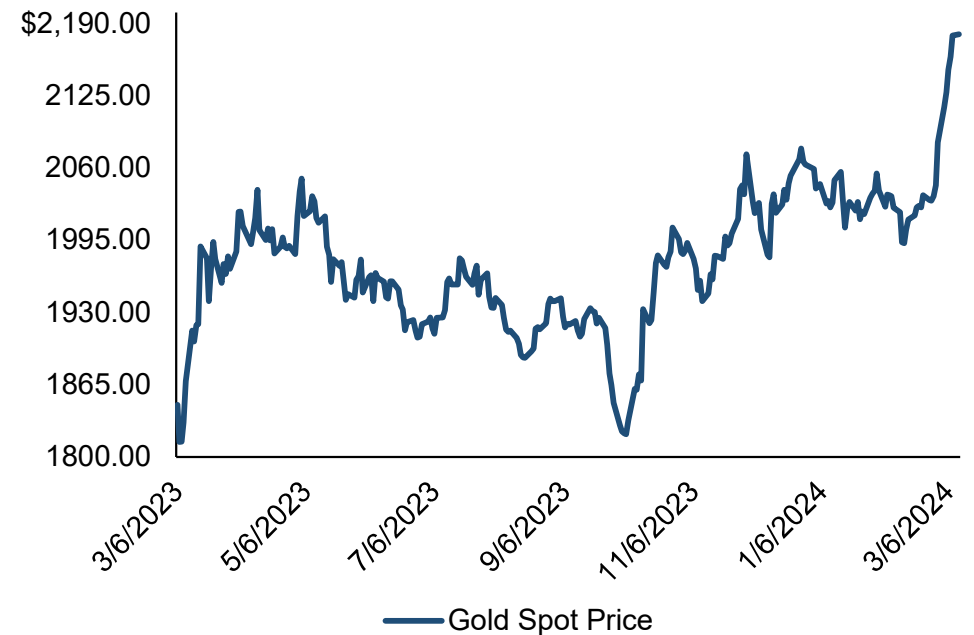




Gold | One-Year Price Chart



Position Details

- Gold | GC1
- Underlying Price: \$2,184.00
- Bull Call Spread
- Expiration Date: December 25th, 2024

Metals Sector

Analyst

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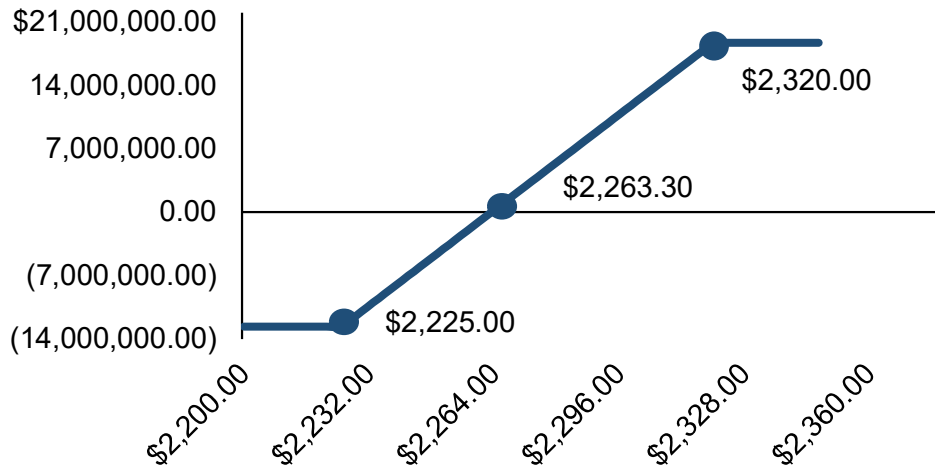
I. Product & Position Overview

Product & Position Overview

Product Description

- **Gold**
 - Gold is a raw material found in nature in a pure form. It is a precious metal used as a safe haven asset, hedge against the U.S. Dollar, and in the jewelry industry
- **Major Countries Involved:**
- **Producers:**
 - China | 375.00 T
 - Russia | 324.70 T
 - Australia | 313.90 T
- **Consumers:**
 - China | 675.00 T
 - India | 464.00 T
 - U.S. | 149.90 T

