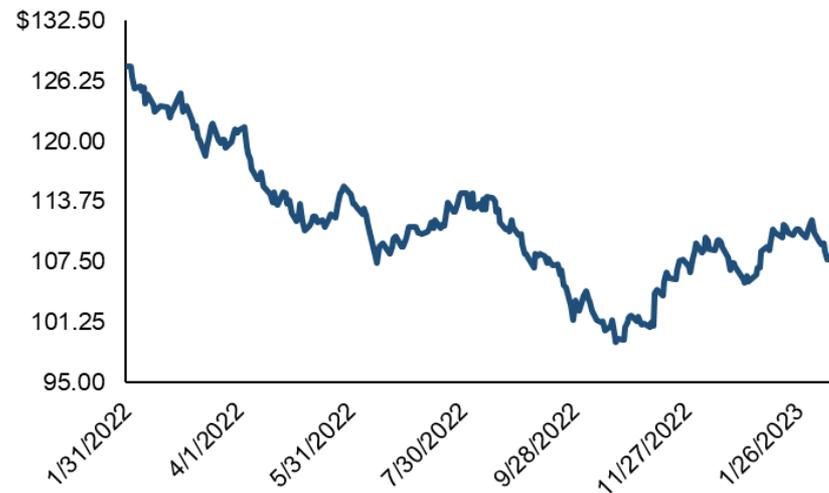




Position Details

- iShares iBoxx \$ Investment Grade Corporate Bond ETF | LQD
- Underlying Price: \$106.03
- Bull Call Spread
- Expiration Date: December 15, 2023

LQD | One-Year Price Chart



Interest Rate Products Sector

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Table of Contents

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



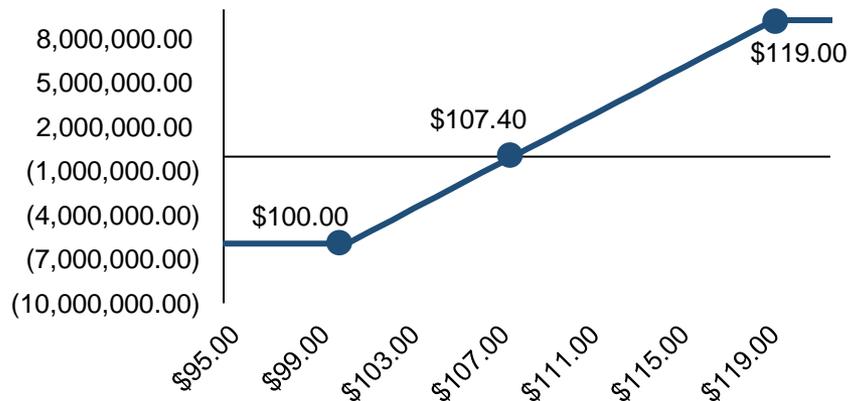
I. Product & Position Overview

Product & Position Overview

Product Description

- **iShares iBoxx \$ Investment Grade Corporate Bond ETF**
 - LQD is an ETF that tracks the investment results of an index made up of U.S. dollar-denominated, investment-grade corporate bonds
 - The ETF has core exposure to the Markit iBoxx USD Liquid Investment Grade Index, with at least 80.00% of assets in the securities of the underlying index
- **Top Sector Weightings**
 - Financials | 30.74%
 - Consumer, Non-cyclical | 20.64%
 - Communications | 13.18%

Payoff Diagram



Trade Breakdown

- **Bull Call Spread**
 - This trade benefits from increases in the prices and decreases in the yields of investment grade securities
- **Setup**
 - We Buy – 8,000.00 ITM \$100.00 Calls (\$8.25) | TLT
 - We Sell – 8,000.00 OTM \$119.00 Calls (\$0.85) | TLT
- **Expiration**
 - Date: December 15, 2023

Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
 - **\$119.00 / \$114.00 / \$99.00**
 - Breakeven – \$107.40
- **Methodology**
 - The Sector believes that the underlying will trade up ~12.00% as fixed income continues to recover and inflation continues to return to its 2.00% target
- **Hedge Strategy**
 - Should inflationary pressures remain high beyond 2Q2022, the Sector will look to exit the position by reverse trading



