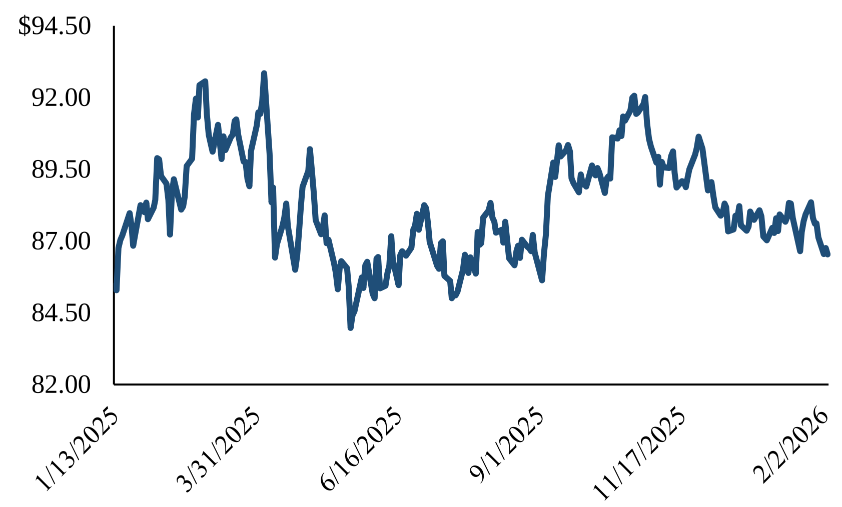
TLT | One-Year Price Chart



Position Details

- iShares 20.00+ Year Treasury Bond ETF | TLT
- Underlying Price: $87.52
- Put Ratio Spread
- Expiration Date: June 18, 2026

Interest Rate Products Sector

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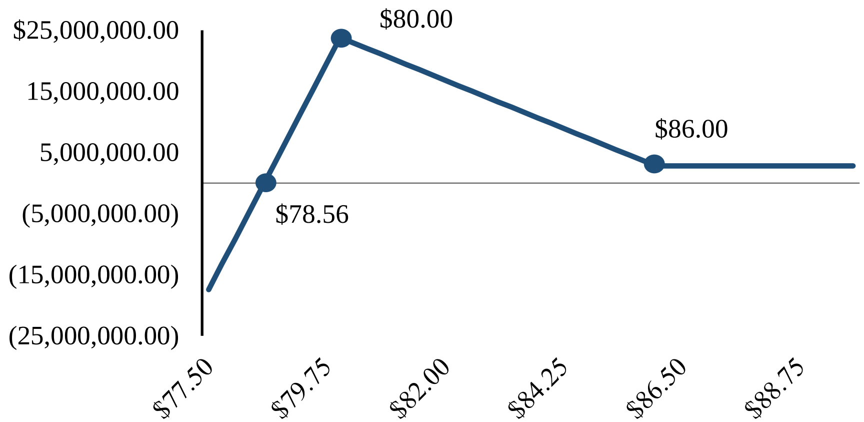
I. Product & Position Overview

Product & Position Overview

Product Description

- **iShares 20.00+ Year Treasury Bond ETF**
  - TLT is a treasury bond ETF that tracks 20.00+ Year U.S. Treasury Bond prices, which make up 99.76% of the index. The additional 0.24% of the index is held in cash
  - The index provides investors with a diversified portfolio of safe-haven securities backed by the U.S. It is one of the most actively traded Treasury Bond ETFs on the market. The benchmark for the ETF is the ICE U.S. Treasury 20.00+ Bond Index
  - The price of the ETF is largely affected by macroeconomic data, investor sentiment, and monetary policy, as long-duration Treasury Bonds are more sensitive to interest rate fluctuations

Payoff Diagram



Trade Breakdown

- **Put Ratio Spread**
  - This trade benefits from minor bearish movement in the underlying until it passes the lower strike, where it starts to lose value
- **Setup**
  - We Buy – 35.00 k OTM $86.00 Puts | TLT
  - We Sell – 200.00 k OTM $80.00 Puts | TLT
  - Max Profit: $23,810,000.00
  - Entry Credit: $2,810,000.00
  - Theoretical Max Loss: ($940,000.00)
- **Expiration**
  - Date: June 18, 2026

Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
  - **$80.00 / $85.00 / $78.00**
  - Breakeven – $78.56
- **Methodology**
  - The sector looks to profit from minor bearish movement in the underlying, resulting from a moderate increase in yields
- **Hedge Strategy**
  - The sector would look to buy back 200.00 k puts if TLT reaches $78.50, to minimize potential loss if yields surge

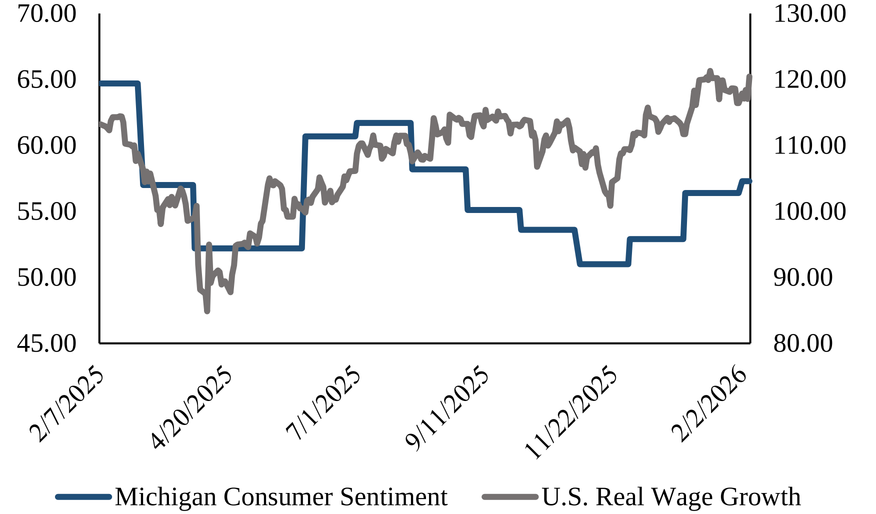
II. Macroeconomic Thesis

Macroeconomic Thesis

Macroeconomic Summary

- **Supply Constraints and Rising Input Costs Keep Inflation Elevated**
  - Immigrants make up ~30.00% of the construction labor force in the U.S. With a current estimated housing shortage of 3.50 mm to 5.00 mm homes, reduced construction labor further constrains supply with only 1.50 mm homes built per year, putting upward pressure on home prices, which account for ~60.00% of inflation
  - Core PPI came in at 0.70% m/m in December, and PPI came in at 0.50% m/m, both exceeding expectations of a 0.20% increase, signaling higher input costs associated with tariffs. 57.00% of firms are also expecting to increase prices in 1Q2026
- **Continued Foreign Divestment in U.S. Bonds Pushes Yields Higher**
  - President Trump's persistence in acquiring Greenland caused a Danish pension fund to sell $100.00 mm of U.S. bonds, while a Greenland pension fund looks to sell ~$40.12 bn of U.S. bonds
  - Japan, the largest holder of U.S. debt, recently had a major selloff of U.S. long-term bonds, as JGB 40.00-Year yields spiked to new highs. China also reduced its U.S. Treasury holdings by ~10.00% in 2025, reaching the lowest levels since 2008
- **Short-Term Rate Stability with Hawkish Pressures Ahead**
  - In the January FOMC meeting, Powell reiterated a cautious approach to monetary policy due to inflation remaining sticky at 2.70% and the unemployment rate seemingly stabilizing around 4.40%. Lisa Cook has mentioned "inflation has stalled", calling for a pause in monetary policy changes in the short-term
  - Once Kevin Warsh takes over as Fed Chair in May, the Fed will shift further hawkish to align with Warsh's plan to begin QT and shrink the balance sheet to focus on price stability

Michigan Consumer Sentiment vs U.S. Real Wage Growth | One-Year Chart



Market Pros & Cons

- Trump administration tariffs increasing manufacturing inside U.S.
- Tight corporate credit spreads signaling economic confidence
- Rising geopolitical tensions trigger a war, spiking inflation
- Escalating concerns as U.S. debt reaches $38.57 T

III. Risk Analysis

Risk Analysis

Directional & Magnitude Risk

- **Delta Analysis**
    - The Delta for this trade is 0.3511, meaning that for every $1.00 change in the underlying TLT contract, the price of the ratio spread will change by $0.3511 in value
    - The Delta for this trade is positive because the strategy involves selling 5.71x the amount bought puts, and the positive Delta of the short puts outweighs the negative Delta of the long puts
- **Gamma Analysis**
    - The Gamma for this trade is (0.1125), meaning every $1.00 change in the underlying, the Delta value changes by ($0.1125)