Payoff Diagram



Trade Breakdown

- **Bull Call Spread**
 - This strategy benefits from relatively bullish price movements in the underlying asset
- **Setup**
 - We Buy – 300.00 \$2,225.00 Calls | XAU
 - We Sell – 300.00 \$2,320.00 Calls | XAU
 - Max Profit: \$18,711,000.00
 - Max Loss: (\$12,639,000.00)
- **Expiration**
 - Date: December 25, 2024

Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
 - **\$2,320.00 / \$2,260.00 / \$2,225.00**
 - Breakeven – \$2,256.00
- **Methodology**
 - The Metals Sector expects a 6.23% increase in the price of the underlying before the expiration date
- **Hedge Strategy**
 - If the underlying price were to decrease unexpectedly, the sector would look to reverse trade in this situation



II. Macroeconomic Thesis

Macroeconomic Thesis

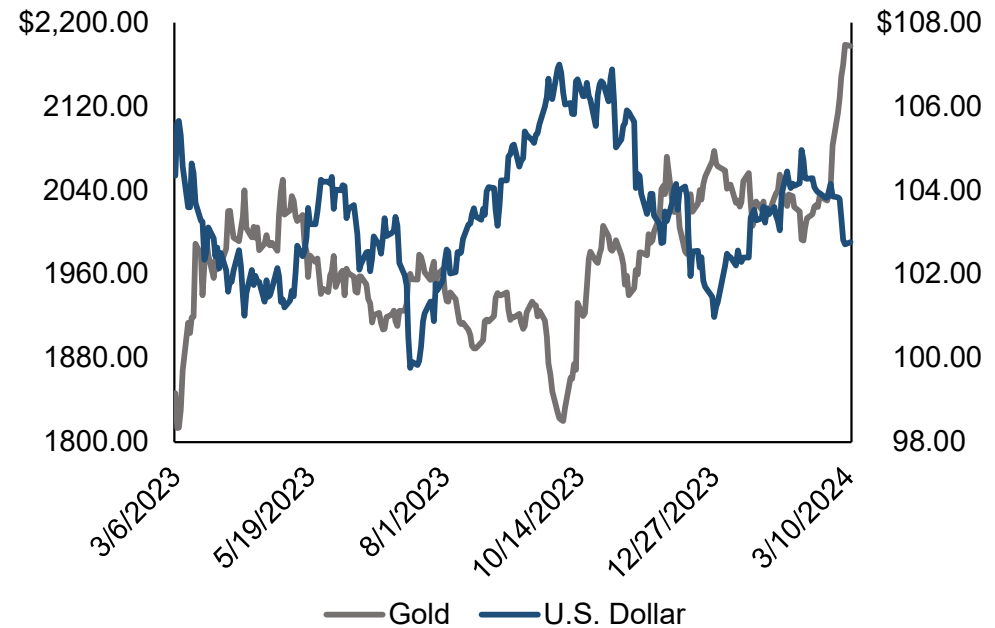
Macroeconomic Summary

- **Political and Geopolitical Tensions Threaten a Rise in Volatility**
 - The Israel-Hamas crisis continues to escalate with no end in sight and no intention of collaboration from either side
 - Israeli Prime Minister Benjamin Netanyahu rejects cease-fire proposal from the leaders of Hamas, and Hamas declined to trade Israeli troops for Palestinians imprisoned for terrorism
 - The upcoming presidential election has been an extremely tight race, with polls for President Biden and former President Trump have been a tie, with 44.00% support on both sides

- **U.S. Dollar to Weaken Following Federal Funds Rate Cuts**
 - Fed Chairman Jerome Powell has stated the intended Federal Funds rate 2024FY is 4.60%. CME Fed Watch predicts approximately three to four 25.00 bps cuts before the December 25th expiration
 - Gold, as opposed to fixed-income assets, does not offer yields or dividends, and becomes more valuable when interest rates are lower due to lower yields on said assets

- **Central Bank Gold Holdings Increase due to Undervaluation**
 - Central Banks have raised Gold holdings by nearly 24.00%, purchasing an average of 1,060.00 T of Gold from 2022-2023 compared to 509.00 T between 2016-2019
 - China, Turkey, Poland, and India lead countries in increasing their Gold reserves, while simultaneously moving away from the weakening USD

Gold vs. U.S. Dollar



Market Pros & Cons

- Inflation readings drop sooner rather than later
- Jewelry market in India continues to have strong returns
- Consumer sentiment remains strong despite low savings
- Global demand of Gold falls amid U.S. stock rally



