



Elise Bennett, Conrad Haas, Brandon Koenig, Jaden Morgan, Gavin Odell, Brayden Perry

Security

JY3 COMB Currency –
Japanese Yen – USD
Currency Future – June 2025

View

Bullish on Yen
Bearish on USD

Investment

JY3 COMB Currency –
Japanese Yen – USD
Currency Future – June 2025

Thesis
Points and
Risks



Macro
Indicators



Carry Trade



Technical
Analysis



Position
Overview

Thesis

- US Fed cutting rates 50 bps likely to increase inflation
- Japanese macroeconomic indicators indicate a stabilizing economy
- US macro indicators signal a possible weakening of the dollar
- Carry traders still have high interest in yen loans, possibility for margin calls

Thesis Risks

- Inaction from the Japanese Central Bank could possibility cause an issue with the timing of the play
- Volatility drag can affect the overall return of the play
- Low open interest for date of expiration
- Low trader volume for the expiration of the play

US Macro Indicators

Macro News

- The Fed plans to lower interest rates again in early November by 25 basis points
- Heightened tensions between the U.S and China over trade policies could drive investors to seek relative safety in the yen
- If the U.S imposes new tariffs on imports, it could weaken the dollar and strengthen the yen
- Expectations of loosening U.S monetary policy have recently affected the yen

2024 Election

Donald Trump

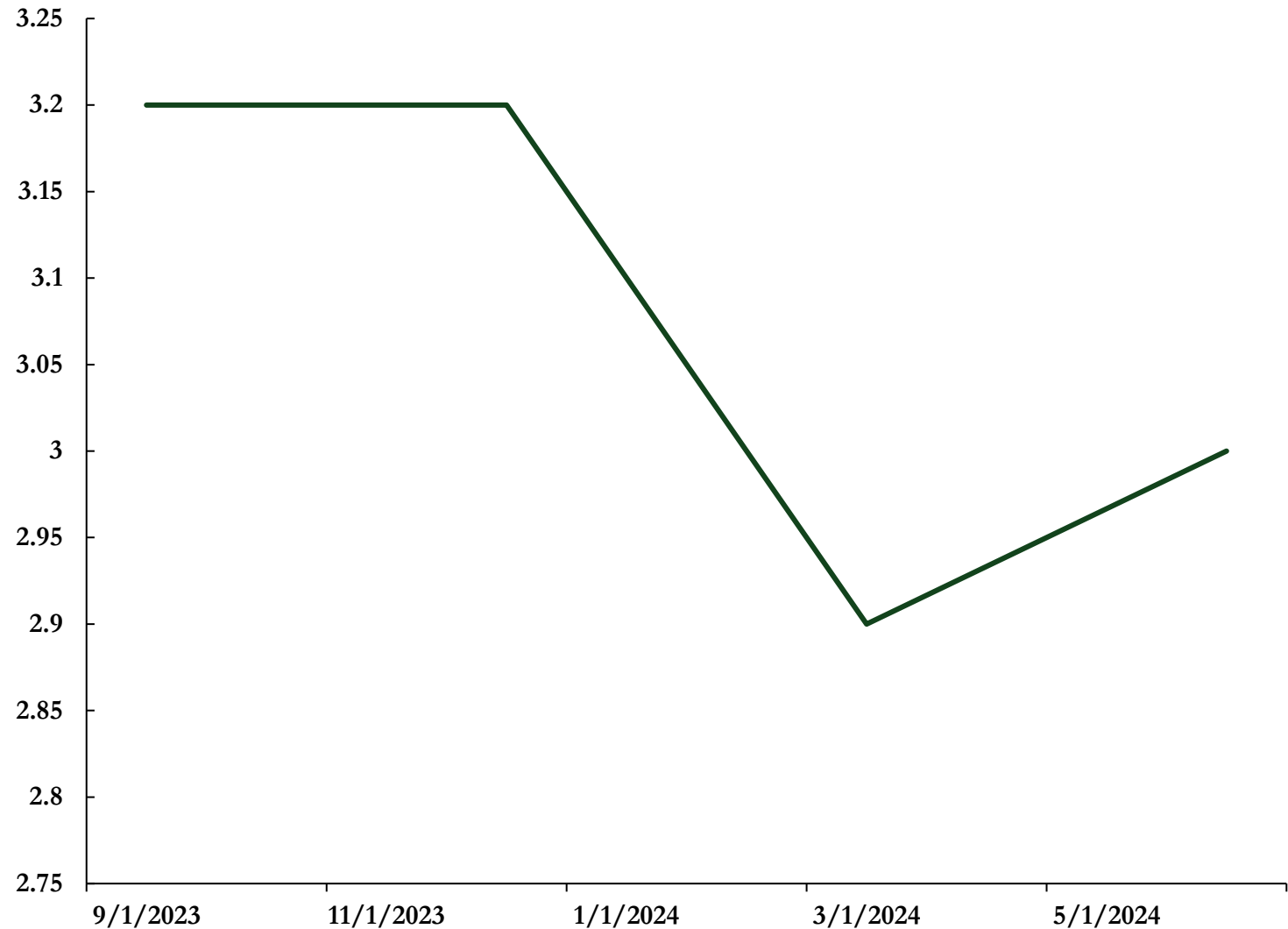
- Proposed many different trade policies and most of them have potential to cause global trade tensions
- Lower corporate taxes and eliminate income taxes on social security benefits
- The combination of tariffs and tax cuts could lead to increased market volatility

