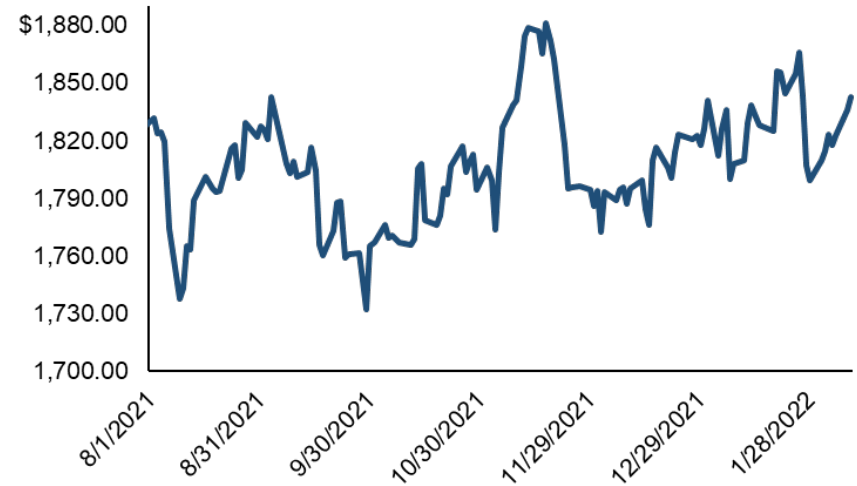


GCZ2 | Six-Month Price Chart



Position Details

- Gold | GCZ2
- Underlying Price: \$1,841.60/oz
- Bear Put Spread
- Expiration Date: November 23, 2022

Metals Sector

Associate

Aaron Eberhardt
Aaron.eberhardt02@gmail.com

Analyst

Kyle Junda
Junda244@gmail.com

Analyst

Conner Prola
cdprola@gmail.com

President

Luke Palma
lukepalma25@gmail.com

Vice President

Nico Mahramas
nicomahramas@gmail.com

Chief Investment Officer

Joseph Palermo
joseph.palermo12@gmail.com



Table of Contents

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



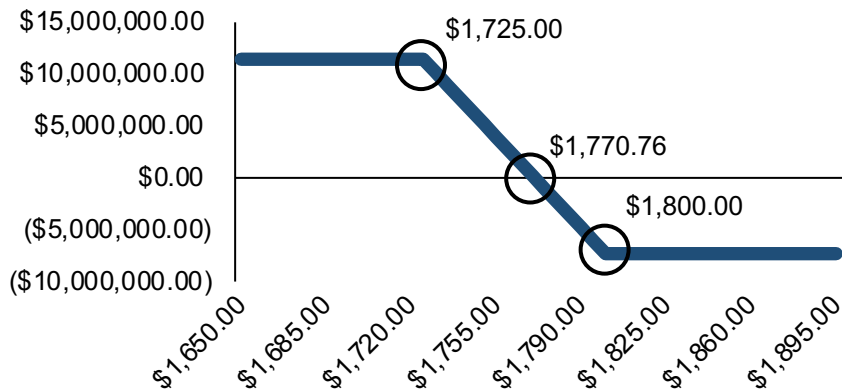
I. Product & Position Overview

Product & Position Overview

Product Description

- Gold is a precious metal that has long been seen as a hedge against times of high inflation and uncertainty in the economy
 - It is also viewed as an indicator of the whole economy because of its sensitivity to macroeconomic conditions
- Gold also tends to have an inverse relationship with the U.S. Dollar
- **Major Countries Involved**
- Imports
 - United Kingdom | 23.50%
 - Switzerland | 23.40%
 - United States | 9.20%
- Exports
 - Switzerland | 18.10%
 - Hong Kong | 10.50%
 - U.A.E. | 12.80%

Payoff Diagram



Trade Breakdown

- **Bear Put Spread**
 - The strategy benefits from a decrease in the underlying price of the asset
- **Setup**
 - We Buy – 2.50 k OTM \$1,800.00 Puts | GCZ2
 - We Sell – 2.50 k ITM \$1,725.00 Puts | GCZ2
- **Expiration**
 - Date: November 23, 2022

Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
 - **\$1,725.00 / \$1,770.00 / \$1,800.00**
 - Breakeven – \$1,770.76
- **Methodology**
 - The price target would represent about ~ 6.50% decrease in the underlying
- **Hedge Strategy**
 - In the event of bullish movement in the underlying price, the Sector will entertain the idea of a reverse trade



