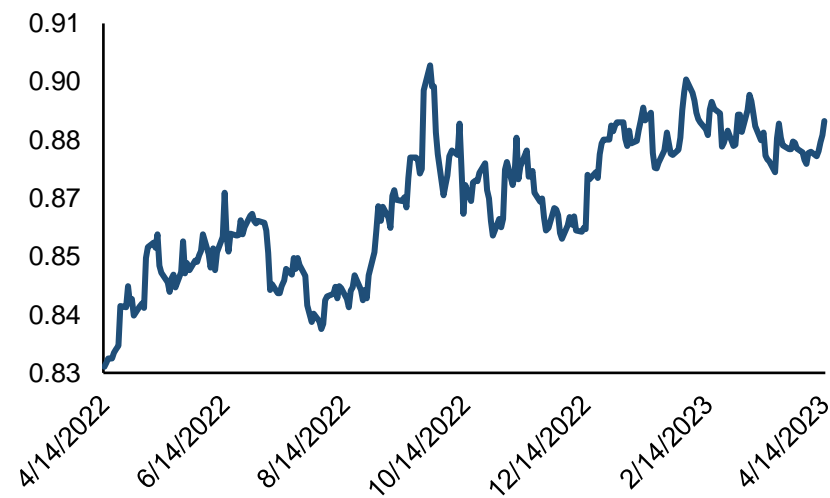




Position Details

- Euro – Great British Pound X Rate | EURGBP
- Underlying Price: 0.8829
- Bull Call Spread
- Expiration Date: August 18th 2023

EURGBP | One-Year Price Chart



Foreign Exchange Sector

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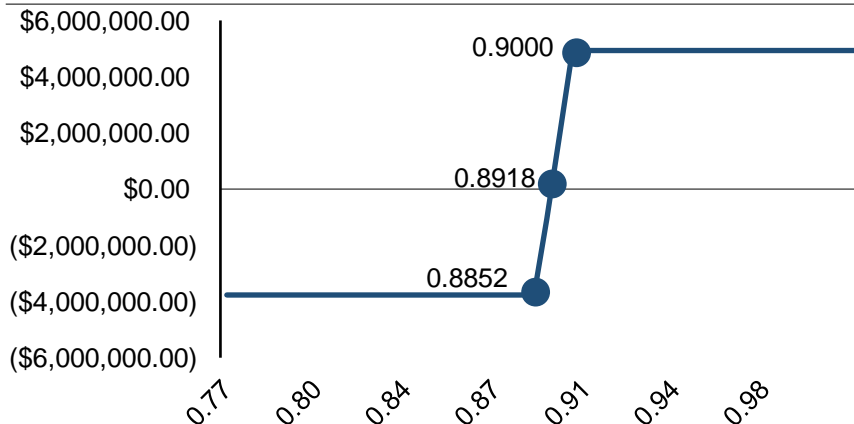
I. Product & Position Overview

Product & Position Overview

Product Description

- **Euro – Great British Pound Exchange Rate**
 - The EURGBP is the abbreviation used to denote the currency spot exchange rate for the euro and the pound, indicating the number of pounds it takes to buy a euro
 - Both the EUR and the GBP are apart of the G10, which contain ten of the world's most liquid and most heavily traded currencies on the foreign exchange market
 - Frequent occurrences that shift the EURGBP pair range from supply and demand, interest rates changes from the BoE or the ECB, as well as labor market data

Payoff Diagram



Trade Breakdown

- **Bull Call Spread**
 - The Sector looks to profit from bullish movement of the underlying currency exchange cross rate
- **Setup**
 - We Buy – 600,000,000.00 Notional ATM 0.8852 Call
 - We Sell – 600,000,000.00 Notional OTM 0.9000 Call
- **Expiration**
 - Date: August 18th 2023

Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
 - **0.9100 / 0.8950 / 0.8800**
 - Breakeven – 0.8918
 - Max Loss – (\$3,757,490.57)
 - Max Profit -- \$4,942,509.43
- **Methodology**
 - The position would profit from a 1.01% or 100 pip move in the underlying
- **Hedge Strategy**
 - In the case of adverse price movement, the Sector would purchase GBP or reverse trade to mitigate losses



