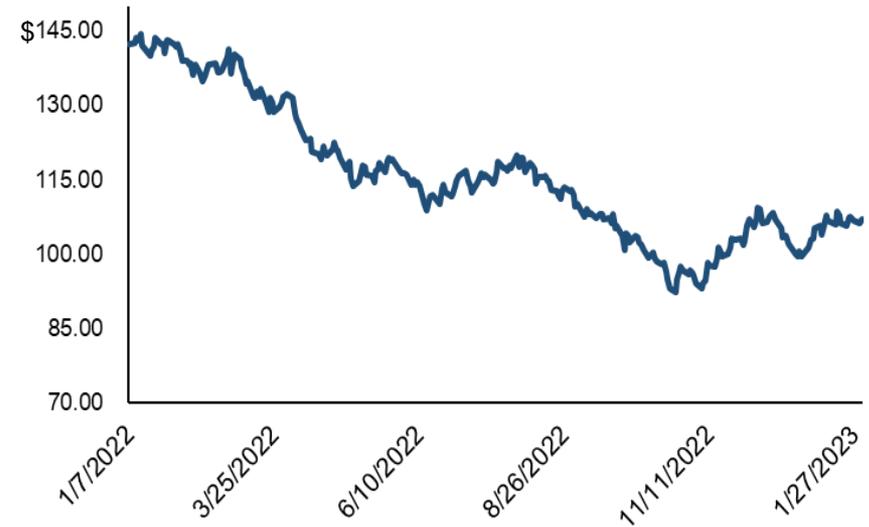




TLT | One-Year Price Chart



Position Details

- iShares 20+ Year Treasury Bond ETF | TLT
- Underlying Price: \$108.33
- Bull Call Spread
- Expiration Date: August 18, 2023

Interest Rate Products Sector

Associate

Rishi Khanna
rishi.khanna03@gmail.com

Analyst

Joseph Piccirilli
josephvpiccirilli@gmail.com

Analyst

Adi Wodeyar
adiwodeyar@gmail.com

President

Anthony Bruno
anthonybruno2186@gmail.com

Chief Investment Officer

Phil Sullivan
philsullivan10@gmail.com

Director of Risk

Eric DuBartell
ericdubartell@gmail.com

Table of Contents

- I. Product & Position Overview
- II. Macroeconomic Thesis
- III. Risk Analysis
- IV. Technical Bias & Fair Value
- V. Capital Allocation



I. Product & Position Overview

Product & Position Overview

Product Description

- **iShares 20+ Year Treasury Bond ETF**
 - The iShares 20+ Year Treasury Bond ETF (TLT) is an exchange-traded fund that tracks the returns of U.S Treasury bonds with maturities over 20.00 years
 - It was created in 2002FY with 99.21% of the fund's holdings being longer-term U.S. Treasury securities
 - TLT's benchmark is the ICE US Treasury 20+ Year Index
 - TLT traded down significantly in 2022FY primarily due to the elevated levels of inflation as well as the Federal Reserve's monetary policy tightening cycle
 - Long-term U.S. Treasury securities bonds are primarily driven by macroeconomic conditions and inflation

Payoff Diagram



Trade Breakdown

- **Bull Call Spread**
 - This strategy benefits from increases in the prices and decreases in the yields of long-term Treasury securities
- **Setup**
 - We Buy – 8,000.00 ITM \$100.00 Calls (\$11.70) | TLT
 - We Sell – 8,000.00 OTM \$120.00 Calls (\$2.02) | TLT
 - Max Profit: \$8,256,000.00
 - Max Loss: (\$7,744,000.00)
- **Expiration**
 - Date: August 18, 2023

Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
 - **\$98.00 / \$115.00 / \$120.00**
 - Breakeven – \$109.68
- **Methodology**
 - The Sector holds that the underlying will trade up as inflationary pressures ease and rate hikes pause
- **Hedge Strategy**
 - If inflation continues to remain high moving into 2023FY, the Sector will exit the position through a reverse trade



