# The Impact of Inflation

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When the prices of goods and services increase over time, consumers can buy fewer of them with every dollar they have saved. This erosion of the real purchasing power of wealth is called inflation. Inflation is an important element of investing. In many cases, the reason for saving today is to support future spending. Therefore, keeping pace with inflation is a crucial goal for many investors. To help understand inflation's impact on purchasing power, consider the following illustration of the effects of inflation over time. In 1916, nine cents would buy a quart of milk. Fifty years later, nine cents would only buy a small glass of milk. And more than 100 years later, nine cents would only buy about seven tablespoons of milk. How can

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investors potentially prevent this loss of purchasing power from inflation over time?

Exhibit 1: Your Money Today Will Likely Buy Less Tomorrow

1916	1966	2017
$0.09 = Quart of Milk	$0.09 = 1 Small Glass of Milk	$0.09 = 7 Tablespoons of Milk
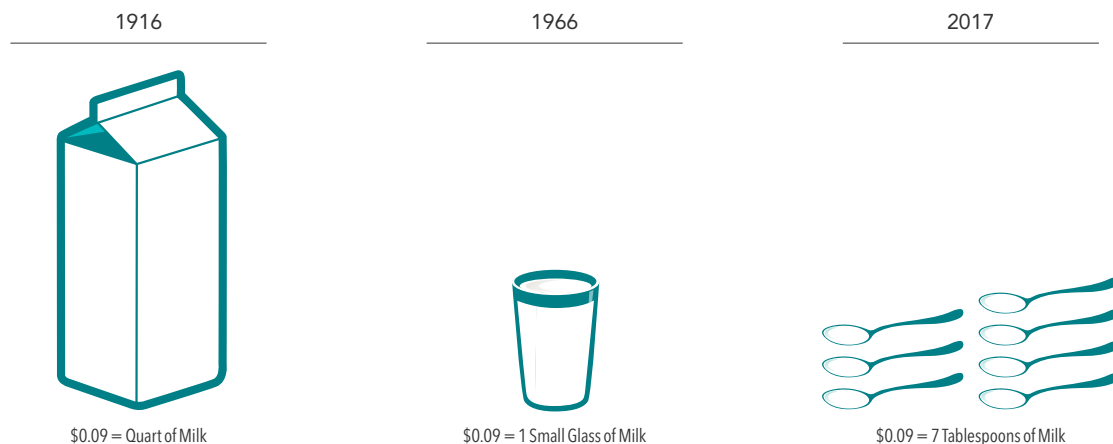
In US dollars. Source for 1916 and 1966: Historical Statistics of the United States, Colonial Times to 1970/US Department of Commerce.
Source for 2017: US Department of Labor, Bureau of Labor Statistics, Economic Statistics, Consumer Price Index—US City Average Price Data.

INVESTING FOR THE LONG TERM AND OTHER "TIPS"

As the value of a dollar declines over time, investing can help grow wealth and preserve purchasing power. Investors should know that over the long haul stocks have historically outpaced inflation, but there have also been short-term stretches where this has not been the case. For example, during the 17-year period from 1966–1982, the return of the S&P 500 Index was 6.8% before inflation, but after adjusting for inflation it was 0%. Additionally, if we look at the period from 2000–2009, the so-called "lost decade," the return of the S&P 500 Index dropped from –0.9% before inflation to –3.4% after inflation.

Despite some periods where stocks have failed to outpace inflation, one dollar invested in the S&P 500 Index in 1926, after accounting for inflation, would have grown to more than $500 of purchasing power at the end of 2017 and would have significantly outpaced inflation over the long run. The story for US Treasury bills (T-bills), however, is quite different. In many periods, T-bills were unable to keep pace with inflation, and an investor would have experienced an erosion of purchasing power. After adjusting for inflation, one dollar invested in T-bills in 1926 would have grown to only $1.51 at the end of 2017.

While stocks are more volatile than T-bills, they have also been more likely to outpace inflation over long periods.

The lesson here is that volatility is not the only type of risk that should concern investors. Ultimately, many investors may need to have some of their allocation in growth investments that outpace inflation to maintain their standard of living and grow their wealth.