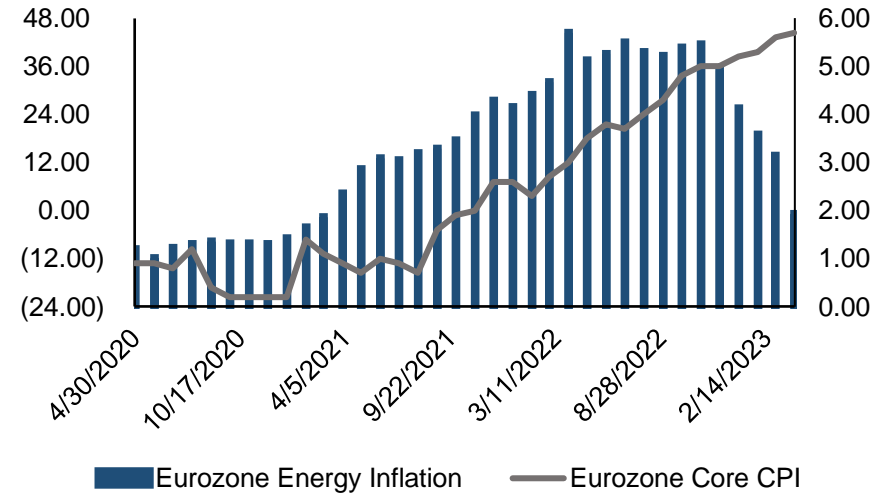
II. Macroeconomic Thesis

Macroeconomic Thesis

Macroeconomic Summary

- **Rising Core Inflation in Eurozone**
 - Eurozone's headline y/y CPI has begun to fall as a result of dropping energy prices, but Core CPI y/y has continued to rise as a lagging effect of Eurozone energy crisis
 - The Eurozone also has felt inflationary pressure coming from q/q wage growth coming in at 5.10% in the final quarter of 2020 as a result of wage-price spiral in the aftermath of recent record high inflationary numbers
 - Eurozone Labor market remains at record lows of 6.60% despite recent rate hikes from the ECB to slow economy
- **U.K. Economic & GDP Growth Remains Sluggish**
 - The U.K. economy failed to grow in March, with GDP m/m dropping below consensus, raising the question for the BoE on whether to continue hiking rates after the May meeting or not
 - The U.K. has also continuously failed to address their deviation in their balance of trade, in which exports for Q4 2022 were immensely lower than imports by 1.20% q/q
 - This stems from actualized lagging effects of the Brexit, as U.K. international trade has faced turmoil
- **Tight U.K. Labor Market**
 - U.K. unemployment rate edged higher this week ahead of expectations, creating fears of economic slowdown. will provide less room for the BoE to hike rates in the future
 - Workers demanding their pay to keep up with inflation has led to a wave of strikes. In the case that the government raises wages, this can have a spiraling effect on inflation
 - If the BoE decides to hike rates despite signs of economic slow down, a recession is almost certain

Eurozone Energy Inflation vs. Core CPI | Three-Year Chart



Market Pros & Cons

- Financial sector concerns begin to alleviate over time
- Retail sales in the U.K. continue to rise, incrementing inflation
- Credit crunch in the Eurozone comes into fruition
- Break of uptrend support level on daily chart



III. Risk Analysis

Risk Analysis

Directional & Magnitude Risk

- **Delta Analysis**
 - The trade has a net Delta of 0.1729 mm
 - This means that for every one big figure change in the underlying pair, the position will move \$172,900
- **Gamma Analysis**
 - The trade has a Gamma value of 1.3922 mm
 - Each big figure move in the pair will result in a Delta change of ~14.00 k at this point in the trade

Implied Volatility Risk

- **Vega Analysis**
 - The Vega for this trade is 245.85 k representing our option's sensitivity to changes in the implied volatility
 - Implied Volatility of the bought and sold call were 6.0035% and 6.0560% respectively. These lower volatilities come as a result of OTC trading within currency options

Time Risk

- **Theta Analysis**
 - The trade has a Theta value of (5.07 k)
 - Since the trade loses value for every day it spends OTM, the premiums would decrease by ~5.00 k as it reaches expiry