III. Risk Analysis

Risk Analysis

Directional & Magnitude Risk

- **Delta Analysis**

- The Delta value for this trade is 0.1176
- For every \$1.00 change in the underlying asset, the contract will gain or lose \$0.1176
- The trade benefits from bullish movements in the underlying price of the commodity

- **Gamma Analysis**

- The Gamma value for this trade is 0.0001
- Gamma has a small impact on this trade, meaning that if the underlying changes by \$1.00, the value of Delta will change by only \$0.0001

Implied Volatility Risk

- **Vega Analysis**

- The Vega value for this trade is 0.5201
- The Vega value is positive due to the underlying being below the breakeven point at the beginning of the trade
- The implied volatility for this trade is 16.00%, as the trade benefits from a swing in price movements above the breakeven point. The market volatility for this trade is around 13.75%, which benefits the trade because high volatility could help push prices ITM

Time Risk

- **Theta Analysis**

- The Theta value for this trade is (0.0359)
- The Theta value is negative due to the trade currently being OTM, meaning that as time goes on, there is an increasingly small chance that the trade will end ITM
- Theta is positive when the underlying is above the breakeven point, and time decay would help the trade

Interest Rate Risk

- **Rho Analysis**

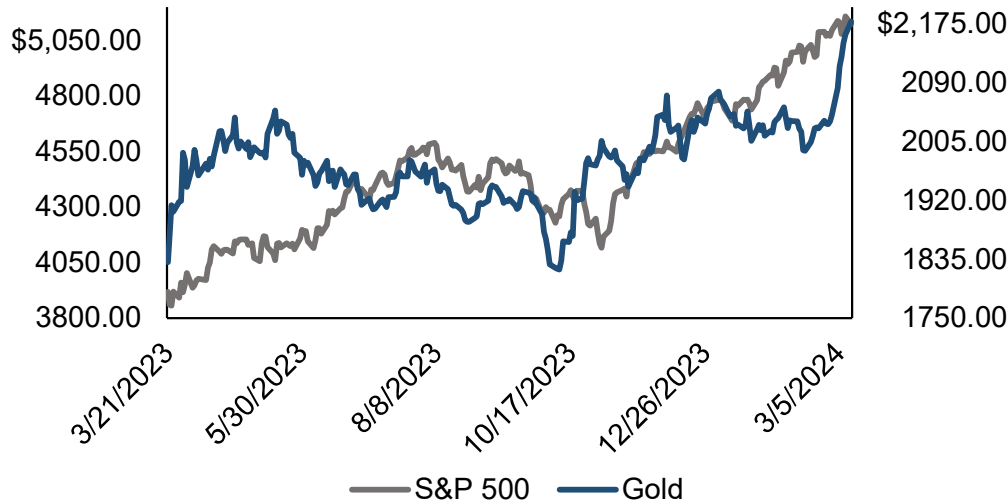
- The Rho value for this trade is (0.2601)
- The value of Rho in this trade is small due to the short and long positions offsetting each other
- If rates are cut earlier than expected, the Rho would increase and become positive



