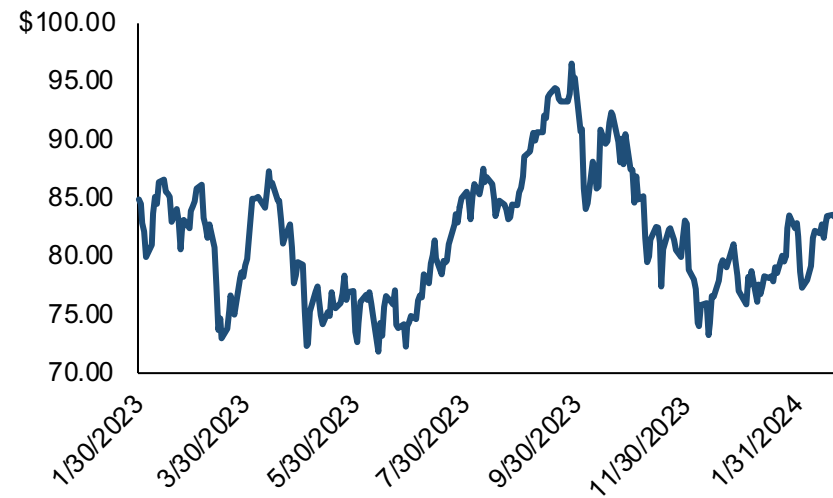




Brent Crude | One-Year Price Chart



Position Details

- Brent Crude | CON4
- Underlying Price: \$80.31
- Bull Call Spread
- Expiration Date: July 24, 2024

Energy Sector

Analyst

Niall Marley
niallmarley1@gmail.com

President

Phil Sullivan
philsullivan10@gmail.com

Vice President

Owen Perry
owenperry0429@gmail.com

Chief Investment Officer

Adi Wodeyar
adiwodeyar@gmail.com

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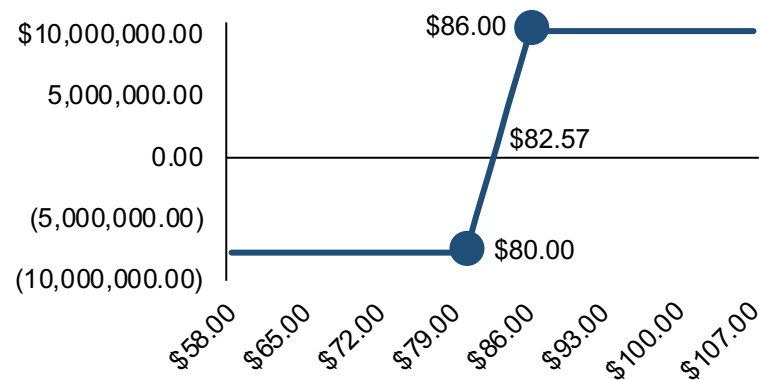
I. Product & Position Overview

Product & Position Overview

Product Description

- **Brent Crude Oil**
 - Brent crude oil is a low density, low sulfur product extracted from the North Sea. Brent is used as a global benchmark representing a large portion of the Middle East, Europe, and Africa. It is easier to transport due to its proximity to the sea, allowing shipping to multiple parts of the world
 - The main uses of Brent crude oil include transformation into gasoline and diesel fuel, making transportation demand an important driver in driving prices. Brent crude prices are also highly impacted by geopolitical issues such as wars, pandemics, or natural disasters
 - Major producers include OPEC, Russia, and the U.S., while major consumers include China, the U.S., and India

Payoff Diagram



Trade Breakdown

- **Bull Call Spread**
 - This strategy benefits from relatively bullish price movements in the underlying product
- **Setup**
 - We Buy – 3.00 k ITM \$80.00 Calls | CON4
 - We Sell – 3.00 k OTM \$86.00 Calls | CON4
 - Max Profit: \$10,290,000.00
 - Max Loss: \$(7,710,000.00)
- **Expiration**
 - Date: July 24, 2024

Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
 - **\$85.50 / \$83.00 / \$79.50**
 - Breakeven – \$82.57
- **Methodology**
 - The Energy Sector expects a moderately bullish 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

