iShares
by BlackRock

MECHANICS OF TIPS AND TIPS ETFs

What are TIPS?

The market for U.S. Treasury Inflation-Protected Securities (TIPS) has grown steadily since their introduction in 1997. TIPS are government bonds with principals that are adjusted with changes in inflation. The U.S. Treasury has issued over $1.7 trillion of TIPS outstanding as of March 31, 2022.

How do the TIPS bonds work?

TIPS are designed to protect investors from the risk of higher-than-expected inflation. TIPS will adjust their principal based on changes on U.S. Consumer Price Index (CPI) and pay out a fixed coupon rate on the principal. As the size of the principal is adjusted, the coupon will also change, increasing and decreasing with changes in CPI.

Principal amounts

Like a nominal U.S. Treasury, TIPS are issued with an original face value of $1,000. To measure inflation, the Treasury uses the CPI-U (Non-Seasonally Adjusted CPI Index for All Urban Consumers) to adjust the principal up or down. At maturity, an investor will receive the greater of the bond's original principal or the inflation-adjusted principal value.

Coupons

TIPS will pay out a fixed percentage of the principal as its coupon biannually until maturity. As the principal is adjusted up or down, the dollar amount of coupon paid out will vary. When TIPS are issued, their initial coupons are set at the prevailing real interest rate, which is the nominal rate of a similar duration Treasury adjusted for market assumptions of future inflation. TIPS's coupons generally yield less than Treasuries.

iShares TIPS ETFs

TIP — **iShares TIPS Bond ETF**
Expense ratio: 0.19%
Effective duration: 7.44 years

STIP — **iShares 0-5 Year TIPS Bond ETF**
Expense ratio: 0.03%
Effective duration: 2.48 years

Effective duration is a measure of the potential responsiveness of a bond or portfolio price to small parallel shifts in interest rates.

Types of marketable U.S. government debt

Type of Treasury bond	Total market value ($ bn)		% of total
Floating Rate Notes	$	619	2.66%
T-Bills (<1 year)	$	3,929	16.87%
Notes (1-10 years)	$	13,348	57.32%
Bonds (10+ years)	$	3,632	15.60%
TIPS (Inflation-protected)	$	1,752	7.52%
Federal Financing Bank	$	6	0.03%
Total Debt	**$**	**23,286**	**100.00%**

Source: U.S. Treasury as of 3/31/2022. Totals on marketable securities are provided by the U.S. Treasury in the Monthly Statement of the Public Debt as of 3/31/2022.

Key differences between TIPS and TIPS ETFs	TIPS ETFs	Individual TIPS Bonds
Diversified	Yes	No
Inflation adjustment	Paid monthly	Paid at maturity
Frequency of income payments	Monthly	Semi-annually
Exchange traded / intra-day prices	Yes	No, OTC
Set maturity date	No	Yes
Phantom income	No	Yes

Understanding TIPS ETF income distributions

TIPS ETFs pay out the earned income of the portfolio, including an inflation adjustment based on two months' prior CPI applied to the fund's underlying securities.

For tax purposes, the principal adjustment is classified as Treasury income and is distributed by the fund even though it is not distributed to individual TIPS security holders (known as phantom income). If there is deflation, the TIP ETF might omit or not pay a monthly distribution.

The monthly distribution is equal to:

Accrued Coupon Interest
- Premium amortization
+Discount accretion
- Net expenses
+/-Inflation adjustment
=ETF earned income

Timing of inflation adjustment and ETF income distribution

January	February	March	April
January 1-31 CPI measuring period	*February 20* January CPI released	*March 1-31* Daily rate applied	*April 1* ETF distribution paid

TIPS glossary

- **Inflation adjustments:** The principal amount of TIPS are adjusted by changes in the Consumer Price Index Non-Seasonally Adjusted All Urban Consumers index. This measures the changes in prices paid on a representative basket of goods and services. This metric is published monthly by the Bureau of Labor Statistics.
- **Real yields:** Yield of a nominal bond minus the rate of inflation. *Real Yield = Nominal Yield – Expected Inflation*
- **Breakeven inflation:** The difference between the yield of a nominal bond and an inflation-linked bond of the same maturity. This can be thought of as a market-based measure of inflation expectations, or the level of inflation required for investors to be indifferent (i.e. 'break-even') between holding the nominal bond and an inflation-linked bond.
- **Phantom income:** When TIPS principal value are adjusted upwards, the Internal Revenue Service (IRS) considers this change in value as income paid to the investor and is taxed. However, investors do not receive the cash flow from this income until the maturity of the bond, hence the term 'phantom income'. The ETF pays out the inflation adjustment in monthly income, which provides the cash flow to match the tax consequences.
- **30-Day SEC yield:** A standard calculation developed by the SEC to provide directly comparable values among bond funds. It reflects interest earned by the average investor during the most recent 30-day period, after deducting expenses, annualized. For TIPS ETFs, the SEC yield includes the CPI adjustment on the bonds over the period and is annualized. For months with larger changes in CPI, the fund's SEC yields may be greater than other yield metrics.

Carefully consider the iShares Funds' investment objectives, risk factors, and charges and expenses before investing. This and other information can be found in the Funds' prospectuses, which may be obtained by calling 1-800-iShares (1-800-474-2737) or by visiting www.iShares.com. Read the prospectus carefully before investing.
Investing involves risk, including possible loss of principal.

Bonds and bond funds will decrease in value as interest rates rise and are subject to credit risk, which refers to the possibility that the debt issuers may not be able to make principal and interest payments or may have their debt downgraded by ratings agencies. Securities with floating or variable interest rates may decline in value if their coupon rates do not keep pace with comparable market interest rates. The Fund's income may decline when interest rates fall because most of the debt instruments held by the Fund will have floating or variable rates.

Prepared by BlackRock Investments, LLC.

This information should not be relied upon as research, investment advice, or a recommendation regarding any products, strategies, or any security in particular. This material is strictly for illustrative, educational, or informational purposes and is subject to change.

iShares by BlackRock