Fund Focus

Equity

Fixed Income Real Assets

TDTT

FlexShares iBoxx 3-Year Target Duration /TIPS Index Fund

BUILT MAD TOUGH

For investors seeking the inflation-hedging attributes of TIPS with targeted duration exposure

Protecting against inflation is a popular investment strategy for many investors. And in their pursuit of inflation-hedging investments, Treasury Inflation-Protected Securities, or TIPS, often are investors' top choices.

However, investors using TIPS must consider these securities' duration¹—a key measurement of sensitivity to interest rate movements. We believe that targeting a specific duration based on a portfolio's interest rate exposure is key to successfully protecting against the threat of inflation. That being said, TIPS present more challenges to managing duration than most other fixed-income investments.

In this paper, we offer a closer look at some of those challenges. We then explain the methodology that the FlexShares iBoxx 3-Year Target Duration TIPS Index Fund (TDTT) uses to manage duration and interest rate risk in a portfolio that holds TIPS to hedge against the threat of inflation.



WHY TIPS REQUIRE A SPECIAL APPROACH TO DURATION MANAGEMENT

Although most investors believe that inflation isn't likely to reach the same high levels as was seen in the 1970s, many investors still seek protection from its corrosive effects. One popular inflation-hedging investment vehicle is Treasury Inflation-Protected Securities, or TIPS. The value of these bonds is that their principal grows at the same rate that prices—as measured by Consumer Price Index—rise.

But while TIPS offer a relatively simple way to potentially hedge against rising inflation, investing in these bonds can prove to be more complex or investors seeking to manage their price changes. In particular, changing inflation expectations can affect these securities' durations, potentially leaving investors with more interest rate risk than they expected in their portfolios.



Investors often use duration to directly compare bonds with different maturities and coupon rates. You will often see duration expressed as a number of years: The higher the number, the more volatile a bond's price will be as interest rates change. For example, long-term bonds carry greater interest rate risk than shorter-term bonds because of the longer time required to receive principal repayment and a significant percentage of income, negatively affecting a bond's market price if interest rates indeed rise.

However, managing duration in a TIPS portfolio can be more challenging than in other bond portfolios because of TIPS' unique inflation-protected structure. Duration only measures one factor that affects TIPS returns: changes to interest rates. But measuring TIPS duration also means factoring in changing inflation expectations, which can affect these bonds' returns. As a result, TIPS bonds require a unique duration metric called *modified adjusted duration* (MAD) in order to judge their performance against the broader market of fixed-income securities. MAD is the market's estimate of the duration on a TIPS bond based on inflation expectations at that point in time. Since inflation expectations are highly variable, a TIPS bond's MAD can change quickly.

In our view, successful TIPS investing calls for focusing on MAD. We believe that targeting the durations of TIPS more precisely can help investors better manage their investment risks by tailoring more effective inflation-hedging strategies for their portfolios. Yet keeping a TIPS portfolio close to its target duration can be a time-consuming and costly process that requires constant oversight and trading to keep the MAD within that target range.



MODIFIED ADJUSTED DURATION

MAD is the market's estimate

of the duration on a TIPS bond

based on inflation expectations

at that point in time.

THE FLEXSHARES SOLUTION: A RULES-BASED METHOD FOR MANAGING DURATION

FlexShares iBoxx 3-Year Target Duration TIPS Index Fund (TDTT) seeks to effectively remove variability around duration in a TIPS portfolio by tracking its underlying index, the iBoxx 3-Year Target Duration TIPS Index².

Markit, the index provider, uses a transparent, rules-based methodology to target a precise MAD within a range of +/-5% of its three-year duration target. The index first examines the universe of TIPS bonds with at least \$2 billion outstanding, then it further refines that list to include TIPS with maturities between one and 10 years.