Interest Rate Risk

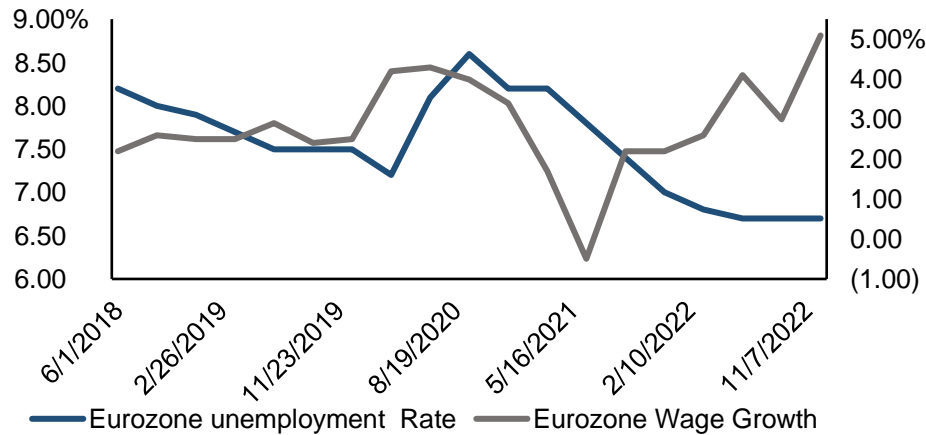
- **Rho Analysis**
 - The trade has a Rho value of 661.76 k
 - A 1.00% move in the marginal lending rate would cause option premiums to gain or lose ~660.00k
- **Phi Analysis**
 - The trade has a Phi value of (686.46 k)
 - A 1.00% in the U.K. interest rates would result in a 686.46 k loss across our option premiums



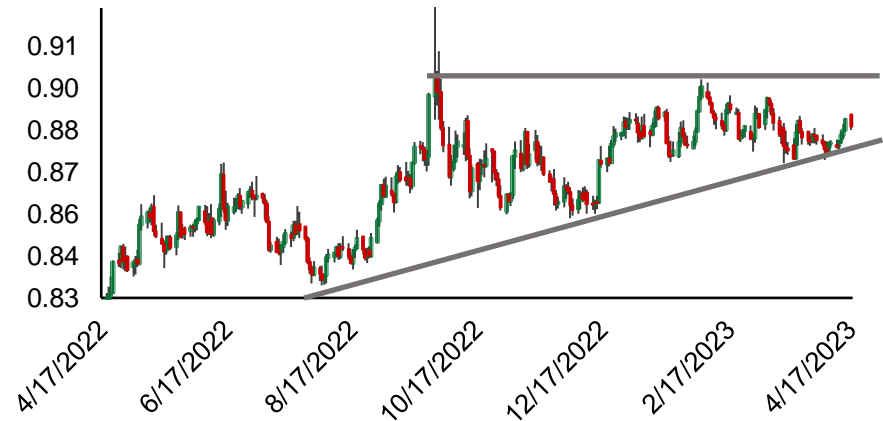
IV. Technical Bias & Fair Value

Technical Bias & Fair Value

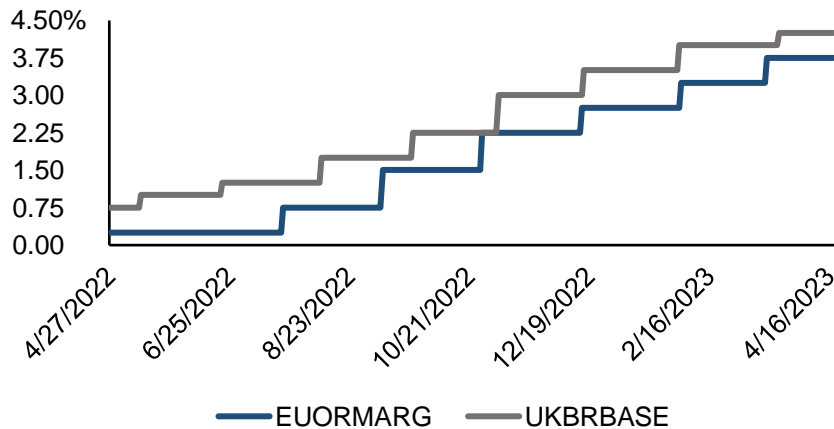
Eurozone Wage Growth vs. Unemployment Rate | Five-Year Chart