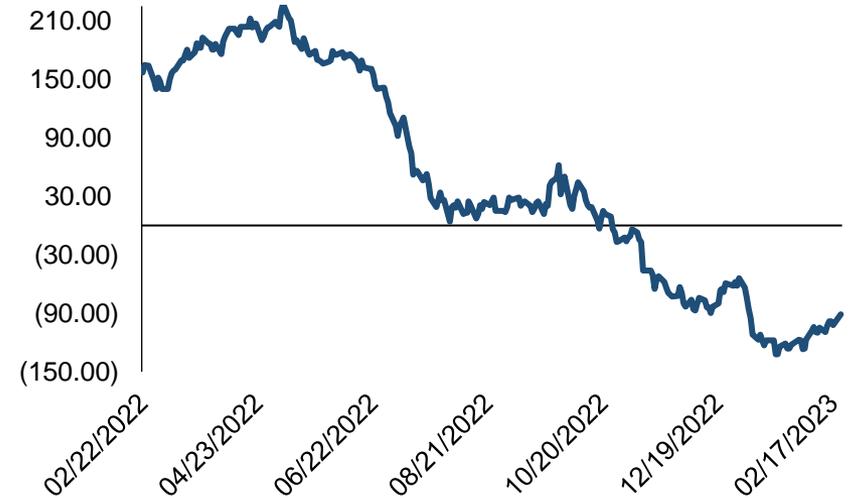
II. Macroeconomic Thesis

Macroeconomic Thesis

Macroeconomic Summary

- **Return to Fixed Income**
 - With a possible recession on the horizon, investors have already begun the return to fixed income securities, which are generally viewed as safer investments than equities
 - Exchange-traded fixed income funds have netted inflows for 6.00 of the past 7.00 weeks, with outflows coming after a hotter-than-expected CPI report
 - The increasing fund inflows suggest a buying opportunity for the underlying, as 26.39% of the underlying's holdings have over 20.00+ years until maturity
- **Tightening Credit Spreads**
 - The U.S. High Yield Credit Spread is around ~438.00 bps, which represents a significant contraction from its high of ~599.00 bps in July 2022FY
 - The tightening of credit spreads is indicative of investors recognizing a lower overall perceived risk to credit markets
- **Reductions in Inflation**
 - Despite January CPI coming in hotter-than-expected at 6.40%, inflation has continued to show signs of cooling over the course of the last 7.00 months
 - The Fed's preferred inflation gauge, core PCE, has continued to be cyclical, but has shown signs of subsiding, reaching a yearly low of 4.40%
 - With additional rate hikes now priced in by markets, an eventual decrease in inflation will be followed by a decrease in the yields of longer-term bonds

10-Year-3-Month Treasury Yield Spread (bps) | One-Year Chart



Market Pros & Cons

- Full effect of interest rate hikes begins to be felt
- European credit spreads widen
- U.S. Government defaults on debt
- Banks recognize massive unrealized losses



III. Risk Analysis

Risk Analysis

Directional & Magnitude Risk

- **Delta Analysis**
 - The trade has a Delta value of 0.4556
 - This trade benefits off of bullish price movements in the underlying, which is correlated with a decrease in the yields of investment grade securities
- **Gamma Analysis**
 - The trade has a Gamma value of 0.0039
 - Due to the fact that a call option is being both bought and sold, Gamma will be somewhat insignificant

Implied Volatility Risk

- **Vega Analysis**
 - The trade has a Vega value of 0.0540
 - This trade is long volatility for its duration, as the premiums of each leg of the spread would continue to appreciate
 - Continued inflows for exchanged-traded fixed income funds markets will prolong increased volatility in the market
 - The implied volatility for both legs of the trade is ~15.00%

Time Risk

- **Theta Analysis**
 - The trade has a Theta value of (0.0011)
 - Theta is negative for this trade as the premium for the short call is significantly lower than that of the long call
 - This lower Theta value is due to the longer duration of the trade, as time value decays exponentially the longer the trade remains out of the money

