments equal 4% of the bond's principal. Three years later, she wants to sell the bond. However, interest rates have risen; corporate bonds being issued now are paying interest rates of 6%. As a result, investors won't pay as much for Jane's bond, since they could buy a new one that pays more interest. If rates fall later, Jane's bond would rise in value.

When interest rates drop, bond prices tend to go up. However, a slowing economy increases the chance that some borrowers may default on their bonds. Also, when interest rates fall, some borrowers may redeem existing bonds and issue new ones at a lower interest rate, just as you might refinance a mortgage. If you plan to reinvest any of your bond interest, it may be a challenge to generate the same income without adjusting your investment strategy.





## All bond investments are not alike

Inflation and interest rate changes don't affect all bonds equally. Under normal conditions, short-term interest rates may reflect the effects of any Fed action most immediately, but longer-term bonds likely will see the greatest price changes.

Also, a portfolio of bonds may be affected somewhat differently than an individual bond. For example, a portfolio manager may be able to minimize the impact of rate changes, altering the portfolio's duration by adjusting the mix of long-term and short-term bonds.

## Focus on goals, not just rates

Your bond investments need to be tailored to your financial goals, and take into account your other investments. Your financial professional can help you design a portfolio that can accommodate changing economic circumstances.

## The inflation/interest rate cycle at a glance

- Inflation goes up
- Bondholders worry that the interest they're paid won't buy as much in the future because inflation is driving costs higher.
- The Fed may decide to raise interest rates to try to control inflation. To get investors to lend money (buy bonds), bond issuers must pay higher interest rates.
- When interest rates go up, bond prices go down.
- Higher interest rates make borrowing money more expensive. Economic growth tends to slow, which means less spending.
- With less demand for goods and services, inflation levels off or falls.
- With lower inflation, bond investors are less worried about the future purchasing power of the interest they receive. Therefore, they may accept lower interest rates on bonds, and prices of older bonds with higher interest rates tend to rise.
- Interest rates in general fall, fueling economic growth and potentially a new round of inflation.



## Inflation Doesn't Retire When You Do

The need to outpace inflation doesn't end at retirement; in fact, it becomes even more important. If you're living on a fixed income, you need to make sure your investing strategy takes inflation into account. Otherwise, you may have less buying power in the later years of your retirement because your income doesn't stretch as far.

early years of retirement.

Current Life Expectancy Estimates		
	Men	Women
At birth	76.2	81.0
At age 65	82.7	85.3

**Source:** National Vital Statistics Report, Vol. 61, No. 4, May 8, 2013.

## Your savings may need to last longer than you think

Gains in life expectancy have been dramatic. According to the National Center for Health Statistics, people today can expect to live more than 30 years longer than they did a century ago. Individuals who reached age 65 in 1950 could expect to live an average of 14 years more, to age 79; now a 65-year-old might expect to live for roughly an additional 19 years. Assuming inflation continues to increase over that time, the income you'll need will continue to grow each year. That means you'll need to think carefully about how to structure your portfolio to provide an appropriate withdrawal rate, especially in the

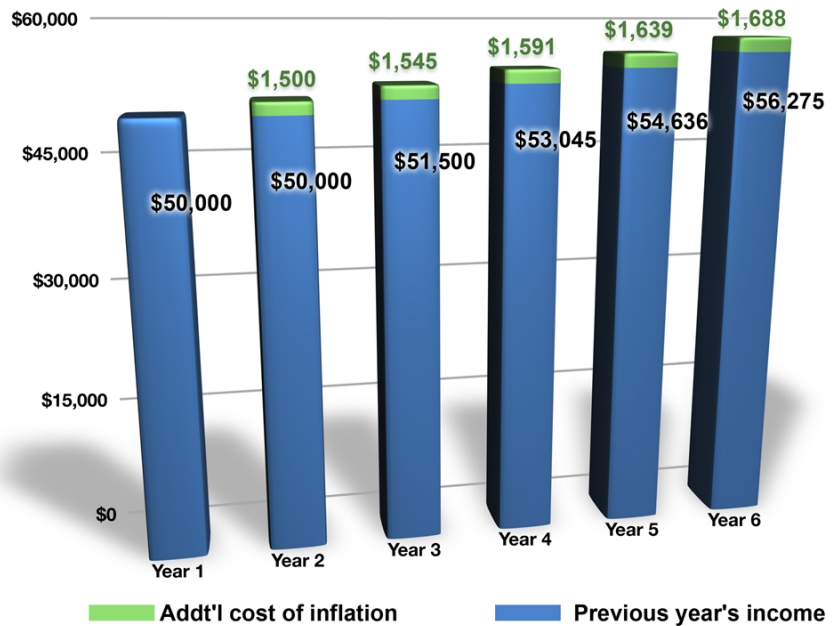
## Adjusting withdrawals for inflation

Inflation is the reason that the rate at which you take money out of your portfolio is so important. A simple example illustrates the problem. If a \$1 million portfolio is invested in an account that yields 5%, it provides \$50,000 of annual income. But if annual inflation runs at a 3% rate, then more income--\$51,500--would be needed the next year to preserve purchasing power. Since the account provides only \$50,000 of income, \$1,500 must also be withdrawn from the

**Some ways to help your savings last**

- Don't overspend early in your retirement
- Consider putting at least part of your portfolio in investments that help you try to outpace inflation
- Plan IRA distributions so you can preserve tax-deferred growth as long as possible
- Postpone taking Social Security benefits to increase the amount of payments
- Adjust your asset allocation

**Income Needs Rise With Inflation**



principal to meet retirement expenses. That principal reduction, in turn, reduces the portfolio's ability to produce income the following year. In a straight linear model, the principal reductions accelerate, ultimately resulting in a zero portfolio balance after 25 to 27 years, depending on the timing of the withdrawals.

A seminal study on withdrawal rates for tax-deferred retirement accounts (William P. Bengen, "Determining Withdrawal Rates Using Historical Data," Journal of Financial Planning, October 1994), using balanced portfolios of large-cap equities and bonds, found that a withdrawal rate of a bit over 4% would provide inflation-adjusted income (over historical scenarios) for at least 30 years. More recently, Bengen showed that it is

possible to set a higher initial withdrawal rate (closer to 5%) during early active retirement years if withdrawals in later retirement years grow more slowly than inflation.

**Invest some money for growth**

Some retirees put all their investments into bonds when they retire, only to find that doing so doesn't account for the impact of inflation. If you're fairly certain that your planned withdrawal rate will leave you with a comfortable financial cushion and it's unlikely you'll spend down your entire nest egg in retirement, congratulations! However, if you want to try to help your income--no matter how large or small--at least keep up with inflation, consider including a growth component in your portfolio.

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Harbour Trust & Investment  
Mgmt  
Mike Hackett  
Vice President & Trust Officer  
1024 N Karwick Road  
Michigan City, IN 46360  
mhackett@harbourtrust.com  
219-877-3500