Next, the index allocates the majority of its exposure to a core group of five issues with durations closest to its target of three years. The index typically holds between 10 and 15 issues and is rebalanced monthly to maintain that target duration. If the index's MAD shifts because of changing inflation expectations, issues with longest or shortest durations are reallocated to holdings closest to the index's duration target. The index also has constraints in place to avoid violating wash-sale rules, which means the index can't re-purchase a bond it sold the month before.



A POTENTIAL LONG-TERM STRATEGY TO HELP FIGHT INFLATION

While other market capitalization weighted TIPS funds may be subject to unpredictability as inflation expectations change, the FlexShares iBoxx 3-Year Target Duration TIPS Index Fund (TDTT) is designed to target TIPS durations through changing interest rate and economic cycles. The key difference is the index's rules-based process for portfolio construction and monthly rebalancing.

We believe this approach gives investors an opportunity to build potential inflationhedging strategies that match their overall investment strategy while helping to manage interest rate risk—regardless of how inflation expectations shift over time.

CONCLUSION

Investors often choose TIPS to help protect against the damaging effects of inflation. But while TIPS offer an effective hedge against rising inflation, their unique characteristics also make it more difficult for investors to manage the duration of a TIPS portfolio. As a result, investors may find that their efforts to use TIPS as a hedge against inflation introduces them to unexpected interest rate risk as these investments' duration shifts over time.

FlexShares iBoxx 3-Year Target Duration TIPS Index Fund (TDTT) may provide investors with the inflation protection they seek from TIPS, while also maintaining a target duration that stays relatively constant over time. We believe this rules-based methodology offers a distinct advantage over traditional TIPS portfolios for investors who want to manage both inflation risk and interest-rate risk in their portfolios.

FIND OUT MORE

The FlexShares approach to investing is, first and foremost, investor-centric and goal oriented. We pride ourselves on our commitment to developing products that are designed to meet real-world objectives for both institutional and individual investors. If you would like to discuss the attributes of any of the ETFs discussed in this report in greater depth or find out more about the index methodology behind them please don't hesitate to call us at 1-855-FlexETF (1-855-555-9585).

FOOTNOTES

1 Duration is how sensitive your investment or a portfolio is to a change in interest rates. You will often see it expressed as a number of years – the higher the number the more volatile will be the expected change. Historically, rising interest rates have often meant falling bond prices, while declining interest rates have meant rising bond prices.

2 iBoxx 3-Year Target Duration TIPS Index measures the performance of Treasury Inflation Protected Securities (TIPS) targeting a modified adjusted duration of 3.0 years and TIPS as having no less than one year and no more than ten years until maturity

IMPORTANT INFORMATION

Before investing, carefully consider the FlexShares investment objectives, risks, charges and expenses. This and other information is in the prospectus and a summary prospectus, copies of which may be obtained by visiting www.flexshares.com. Read the prospectus carefully before you invest.

Foreside Fund Services, LLC, distributor.

An investment in FlexShares is subject to numerous risks, including possible loss of principal. Fund returns may not match the return of the respective indexes. A full description of risks is in the prospectus.

FlexShares iBoxx 3-Year Target Duration TIPS Fund (TDTT) is passively managed and primarily uses a replication strategy to track its underlying index. Use of a replication strategy creates tracking risk where the Fund's performance could vary substantially from the performance of the underlying index along with the risk of high portfolio turnover. It may invest in derivative instruments. Changes in the value of the derivative may not correlate with the underlying asset, rate or index and the Fund could lose more than the principal amount invested. The Fund is subject to fluctuation of yield risk, income risk, inflation protected security risk and interest rate/maturity risk. The Fund is non-diversified meaning the Fund performance may depend on the performance of a small number of issuers because the Fund may invest a large percentage of its assets in securities issued by or representing a small number of issuers.

The iBoxx 3-Year Target Duration TIPS Index is the intellectual property (including registered trademarks) of Markit iBoxx and/or its licensors ("Licensors"), which is used under license. The securities based on the Index are in no way sponsored, endorsed, sold or promoted by Markit iBoxx and its Licensors and neither of the Licensors shall have any liability with respect thereto.