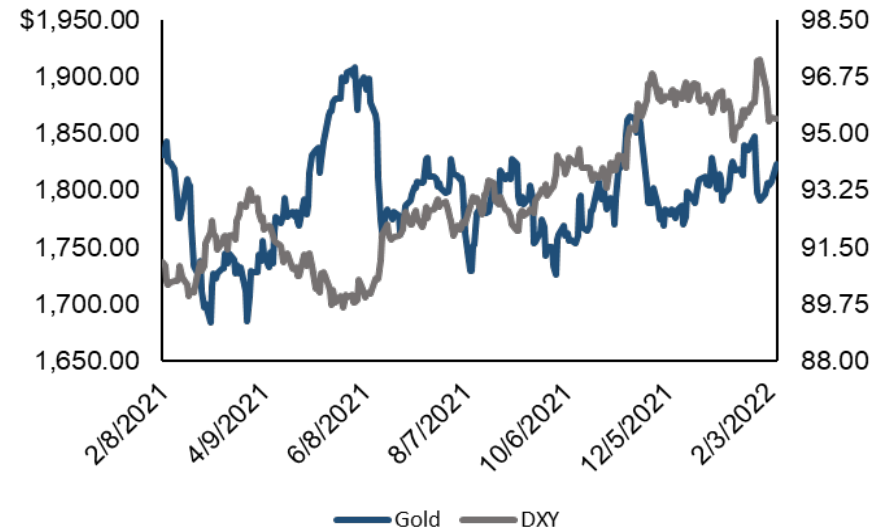
II. Macroeconomic Thesis

Macroeconomic Thesis

Macroeconomic Summary

- **Aggressive Central Banks and Rising Yields**
 - Non-farm payroll data reported that U.S. employment increased by 467.00 k in January, exceeding expectations of 150.00 k
 - The Fed's hawkish stance is being met with a growing consensus among investors that rate hikes will be more severe and frequent than originally perceived
 - U.S. 10 Year Treasury Yield is currently 1.96%, the highest that it has been since 2019
- **Inflation Expected to Dissipate Throughout 2022**
 - Inflation expected to peak in February, and current CPI estimates point toward a 7.10% y/y increase
 - Supply chain bottlenecks ease as shipping costs from China to the U.S. West Coast have retreated 30.00%
 - Shifting consumer demand from hard goods to services is expected to take pressure off demand side inflation
 - Omicron variant concerns continue to dissipate as a record drop in cases shows 300.00 k daily average cases vs. 500.00 k daily average cases a week prior
- **Russia-Ukraine Conflict**
 - Military intervention by one country in another is against international and U.N. law
 - Chinese Foreign Minister Wang Yi indicated that Beijing would support a solution with similar "direction and spirit" as the cease-fire agreements signed in 2014 and 2015
 - Ukrainian and Russian officials are in talks to implement the Minsk-2 peace accords for the first time since 2019

Gold vs. DXY Index | One-Year Chart



Market Pros & Cons

- Inflation proves transitory and subsides over the trade timeline
- Fed successfully achieves a soft landing in a strong U.S. economy
- ECB rate hikes near the expiration of our pitch
- New omicron subvariant BA.2 spreads across the U.S.



III. Risk Analysis

Risk Analysis

Directional & Magnitude Risk

- **Delta Analysis**
 - The trade has a Delta value of (0.1329)
 - The trade benefits from bearish movement of the underlying as it approaches the strike at \$1,725.00
- **Gamma Analysis**
 - The trade has a Gamma value of 0.0003
 - Gamma is minimal as the options contract does not expire until November

Implied Volatility Risk

- **Vega Analysis**
 - The trade has a Vega value of 0.9394
 - The nature of this trade requires sufficient volatility to move the underlying price towards max profit
 - A sizeable Vega value is necessary in this trade as the strategy requires the price of gold to decrease ~ 6.50% to reach max profit

Time Risk

- **Theta Analysis**
 - The trade has a Theta value of (0.0772)
 - Theta is slightly negative in this trade as the underlying price is currently OTM
 - Theta will become positive as the underlying price moves ITM

Interest Rate Risk

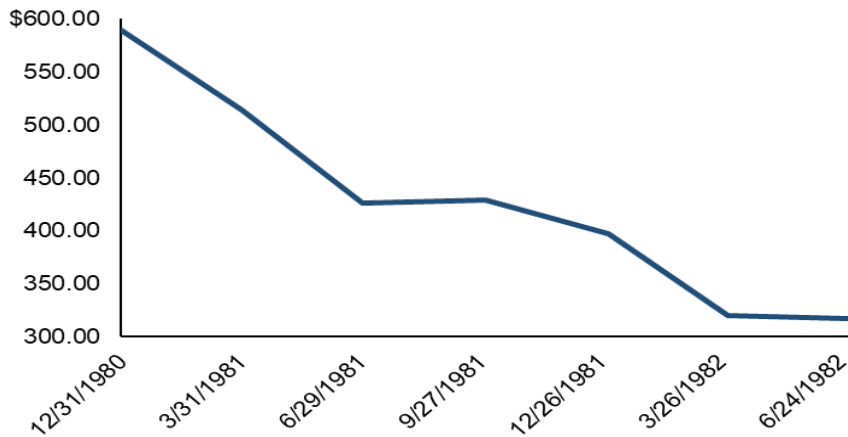
- **Rho Analysis**
 - The trade has a Rho value of (0.2218)
 - As interest rates increase the value of our position will decrease in value
 - Rho is significant in this trade as interest rate hikes are expected in the duration of this trade. Higher interest rates negatively affect gold, a non-interest-bearing asset