EURGBP Ascending Triangle | One-Year Chart



Marginal Lending Rate vs. U.K. Bank Rate | One-Year Chart



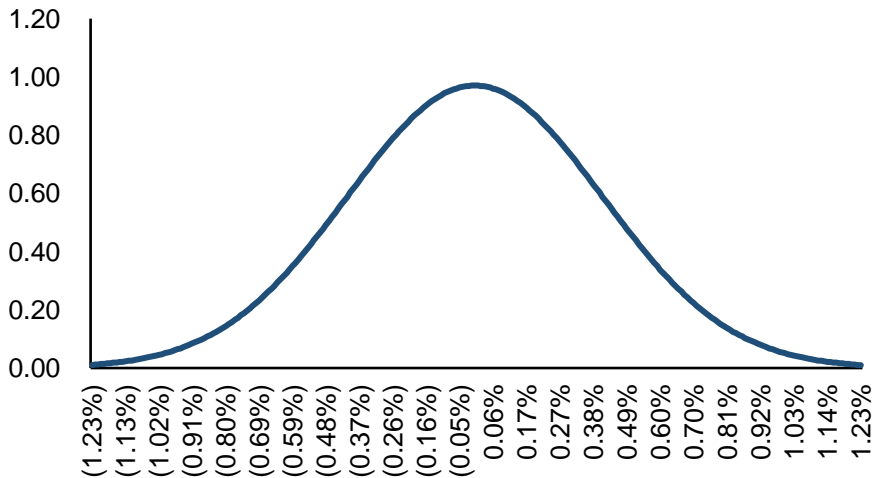
Synopsis

- Eurozone wage growth has reached a 5.00 year high at 5.10% in Q42022. The increase in wages is keeping the Eurozone's labor market extremely tight putting pressure on inflation
- Formation of an ascending triangle on the daily chart indicates buyers becoming increasingly active and pushing price to higher lows
 - Creates statistical likelihood of bullish trend increase
- The Sector is expecting the ECB to deliver a minimum of three 25.00 bps increases, as is still lots of work to be done in the Eurozone
 - Recent inflationary data has put pressure on the BoE to hike 25.00 bps in May, however, continuous negligence of economic slowdown will result in a recession, weakening the sterling

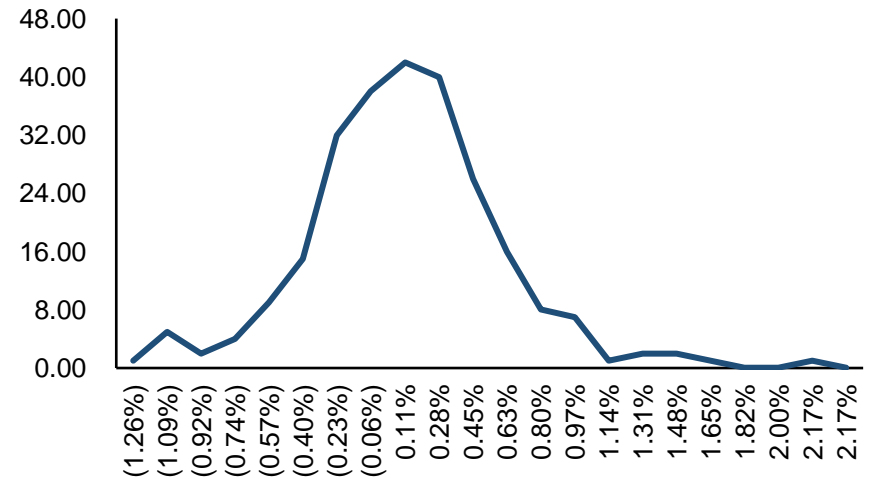
V. Volatility Analysis

Volatility Analysis

Expected Theoretical Daily Return Distribution



Historical Daily Return Distribution



- The graph above is an expected distribution of daily returns for the EURGBP pair based on our volatility analysis
 - The x-axis represents the daily returns, while the y-axis represents the probability of each return
- The bell-shaped curve indicates that the model has a normal distribution of returns
 - This that most returns are close to the average return, with fewer returns further away from the mean
- The Sector plans to compare historical distribution of returns to identify differences between the volatility model and actual unrealized returns

- The graph demonstrates the frequency of daily returns for the EURGBP pair over the past year based on our volatility analysis model
- The x-axis is the range of daily returns while the y-axis displays how often those returns occur throughout the yearly duration of data pulled
 - The shape of the graph is skewed slightly to the right indicating an uneven distribution with higher probability of returns to the downside
- The Sector sees this slight skew as a theoretical edge in this trade allowing for increased profit when positioning towards long EURGBP



V. Capital Allocation

Capital Allocation