Kamala Harris

- Plans to expand the Child Tax Credit to \$3,600 per child under 5 and \$3,000 per child over 5 which could lead to higher fiscal deficits
- Raise the corporate tax rate from 21% to 28% potentially slowing economic growth
- Likely to maintain a cautious approach to new trade deals

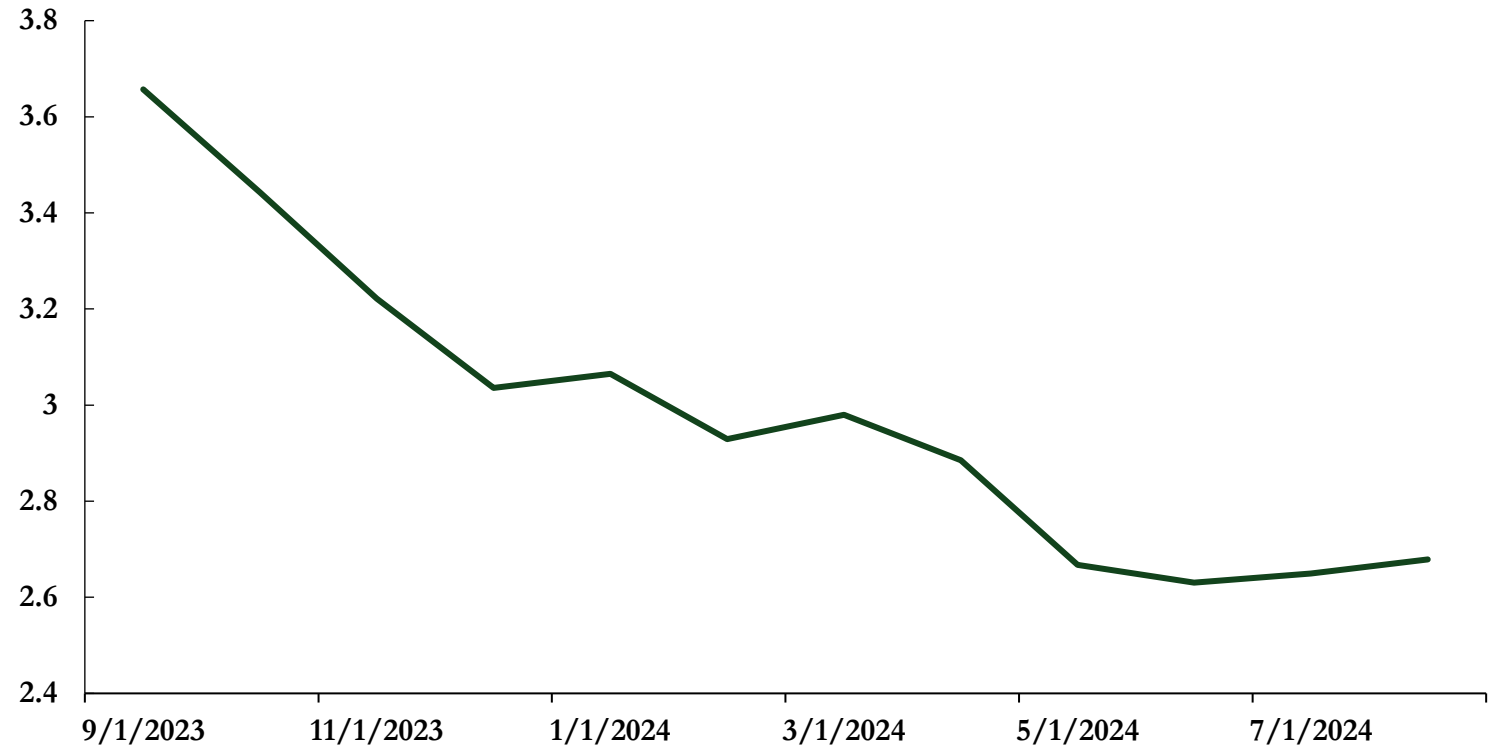
GDP

- Manufacturing activity has been slowing down
- The GDP grew at an annualized rate of 3.0% in the second quarter of 2024
- A higher GDP typically correlates to a stronger U.S dollar