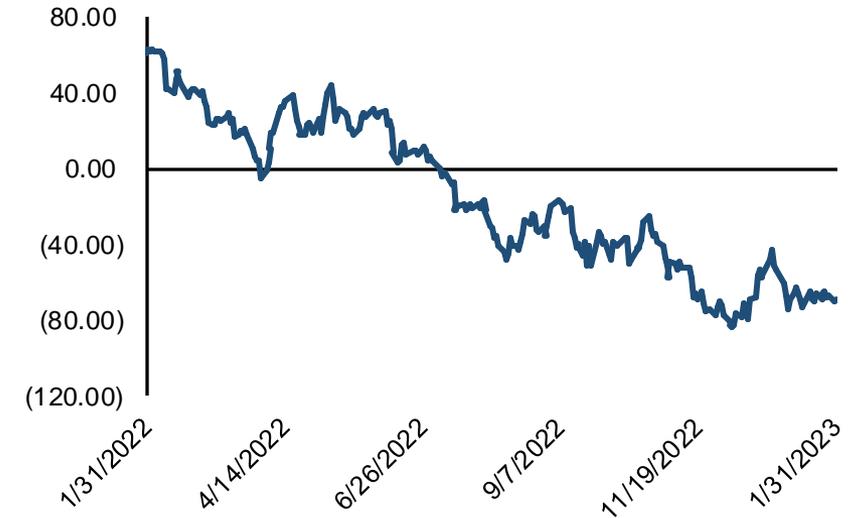
II. Macroeconomic Thesis

Macroeconomic Thesis

Macroeconomic Summary

- **Understated Recessionary Fears**
 - In a potential recessionary environment, investors will likely flock to safer investments, such as fixed income securities, as the Federal Reserve halts its interest rate increases
 - In 4Q2022 and the beginning of 2023FY, fixed income ETFs have traded up significantly, as investors largely exit equity investments and move into safer alternatives
 - The recent market trade up presents a strong buying opportunity for longer term bonds, as the economy begins to feel the effects of tightening monetary policy
- **Decreasing Inflation Figures**
 - After reaching historic highs in September 2022FY, inflation has shown signs of cooling in the past four months
 - With core PCE, the Fed's preferred inflation gauge, decreasing to ~4.40% as well as core CPI falling 0.10%, fixed income investors are now pushed into a position where they can benefit off recessionary pressures and a decrease in inflationary pressures at large
- **Recovering Credit Spreads**
 - The Investment Grade Credit Spread has reached ~125.00 bps, which represents a significant decrease from a year-long high of ~170.00 bps in October 2022FY
 - The decrease in credit spreads reflects lower market perceived risk in credit markets, in addition to the flow of investor capital back into fixed income investments
 - Credit spreads will continue to decrease and stabilize as credit markets witness increased capital inflows, which will also contribute to higher volatility in the underlying ETF

2-10 U.S. Treasury Yield Spread (bps) | One-Year Chart



Market Pros & Cons

- Inflation continues to decrease as interest rates remain elevated
- Bond ETFs see greater inflows as investors seek stable returns
- Secular factors continue to keep inflation at elevated levels
- Economic growth remains strong, leading investors to equities



III. Risk Analysis

Risk Analysis

Directional & Magnitude Risk

- **Delta Analysis**

- The trade has a Delta value of 0.4552
- The trade benefits from bullish price movements in the underlying, which corresponds with a broader decrease in the yields of long-term U.S. Treasury securities

- **Gamma Analysis**

- The trade has a Gamma value of 0.0004
- Gamma is somewhat negligible for this trade, since a call option is being bought and sold

Implied Volatility Risk

- **Vega Analysis**

- The trade has a Vega value of 0.0048
- The trade is long volatility for the duration of the trade, as the premiums for each leg of the spread would increase
- Sustained inflows into U.S. Treasury markets at large will increase the volatility of fixed income markets
- The implied volatility for each leg of the trade is ~17.00%

Time Risk

- **Theta Analysis**

- The trade has a Theta value 0.0021
- Theta is positive for the trade because the premium for the long call is substantially higher than that of the short call
- To enter the position, the Sector is a net payer in premiums, so as time progresses, the trade should appreciate in value

