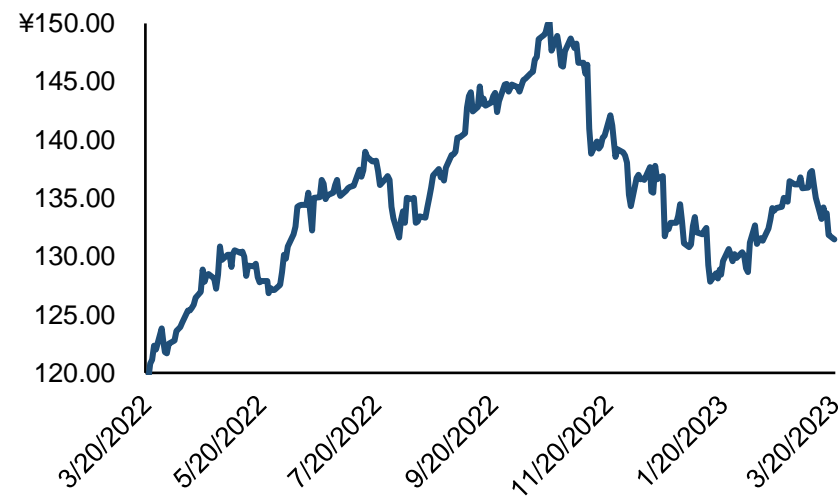




## USDJPY | One-Year Price Chart



### Position Details

- US Dollar/Japanese Yen Spot Exchange Rate | USDJPY
- Underlying Price: ¥131.45
- Bull Call Spread
- Expiration Date: June 23, 2023

### Foreign Exchange

#### Analyst

Olusola Babalola  
olusolab56@gmail.com

#### President

Anthony Bruno  
anthonybruno2186@gmail.com

#### Vice President

Julia Petrova  
julia.petrova6100@gmail.com

#### Chief Investment Officer

Phil Sullivan  
philsullivan10@gmail.com

## Table of Contents

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



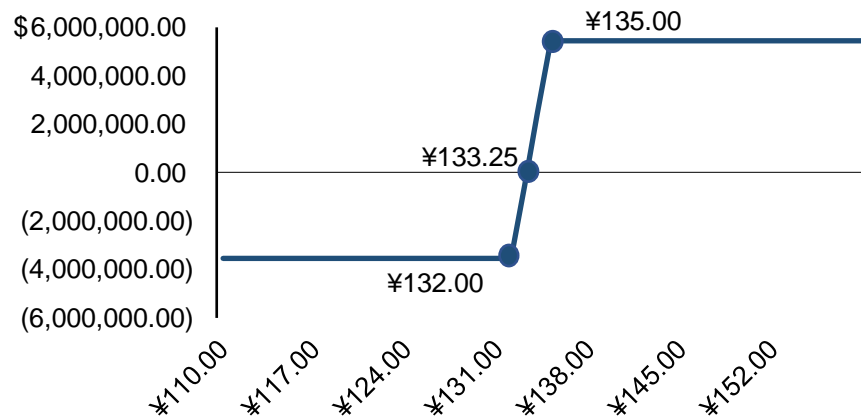
## I. Product & Position Overview

## Product & Position Overview

### Product Description

- **US Dollar/Japanese Yen Spot Exchange Rate**
  - The USDJPY is the abbreviation used to denote the currency spot exchange rate for the U.S. Dollar (base currency) and Japanese Yen (quote currency)
  - Both the USD and the JPY are apart of the G10 currencies, which contain ten of the world's most liquid and most heavily traded currencies on the foreign exchange market
  - Frequent occurrences that shift the USDJPY pair range from supply and demand, interest rates changes from the Fed or the BoJ, as well as treasury yield movements

### Payoff Diagram



### Trade Breakdown

- **Bull Call Spread**
  - The Sector will profit from bullish movement of the underlying
- **Setup**
  - We Buy – 3.00 mm OTM ¥132.00 | USDJPY
  - We Sell – 3.00 mm OTM ¥ 135.00 | USDJPY
    - Max Profit: \$5,452,382.71
    - Max Loss: (\$3,547,617.29)
- **Expiration**
  - Date: June 23<sup>rd</sup>, 2023

### Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
  - **¥135.50 / ¥133.50 / ¥131.00**
  - Breakeven – ¥133.18
- **Methodology**
  - The Sector aims to profit from ~ 3.00% bullish movement in the underlying as the USD appreciates against the JPY
- **Hedge Strategy**
  - In the event of adverse price movement, the Sector will look to exit the position though reverse trading