Interest Rate Risk

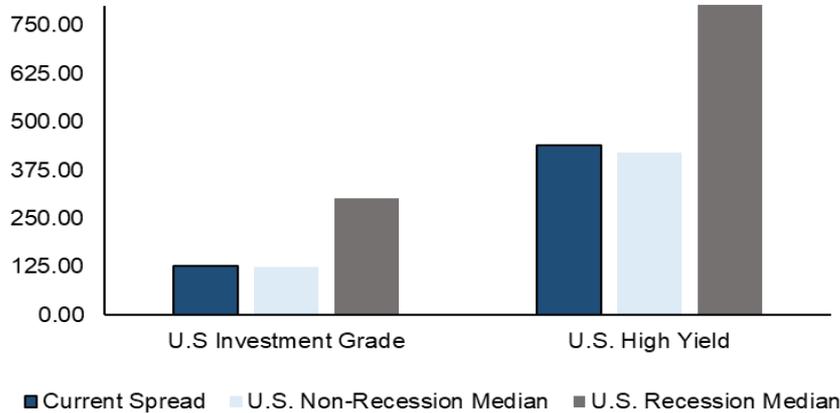
- **Rho Analysis**
 - The trade has a Rho value of (0.0576)
 - Rho is somewhat significant for the trade, as bond yields for any security are closely correlated with movements in the federal funds rate target range and inflation
 - As longer-term fixed income securities are typically less affected by interest rate hikes, an increase in inflation beyond market expectations could lead to elevated yields



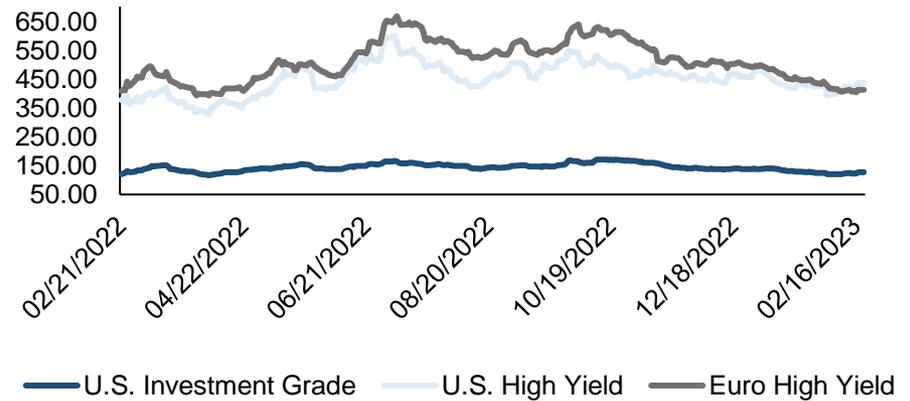
IV. Technical Bias & Fair Value

Technical Bias & Fair Value

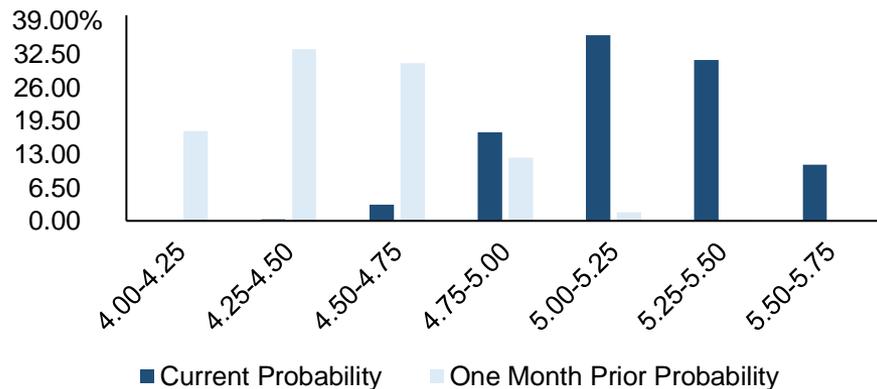
Credit Spreads vs. Historical Median Spread (bps)