One additional tool available to investors who are concerned about both stock market volatility and inflation are Treasury Inflation-Protected Securities (TIPS). TIPS are guaranteed by the US Treasury and as such are considered by the marketplace to have low risk of default. The Treasury issues TIPS with a variety of maturities, and these securities are easily bought and sold. Unlike traditional Treasury securities such as T-bills, TIPS are indexed to inflation to protect investors from an erosion in purchasing power. As inflation (measured by the consumer price index) rises, so does the par value of TIPS, while the interest rate remains fixed. This means that if inflation unexpectedly rises, the purchasing power of any principal invested in TIPS should also increase.[1] Although they may not offer the long-term growth opportunities that stocks do, their structure makes TIPS an effective risk management tool for investors who are concerned with managing uncertainty around future purchasing power.

Exhibit 2: Growth of $1, *1926–2017*
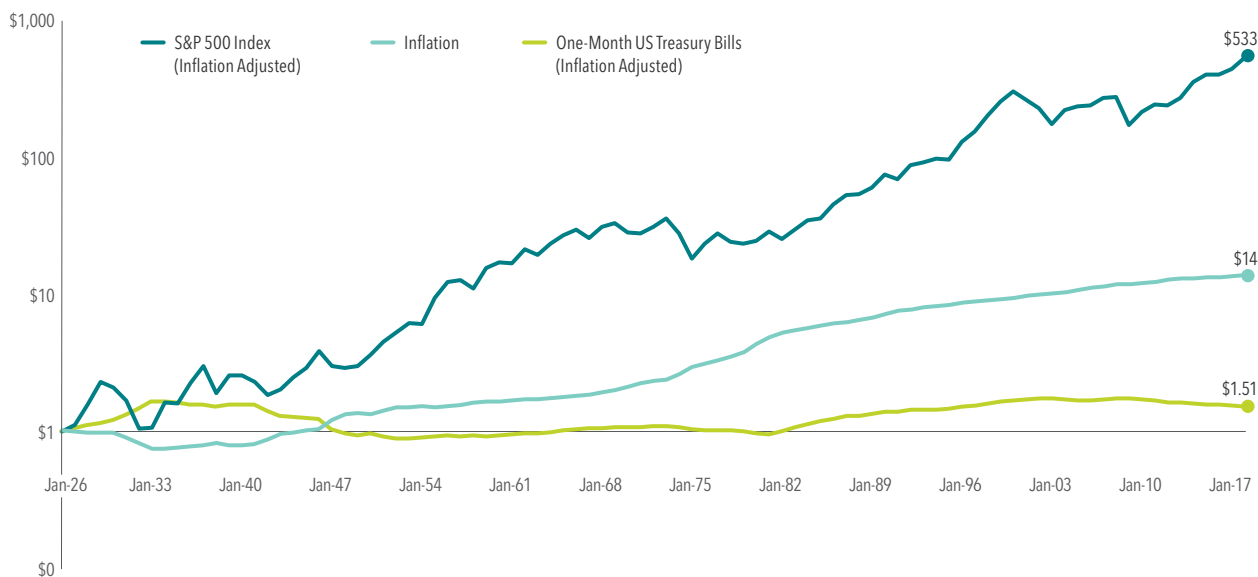
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1. Market prices incorporate market participants' expectations about the future. Therefore, market participants' expectations about future inflation should be incorporated into current prices. These expectations are referred to as expected inflation. Unexpected inflation refers to unexpected changes in inflation that deviate from prior market expectations. Unexpected inflation should be considered a primary driver of inflation risk.

CONCLUSION

Inflation is an important consideration for many long-term investors. By combining the right mix of growth and risk management assets, investors may be able to blunt the effects of inflation and grow their wealth over time. Remember, however, that inflation is only one consideration among many that investors must contend with when building a portfolio for the future. The right mix of assets for any investor will depend upon that investor's unique goals and needs. A financial advisor can help investors weigh the impact of inflation and other important considerations when preparing and investing for the future.

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