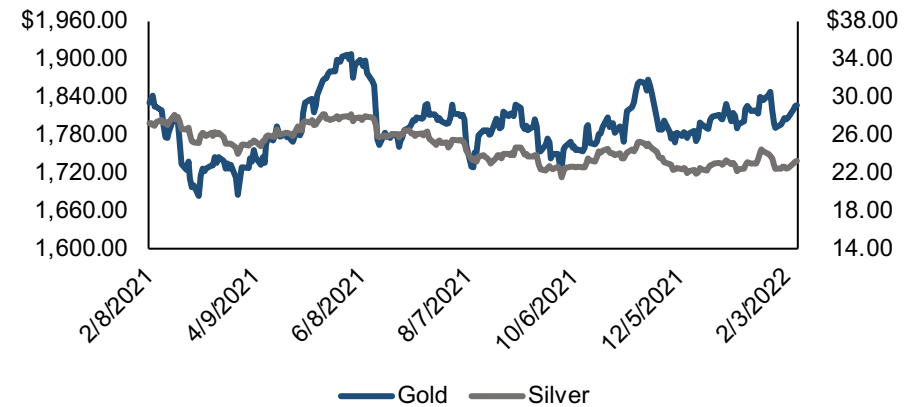
IV. Technical Bias & Fair Value

Technical Bias & Fair Value

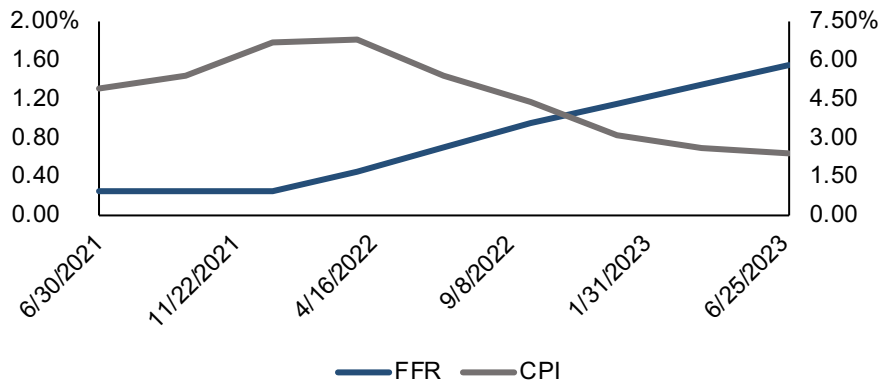
Gold Price Post 1980 | Two-Year Chart



Gold vs. Silver | One-Year Chart



FFR Forecast vs. CPI Forecast | Two-Year Chart



Synopsis

- After a period of high inflation in the late 1970's, gold prices declined to start the 1980's following strict monetary policy
- Inflation is expected to peak in 1Q2021 and then gradually decrease in the following months while the weighted average upper bound federal funds rate is expected to gradually increase over the same time period
- The Sector chose a bear put spread on gold rather than silver because of its relative outperformance over the past six months
 - Typically, gold and silver move together, but over the past six months silver has traded nearly flat while gold is up 5.25%

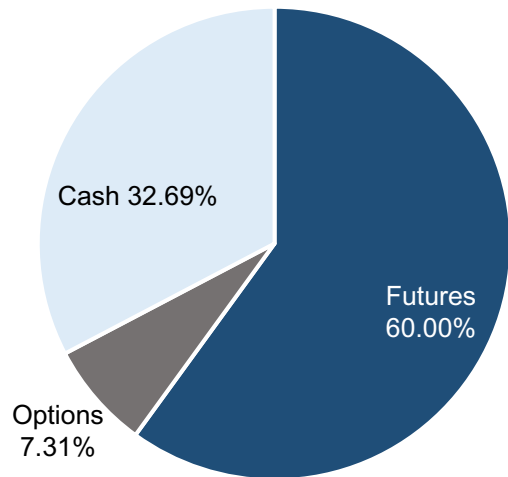


V. Capital Allocation

Capital Allocation

Allocation Breakdown & Portfolio Implications

- The Sector is allocating 7.31% of its total capital to this trade
 - This brings total capital use for options to 7.31%
- This trade will be hedged by the Sector's current exposure to gold
- Currently the Sector holds only gold, copper, and aluminum



Portfolio vs. Benchmark Allocation Weights