Interest Rate Risk

- **Rho Analysis**

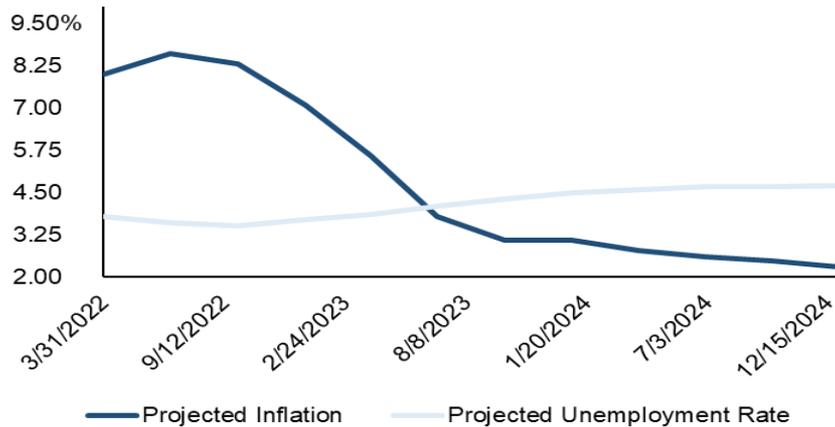
- The trade has a Rho value of (0.0460)
- Rho is somewhat significant for the trade, since U.S. Treasury securities are largely correlated with movements in the target range for the federal funds rate
- Although longer-term fixed income securities tend to be less affected by interest rate increases, sustained rate hikes could lead to elevated yields on these bonds



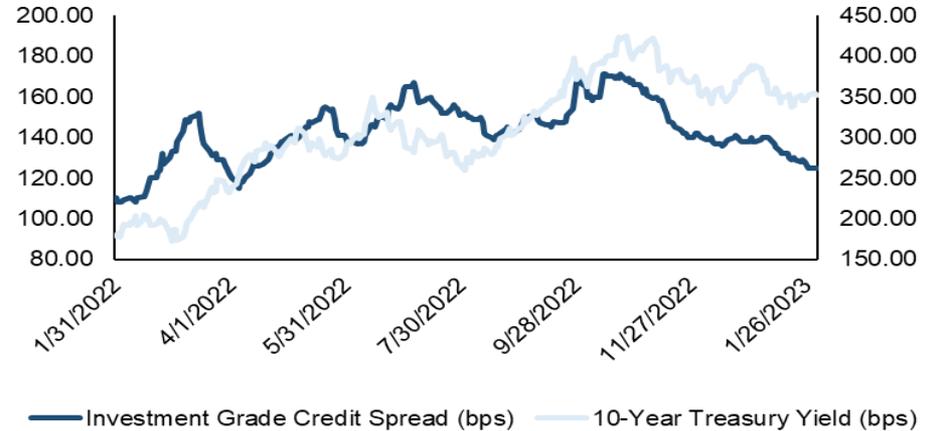
IV. Technical Bias & Fair Value

Technical Bias & Fair Value

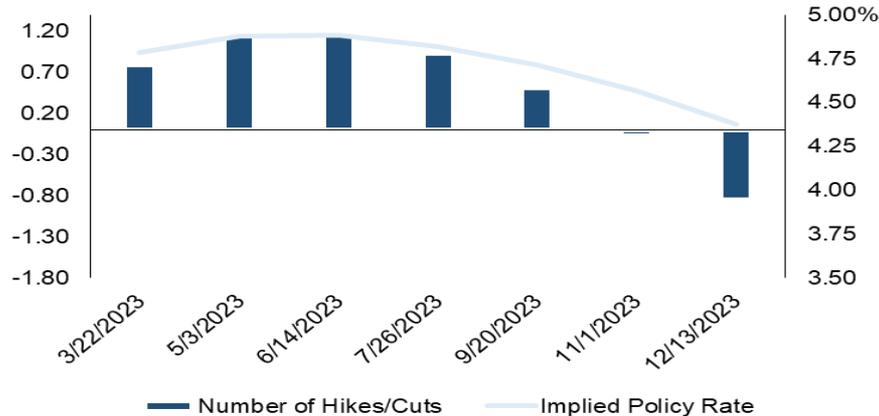
Projected Inflation vs. Projected Unemployment | Three-Year Chart



Investment Grade Credit vs. 10-Year Treasury Yield | Two-Year Chart



WIRP Federal Funds Rate | One-Year Chart



Synopsis

- As inflation returns to its two percent target in the long-run, investors at large will likely flock to stable longer-term fixed income securities due to their stability of cash flows and seemingly risk-free returns
- Credit spreads have shown a decrease in market perceived risk within credit markets, as corporations at large have remained liquid
 - The credit spread tightening has also showed resumed flows into fixed income securities following selloff in 2022FY
- The recent market trade up and lasting effects from the Federal Reserve's ongoing monetary policy tightening cycle presents a strong buying opportunity for U.S. Treasury securities that are underpriced



V. Capital Allocation

Capital Allocation