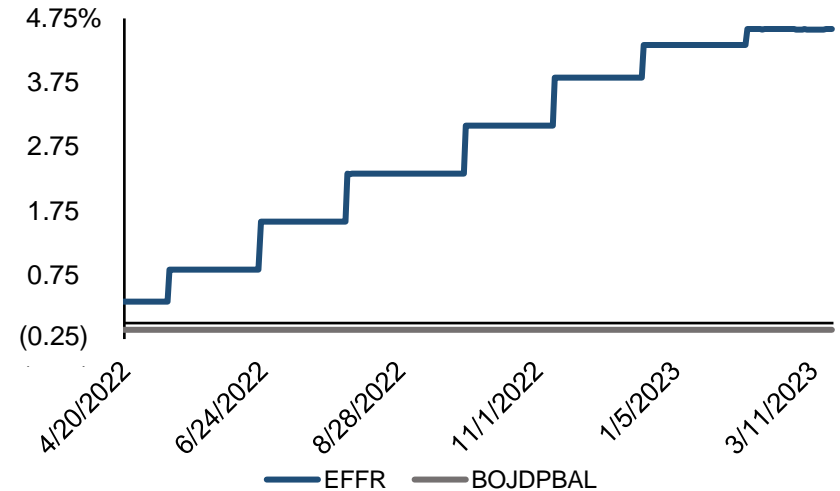
## II. Macroeconomic Thesis

## Macroeconomic Thesis

### Macroeconomic Summary

- **Ultra-loose BoJ Monetary Policy Depreciates Yen**
  - The BoJ kept its interest rates unchanged at (0.10%) during their last meeting, intensifying interest rate differential
    - Kazuo Ueda, the upcoming governor of the BoJ, will adopt similar policies as his predecessor, allowing inflation reach multi-year highs
  - The central bank also made no tweaks to their yield curve control, keeping the cap set at 0.50% for 10-year bonds
- **Japan's Weak Balance of Trade**
  - Japan relies heavily on the export sector for growth, but has seen dips related to sales of electrical machinery
    - Economic slowdown globally from monetary tightening has created a downturn in Japan's growth rate due to deteriorating external demand
  - Japan's balance of trade deficit gap is on pace to continue its current shortfall which is driven by a surge in imports amid high commodity prices in comparison to a weak Yen
- **Banking Sector Settles, Fed Continues Hawkish**
  - Contagion risk fears were calmed as central banks came as a collective last Sunday to increase support for liquidity
    - The frequency of US dollar swap orders for seven-day maturity operations changed from weekly to daily, easing strains in the financial system
  - Based on the preliminary measures taken by the Fed in the banking sector within these past two weeks, we can expect Powell's rhetoric to be on par with the Fed's dual mandate

### EFFR vs BoJ Policy Balance Rate | One-Year Chart



### Market Pros & Cons

- Electrical machinery exports from Japan to China continue to fall
- US Treasury yields continue to rebound towards the upside
- Low-cost real estate financing stance in Japan remains unchanged
- U.S economy dips into a recession prematurely



## III. Risk Analysis

# Risk Analysis

## Directional & Magnitude Risk

---

- **Delta Analysis**
  - The trade has a net Delta of 0.1198
  - The Delta of the bought calls were 0.38 and the sold calls were (0.26) making it net positive
- **Gamma Analysis**
  - The trade has a Gamma of 6.93 k
  - For every one big figure change, the delta would gain or lose \$6.93 k

## Implied Volatility Risk

---

- **Vega Analysis**
  - The trade has a Vega of 296.13
  - If volatility changes 1.00%, the premium will go up by the value of Vega
  - Implied volatility for the lower strike is ~13.16%, and implied volatility for the higher strike is ~12.85%
  - Three month historical volatility for the USDJPY is currently at ~13.95%, increasing by ~0.50% in the past two weeks

## Time Risk

---

- **Theta Analysis**
  - The trade has a Theta (21.70)
  - For every one day that passes with no change in the underlying, the trade would lose \$21.70

## Interest Rate Risk

---

- **Rho Analysis**
  - The trade has a Rho of 301.86
  - A 1.00% move in the U.S. interest rate would cause the option to gain or lose 301.86
- **Phi Analysis**
  - The trade has a Phi value of (321.30). Therefore, a 1.00% gain in the foreign interest rate would result in a 321.30 loss

