# TIPS explained



# Wealth Management

TIPS, or Treasury Inflation-Protected Securities, are a type of fixed income instrument that can help investors preserve purchasing power during rising inflation environments in the U.S. economy by indexing payments to an inflation metric.

## The basics of TIPS

TIPS are U.S. government bonds issued in five-, ten-, and thirty-year maturities. Like Treasury bonds, TIPS pay a fixed coupon rate every six months. However, unlike typical Treasury bonds, the principal value of a TIPS bond is adjusted based on changes in the Consumer Price Index (CPI). The result is that even though TIPS pay a fixed coupon rate, their coupon payments can increase or decrease depending on the adjusted principal value for inflation.

For example, say an investor purchased \$100,000 of TIPS at par with a fixed coupon rate of 1%. If the CPI remains flat throughout the year, the investor will receive \$1,000 in interest over the course of the year. If hypothetically, inflation increases to 5% the following year, the TIPS will pay \$1,050 over the course of the year even though the bond still pays 1% interest annually. The investor receives more income because the principal amount adjusts upward to reflect the 5% inflation rate:

 $$100,000 + ($100,000 \times 5\%) = $105,000 \times 1\% = $1,050.$ 

The same math applies if inflation declines. If CPI decreases 5% in a year, the principal amount of a par bond would adjust to \$95,000, generating \$950 of interest from a 1% coupon. Once a TIPS matures, the investor will receive the greater of par or the adjusted principal amount.

#### Tax considerations

Investors should also consider the potential tax implications of investing in TIPS. Recognizing adjustments to principal value creates taxable events. The so-called "phantom income" created by this tax status means that

investors may experience negative after-tax cash flow during periods of high inflation.

Below is a hypothetical example of a 5-year timeline based on a \$100,000 par amount. As the table shows, annual interest payments will fluctuate cumulatively as the adjusted principal increases or decreases due to inflation.

## Hypothetical 5-year timeline

Year	Coupon	Inflation	Adjusted principal	Interest paid
1	1%	0%	\$100,000	\$1,000
2	1%	3%	\$103,000	\$1,030
3	1%	5%	\$108,150	\$1,082
4	1%	-2%	\$105,987	\$1,060
5	1%	-6%	\$99,628	\$996

Source - RBC Wealth Management

# Breakeven rates are important

Breakeven rates are important metrics for TIPS, because they calculate the difference between the yield on TIPS and the yield offered by traditional Treasury bonds. Breakeven rates are especially useful for measuring inflation expectations, which often fluctuate depending on the outlook for interest rates and economic growth. For example, if the 10-year breakeven rate is 3%, then markets are pricing annual inflation growth to be 3% over the next ten years.

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Breakeven rates also help investors analyze the rate that CPI inflation data would need to average over the life of the TIPS to outperform traditional Treasury securities. For instance, if an investor buys a five-year TIPS at a breakeven rate of 2%, the investor will generate greater returns by owning the TIPS if average CPI is above 2% through maturity, while traditional Treasury bonds would be the better option if CPI averages below 2%.

# Common misconeptions about TIPS

While TIPS are designed to offer protection against inflation, a common misconception is that TIPS always perform well during high inflation environments. For example, in 2022 robust spending and wage growth fueled U.S. inflation to the highest levels in four decades. Yet, despite inflation reaching 9.1% y/y in June 2022, TIPS still lost value. The Bloomberg U.S. TIPS Index ended 2022 returning negative 11.8%, marking the worst annual performance on record since TIPS were first introduced to the United States in 1997. Positively, TIPS performed better than Treasuries because of the higher inflation adjustment that helped offset rising interest rates.

Poor performance during 2022 serves as a reminder that although TIPS are commonly thought of as an inflation hedge, they're still subject to interest rate risk, and can be highly volatile.

#### Positive scenario for TIPS

TIPS often perform well during periods of unexpected inflation, such as when markets presume the end of a Fed tightening cycle while the economy experiences stronger-than-expected growth. This can be a goldilocks scenario for TIPS, because a dovish narrative from the Federal Reserve may cap nominal Treasury yields, while inflation may gradually increase as the economy recovers from previous rate hikes.

# Final thoughts

In our view, while TIPS can play an important role in fixed income portfolios, investors should recognize the risk components and potential tax consequences. TIPS can be valuable investments for preserving purchasing power during rising inflation; however, their prices are still subject to marked-to-market price declines when interest rates increase. That said, for low-risk investors willing to hold TIPS to maturity, the sector can generate greater total returns versus traditional Treasury securities if the actual average inflation is higher than the original breakeven rate on the purchase date.

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