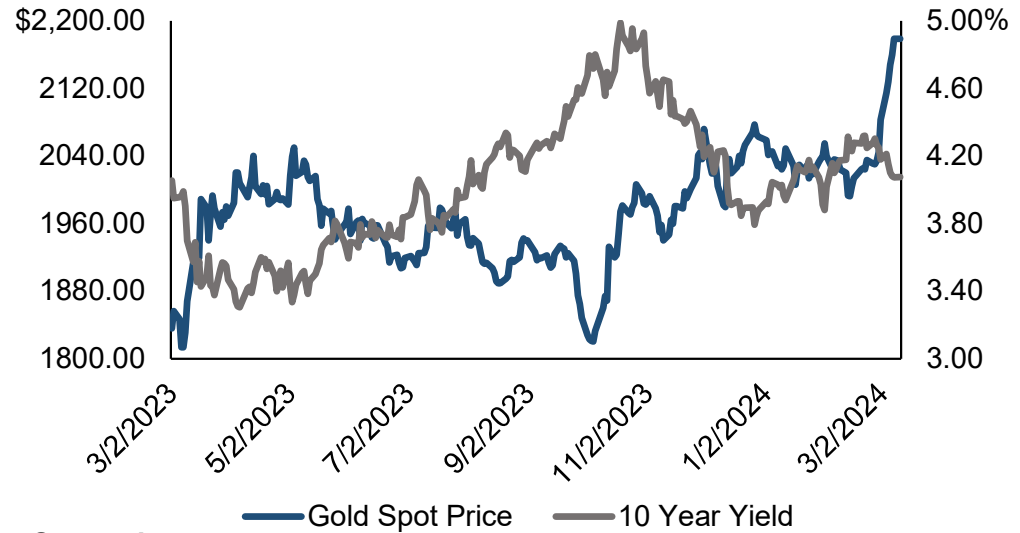
IV. Technical Bias & Fair Value

Technical Bias & Fair Value

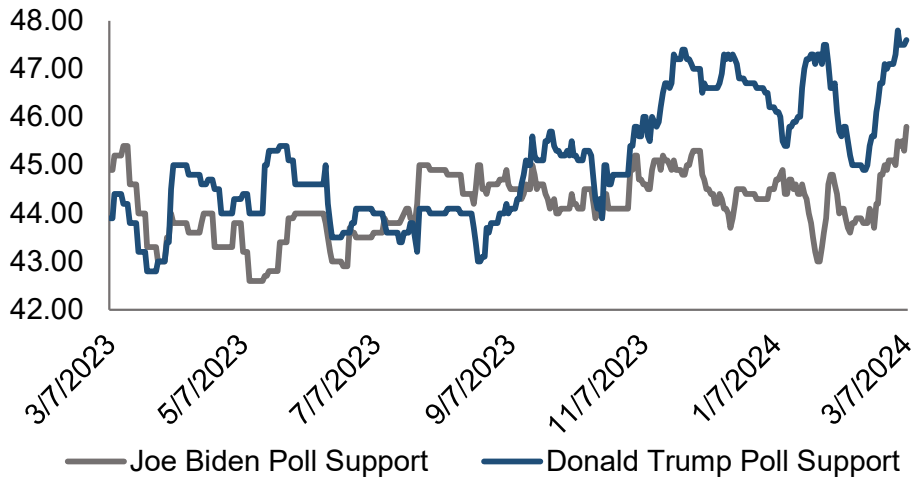
S&P 500 vs. Gold Spot Price



Gold Spot Price vs. 10-Year Treasury Yield



Trump vs. Biden Poll Support



Synopsis

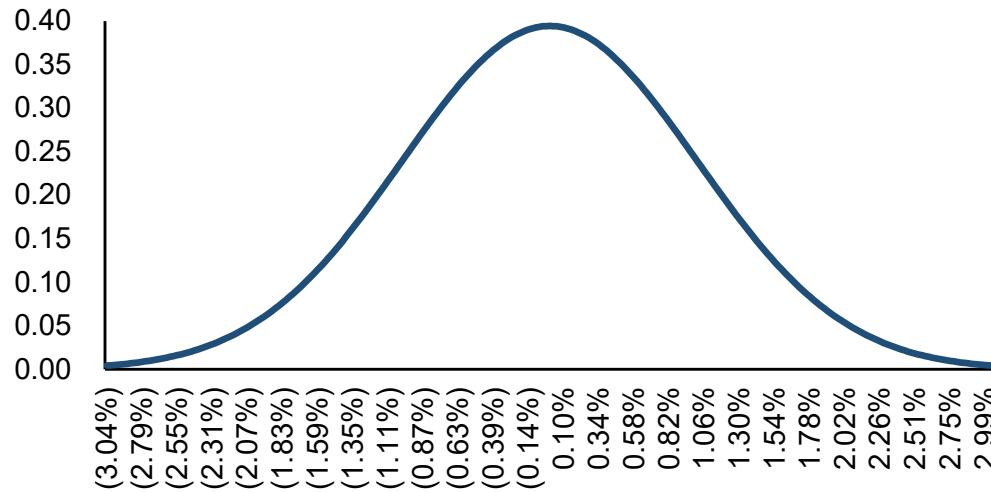
- Gold has historically traded inversely to the stock market, and as a result, to the S&P 500. Gold holds its value as a safe-haven asset and as a very reliable hedge against the economy
- Gold, as opposed to fixed-income assets such as bonds, does not pay out dividends. Because of this, as rates decrease, Gold becomes a more attractive investment to the consumer, as it is a more reliable way to protect investors' assets
- The upcoming U.S. Presidential Election has shown a tight race between President Biden and former President Trump, with polls reading +/- 3.00%. As election season approaches, market volatility, along with the uncertainty of the victor, will push investors toward Gold