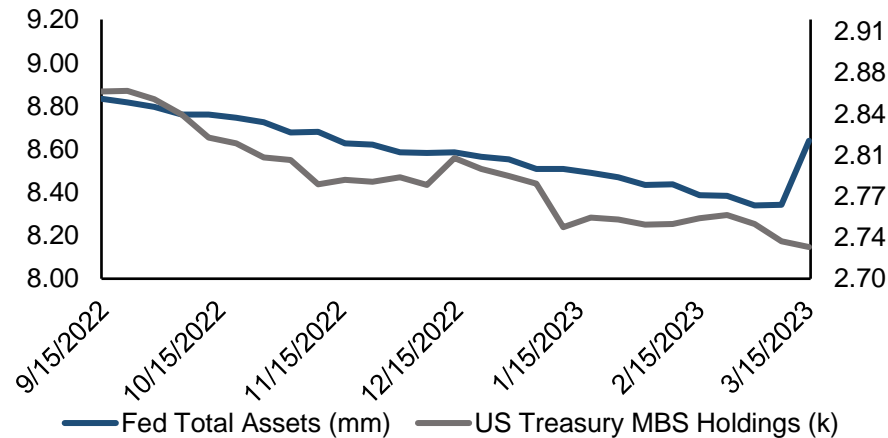




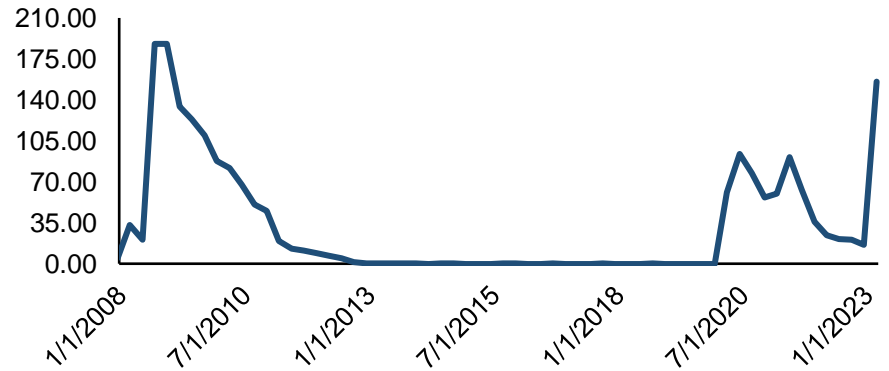
## IV. Technical Bias & Fair Value

## Technical Bias & Fair Value

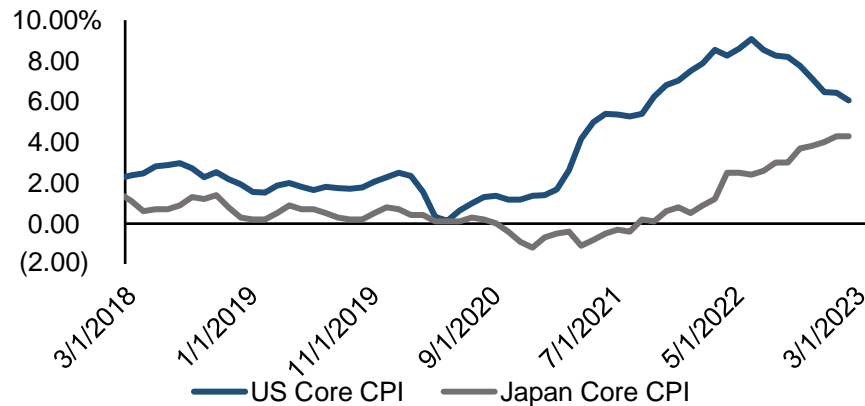
Fed Total Assets vs US Treasury MBS Holdings | Six-Month Chart



Fed Discounted Window Borrowing (bn) | 13-Year Chart



US Core CPI vs Japan Core CPI | Five-Year Chart



### Synopsis

- It was revealed that the Fed's balance sheet swelled by ~300.00 bn in the past two weeks, but do not mistake this as quantitative easing
  - While there was an overall increase in the Fed's total assets, U.S. Treasury mortgage-backed securities continued in a downward direction, as expected under quantitative easing
- What caused the sudden increase in the Fed's assets was discount window lending, which elevated to ~153.00 bn two weeks ago
  - The previous spikes in 2008 and 2020 reflect how discount window lending serves as a safety valve and an extension of credit to alleviate liquidity strains in the banking sector
- Core Inflation in Japan has been rising at an unprecedented rate
  - Currently, the BoJ has refused to change their immensely dovish policies, creating pressure on the strength of the Yen

## V. Capital Allocation

## Capital Allocation