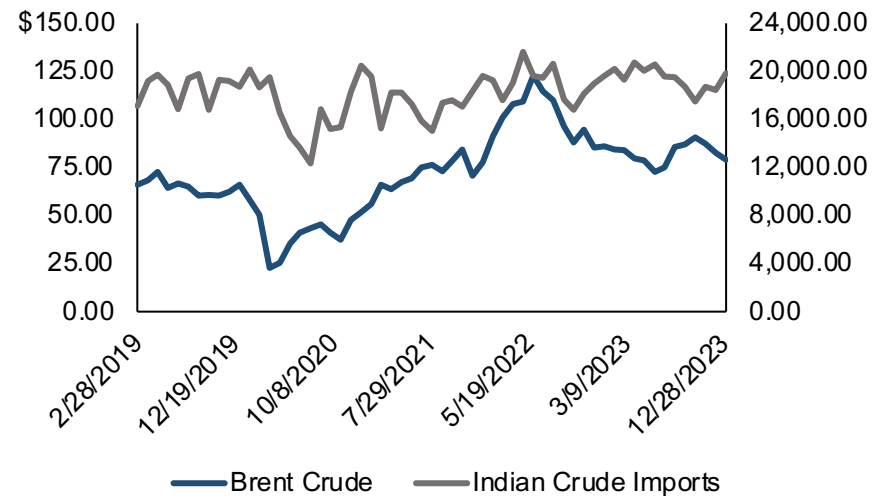
II. Macroeconomic Thesis

Macroeconomic Thesis

Macroeconomic Summary

- **Geopolitical Risks in the Middle East Increase**
 - Israeli Prime Minister Benjamin Netanyahu rejects a potential cease-fire to pause fighting and release hostages
 - Netanyahu asked the IDF to bring a plan of attack against Hamas fighters in Rafah
 - Hezbollah fired dozens of rockets at a northern Israeli town in response to more civilian deaths
 - Attacks in the Red Sea by Yemen's Houthis have persisted, forcing traffic around the Cape of Good Hope
 - The U.S. conducted five self-defense strikes in Houthi-controlled areas of Yemen
 - A missile fired from Yemen struck a tanker headed for India carrying crude oil
- **OPEC+ Production Cuts Expected to Reach into 2Q2024**
 - Crude oil production from OPEC+ dropped 330.00 k Bbl/d in January to an average of 26.34 mm Bbl/d
 - Sharpest decreases in Libya, Kuwait, and Iraq
 - Russia almost reached its target for voluntary cuts for the first time since making the pledge in 2023
 - Iraq and Kazakhstan pledge compliance to new OPEC+ oil cuts and agree to compensate over the next four months
- **Indian Demand Continues to Rise**
 - India's crude imports hit a 20.00-month high of 21.40 mm MT in January, up 8.00% m/m from December
 - India could reach up to 8.00% y/y GDP growth in 2024 due to a booming manufacturing industry throughout all sectors
 - India is expected to export between \$13.00 bn and \$15.00 bn worth of mobile phones in 2024
 - Stronger ties with the U.S. has allowed more Indian businesses to deal with U.S. companies

Brent Price vs. Indian Crude Imports (mm MT) | Five-Year Chart



Market Pros & Cons

- U.N. cracks down on illegal Russian exports
- U.S. oil rig count continues to fall
- Decline in Chinese economy
- Fed predicted to hold interest rates at next two meetings

III. Risk Analysis

Risk Analysis

Directional & Magnitude Risk

- **Delta Analysis**
 - The Delta value for this trade is 0.1822
 - For every \$1.00 change in the underlying asset, the contract will gain or lose \$0.1822
 - The trade benefits from bullish movements in the underlying price of the commodity
- **Gamma Analysis**
 - The Gamma value for this trade is 0.0019
 - Gamma has a small impact on this trade, meaning that if the underlying changes by \$1.00, the value of Delta will change by .0019

Implied Volatility Risk

- **Vega Analysis**
 - The Vega value for this trade is 0.0098
 - 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 30.00%, as the trade benefits from a swing in prices above the breakeven point. The market volatility for this trade is around 27.00%, which benefits the trade because high volatility could help push prices above the breakeven point

Time Risk

- **Theta Analysis**
 - The Theta value for this trade is (0.0046)
 - The Theta value is negative due to the trade currently being OTM, meaning that as time goes on there is a smaller chance that the trade will end up ITM
 - Theta is positive when the underlying is above the breakeven, and time decay would help the trade