Time Risk

- **Theta Analysis**
    - The Theta value for this trade is 0.0842, meaning the position gains $0.0842 in value as each day passes
    - Theta is positive in this trade because the strategy is a net credit strategy that starts off with profit, so time decay benefits the position as there is less time to pass the lower strike

Implied Volatility Risk

- **Vega Analysis**
    - The Vega value for this trade is (0.4332), meaning that a 100.00 bps change in implied volatility will cause a ($0.4332) change in the value of the put ratio spread
    - Vega is negative for this trade because it represents a moderately bearish position that still benefits from low volatility. The position benefits from moderate bearish movement up until the lower strike, where the trade begins to lose value, but also stable prices due to the trade being a net credit position

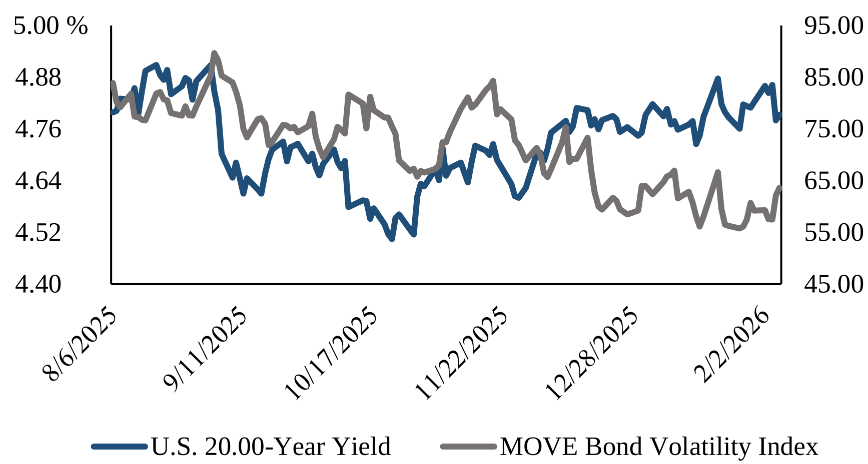
Interest Rate Risk

- **Rho Analysis**
    - The Rho value for this trade is 0.0025, meaning for every 1.00% increase in interest rates, the value of the put ratio spread increases by $0.0025
    - Rho is small and slightly positive for this trade because the net position is dominated by short puts, which gain slightly when rates rise, offsetting the negative rho of the long put