Investment Grade Spread vs. Varying High Yield Spreads (bps)



Year-End Target Rate Probabilities | Federal Funds Rate



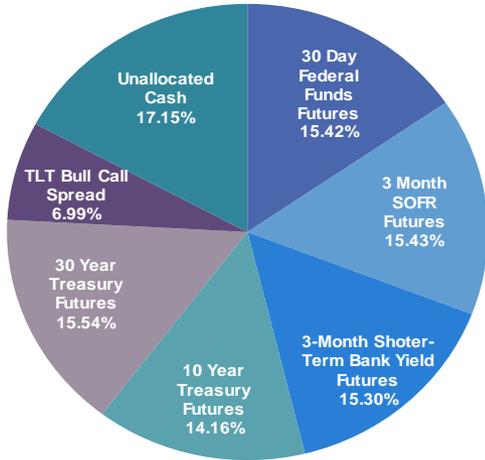
Synopsis

- By analyzing credit spreads during normal market conditions and during recessions, an average median spread shows how current credit spreads compare to prior years
 - With current spreads much closer to non-recessionary median levels, we can expect tightening to continue
- As spreads continue to tighten, investors will continue to buy-in to fixed income securities, as longer-term, higher-yielding debt becomes more attractive to the market as a whole
- With markets now pricing in a higher target rate by year-end, this cycle of rate hikes from the Fed is likely to come to an end as macroeconomic conditions continue to improve throughout the year

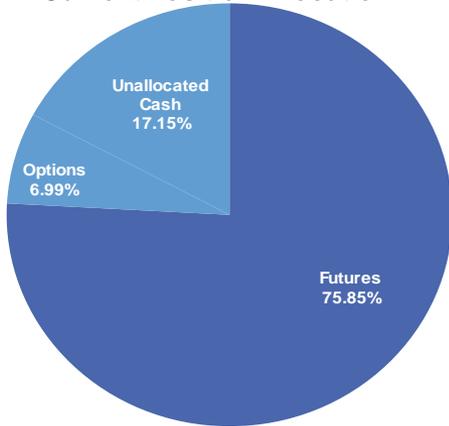
V. Capital Allocation

Capital Allocation

Current Portfolio Allocation



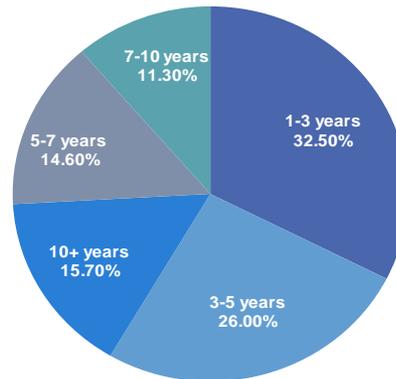
Current Position Allocation



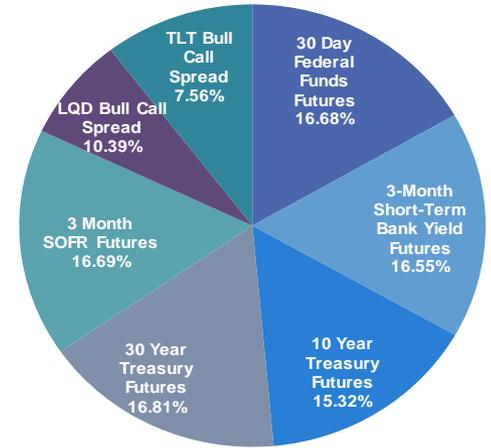
Transaction Summary

Ticker	Position Change	
	Contracts	Allocation
10 Year Treasury Futures	0	\$0.00
3 Month SOFR Futures	0	\$0.00
30 Day Federal Funds Futures	0	\$0.00
30 Year Treasury Futures	0	\$0.00
3-Month Short-Term Bank Yield Futures	0	\$0.00
TLT Bull Call Spread	0	\$0.00
LQD Bull Call Spread	+ 8000	\$5,920,000.00
Allocation Change		\$5,920,000.00

Benchmark Allocation



Proposed Portfolio Allocation



Proposed Position Allocation