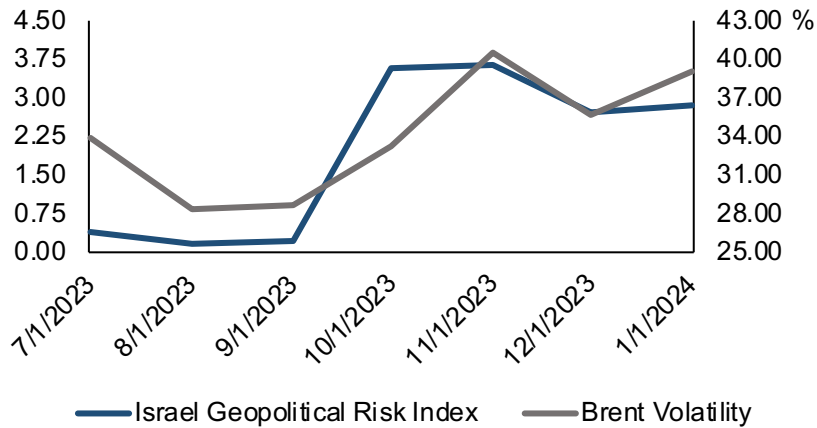
Interest Rate Risk

- **Rho Analysis**
 - The Rho value for this trade is (0.0060)
 - The value of Rho in the trade is small due to the short and long positions involved in the trade
 - If rates are cut earlier than expected, the Rho would increase and become positive

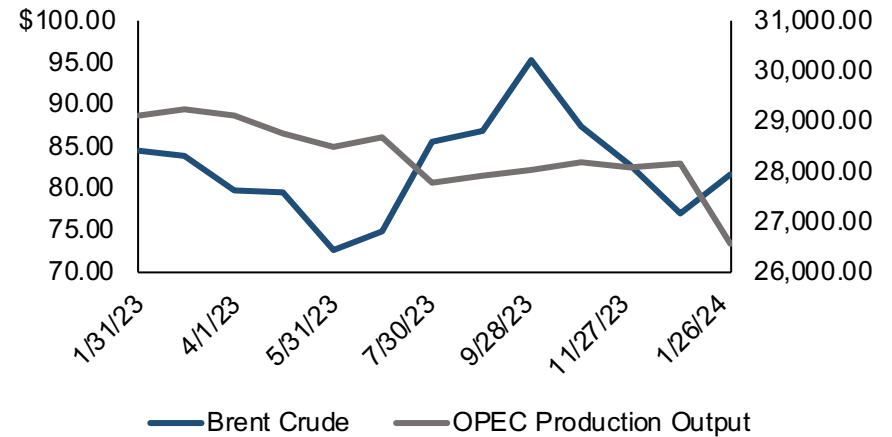
IV. Technical Bias & Fair Value

Technical Bias & Fair Value

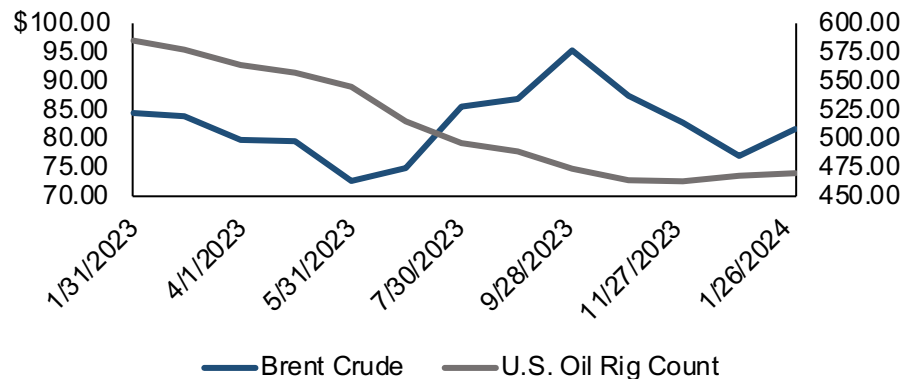
Israel Geopolitical Risk vs. CBOE Crude Volatility | Six-Month Chart