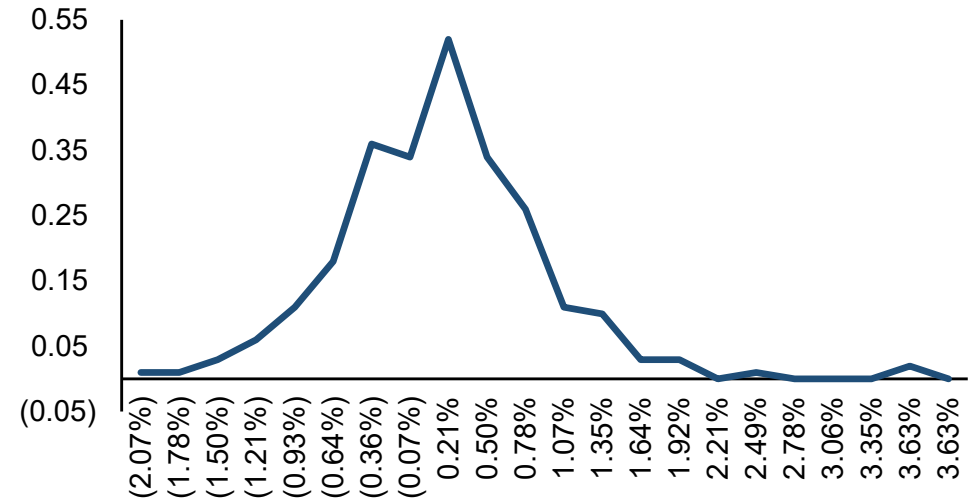
V. Volatility Analysis

Volatility Analysis

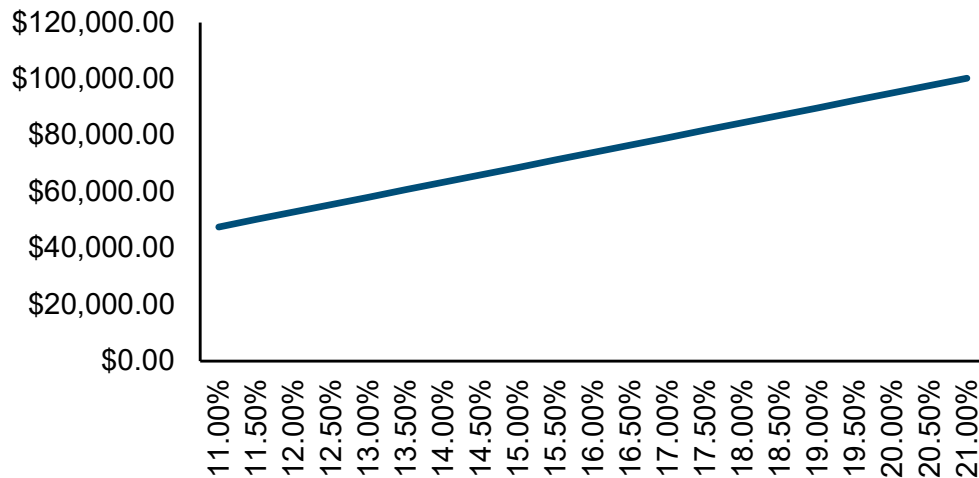
Expected Theoretical Daily Return Distribution



Historical Daily Return Distribution



Position Volatility Sensitivity



Synopsis

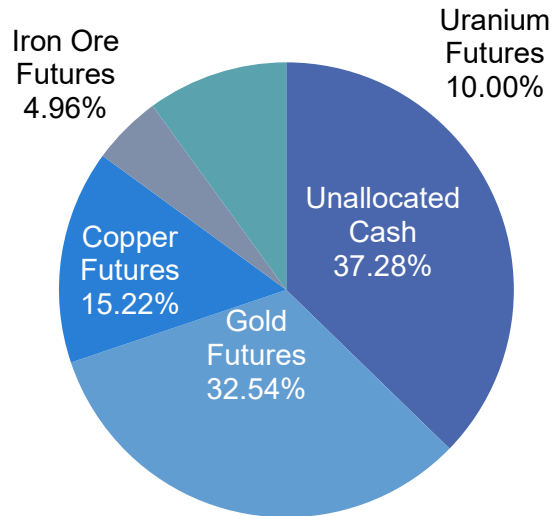
Asset Description	Option Premium
Theoretical Long Call	\$123.07
Actual Long Call	\$118.80
Theoretical Short Call	\$89.02
Actual Short Call	\$84.70
Theoretical Long Call Adj. for DV1	\$12,307.00
Actual Long Call Adj. for DV1	\$11,880.00
Theoretical Short Call Adj. for DV1	\$8,902.00
Actual Short Call Adj. for DV1	\$8,470.00
Theoretical Edge (LC) Assuming 5.00 k Contracts	\$2,135,000.00
	-
Theoretical Edge (SC) Assuming 5.00 k Contracts	(\$2,160,000.00)
Total Theoretical Edge	(\$25,000.00)