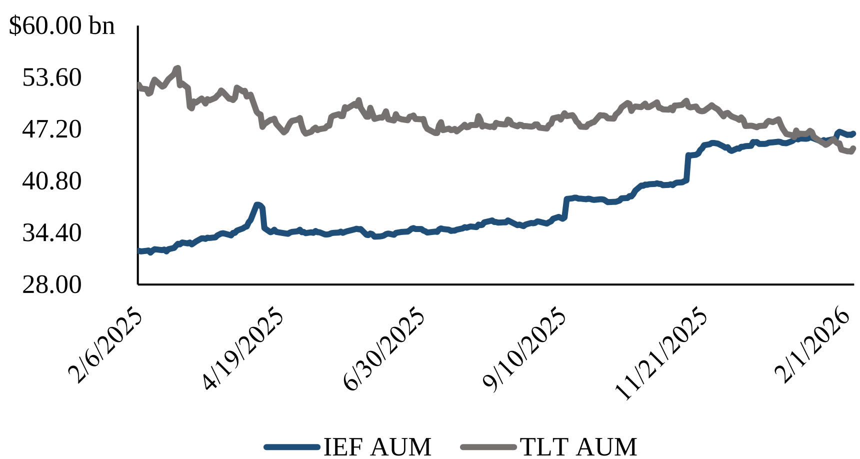
IV. Technical Bias & Fair Value

Technical Bias & Fair Value

U.S. 20.00-Year Yield vs MOVE Volatility Index | Six-Month Price Chart



IEF Total AUM vs TLT Total AUM | One-Year Price Chart



Monte Carlo

Output	Short Put	Long Put
Value	$ 0.3559	$ 1.8886

Synopsis

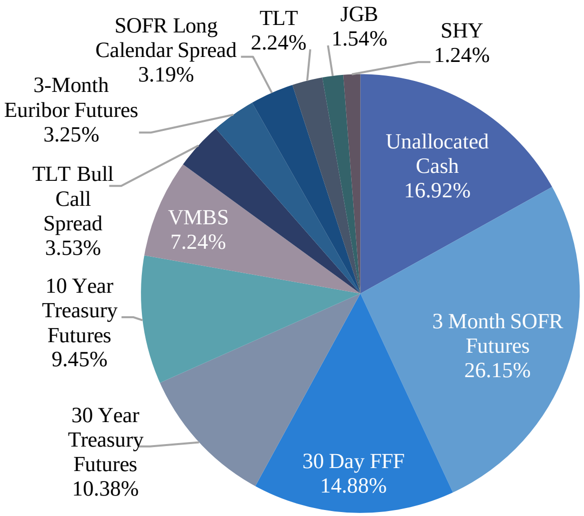
- The MOVE Volatility Index measures the implied volatility for the bond market over the next 30.00 days. As the index continues to decline, it is showing the market expects smaller yield swings and an overall calmer bond market. The rising 20.00-Year yield reflects rising inflation expectations and higher term premium demand from investors. The combination of a rising 20.00-Year yield with the declining MOVE index suggests yields are increasing in a controlled manner, as opposed to panic or volatility spikes

- The top right graph displays investors rotating away from the long end of the yield curve, as assets under management decline in TLT ~15.00% y/y and shift into more intermediate-duration exposure in IEF, as AUM is up ~45.00% y/y. As investor demand continues to weaken on the long end of the yield curve, long-term yields will rise and prices will fall as investors continue to remain cautious about long-term inflation expectations

V. Capital Allocation

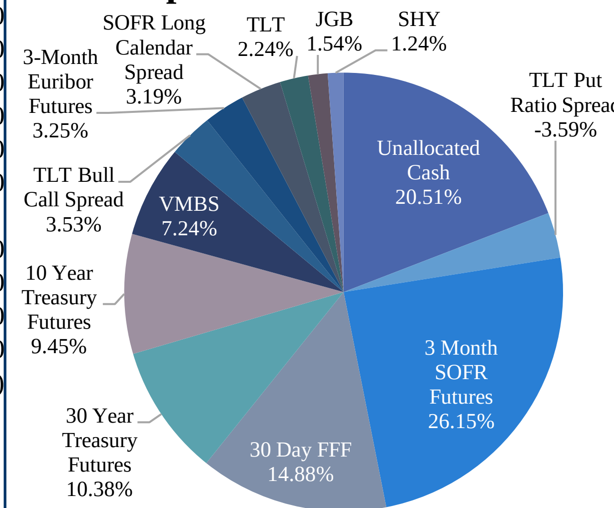
Capital Allocation

Current Portfolio Allocation

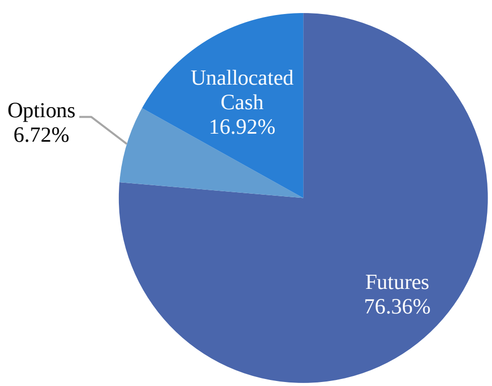


Transaction Summary		
	Position Change	
Ticker	Contracts	Allocation
3 Month SOFR Futures	0	$0.00
30 Day FFF	0	$0.00
30 Year Treasury Futures	0	$0.00
10 Year Treasury Futures	0	$0.00
VMBS	0	$0.00
TLT Bull Call Spread	0	$0.00
3-Month Euribor Futures	0	$0.00
SOFR Long Calendar Spread	0	$0.00
TLT	0	$0.00
JGB	0	$0.00
SHY	0	$0.00
TLT Put Ratio Spread	+235.00 k	($2,810,000.00)
Allocation Change		($2,810,000.00)

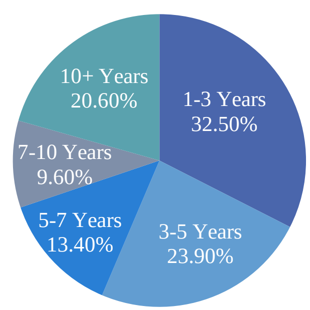
Proposed Portfolio Allocation



Current Position Allocation



Benchmark Allocation



Proposed Position Allocation