Brent Crude vs. OPEC Production Output (mm Bbl/d) | One-Year Chart



Brent Crude vs. U.S. Oil Rig Count | One-Year Chart



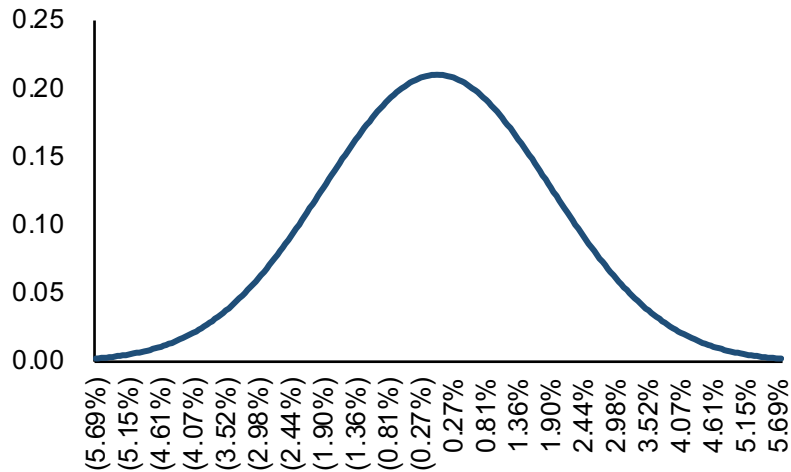
Synopsis

- The large increase in the geopolitical risks in Israel in the past six months has caused the volatility of crude oil to rise alongside the risk index. The direct relationship has remained strong as geopolitical tensions in the Middle East is one of the biggest drivers of oil volatility
- OPEC's production output and the price of Brent crude futures have an inverse relationship due to the fundamental nature of supply and demand. When OPEC cuts, Brent crude reacts in the opposite way
- Brent crude futures prices increase when the U.S. oil rig count decreases, which has dropped steadily since the beginning of 2023. Prices normally have a delayed reaction when oil rig count declines

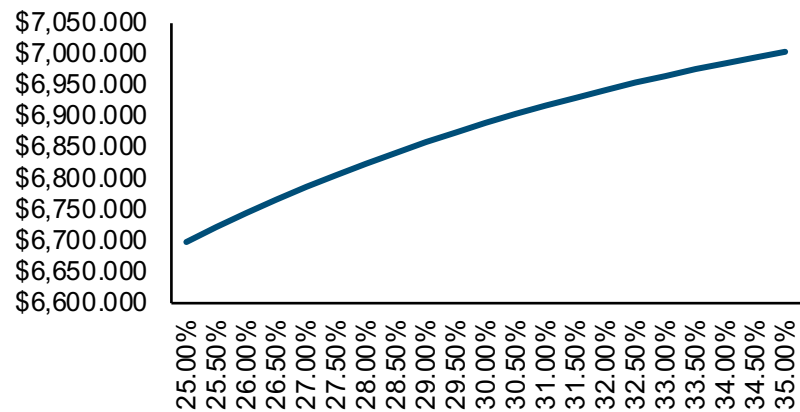
V. Volatility Analysis

Volatility Analysis

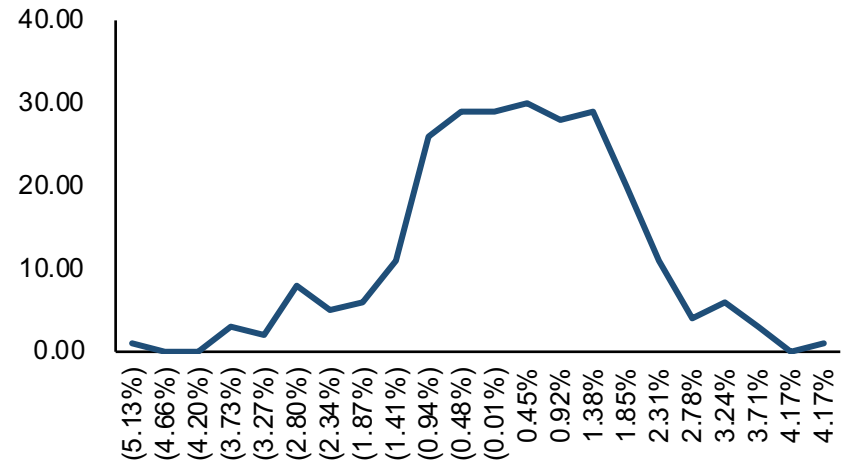
Expected Theoretical Daily Return Distribution