V. Capital Allocation

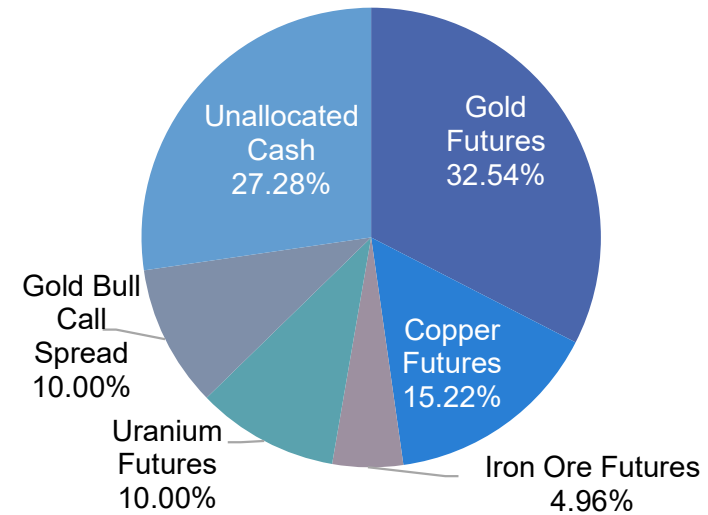
Capital Allocation

Current Portfolio Allocation

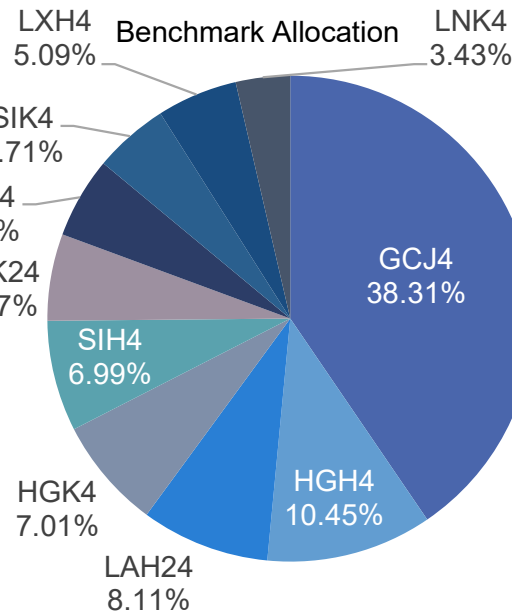
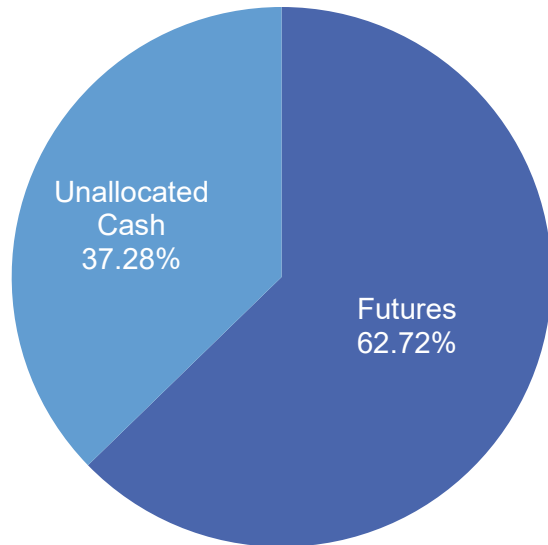


Transaction Summary		
Position Change		
Ticker	Contracts	Allocation
Gold Futures	0	\$0.00
Copper Futures	0	\$0.00
Iron Ore Futures	0	\$0.00
Gold Bull Call Spread	+ 300	12,639,000.00
Allocation Change		12.64mm

Proposed Portfolio Allocation



Current Position Allocation



Proposed Position Allocation