Position Volatility Sensitivity



Historical Daily Return Distribution



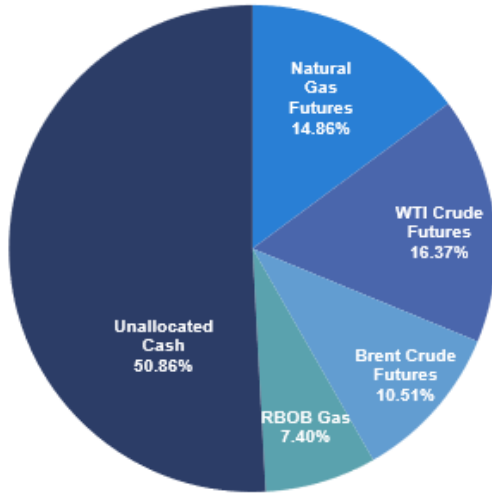
Synopsis

Asset Description	Option Premium
Theoretical Long Call	\$5.0200
Actual Long Call	\$4.9300
Theoretical Short Call	\$2.7200
Actual Short Call	\$2.3600
Theoretical Long Call Adj. for DV1	\$502.0000
Actual Long Call Adj. for DV1	\$493.0000
Theoretical Short Call Adj. for DV1	\$272.0000
Actual Short Call Adj. for DV1	\$236.0000
Theoretical Edge (LC) Assuming 3.00 k Contracts	\$27,000.0000
Theoretical Edge (SC) Assuming 3.00 k Contracts	(\$108,000.0000)
Total Theoretical Edge	(\$81,000.0000)

V. Capital Allocation

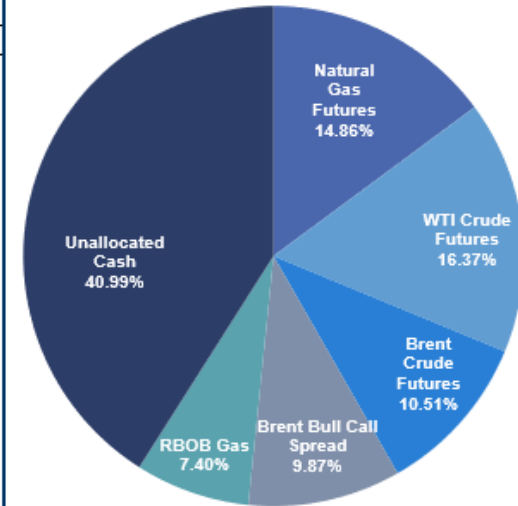
Capital Allocation

Current Portfolio Allocation

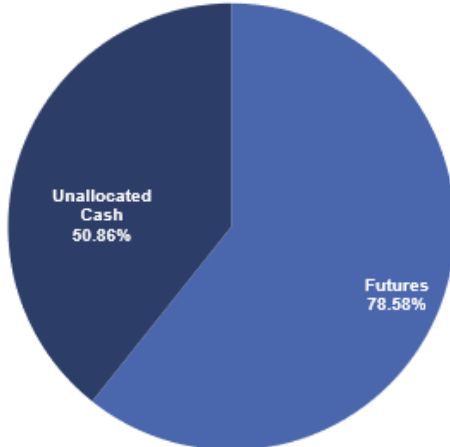


Transaction Summary		
Ticker	Position Change	
	Contracts	Allocation
Brent Crude Futures	0	\$0.00
Natural Gas Futures	0	\$0.00
WTI Crude Futures	0	\$0.00
RBOB Gas	0	\$0.00
Brent Bull Call Spread	+ 3000	\$7,710,000.00
Allocation Change		\$7,710,000.00

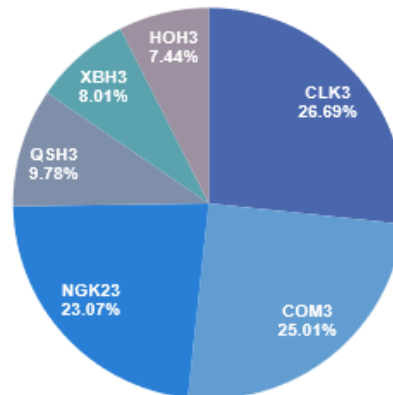
Proposed Portfolio Allocation



Current Position Allocation



Benchmark Allocation



Proposed Position Allocation