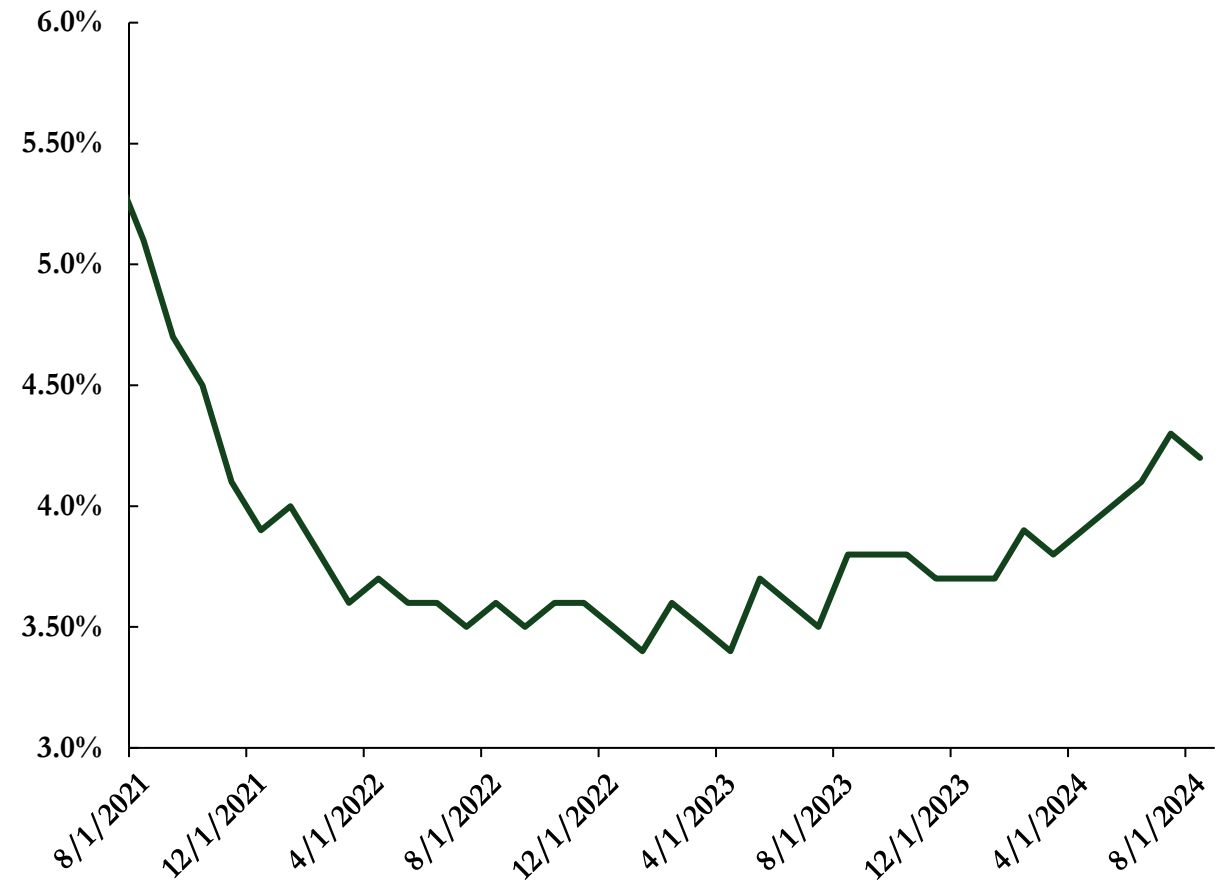
Personal Consumption Expenditure

- The decline in the PCE shows the overall spending of consumers on goods and services has decreased
- The PCE data shows that inflation has dropped
- Lower PCE leads to rate cuts which historically increases inflation

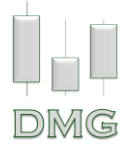
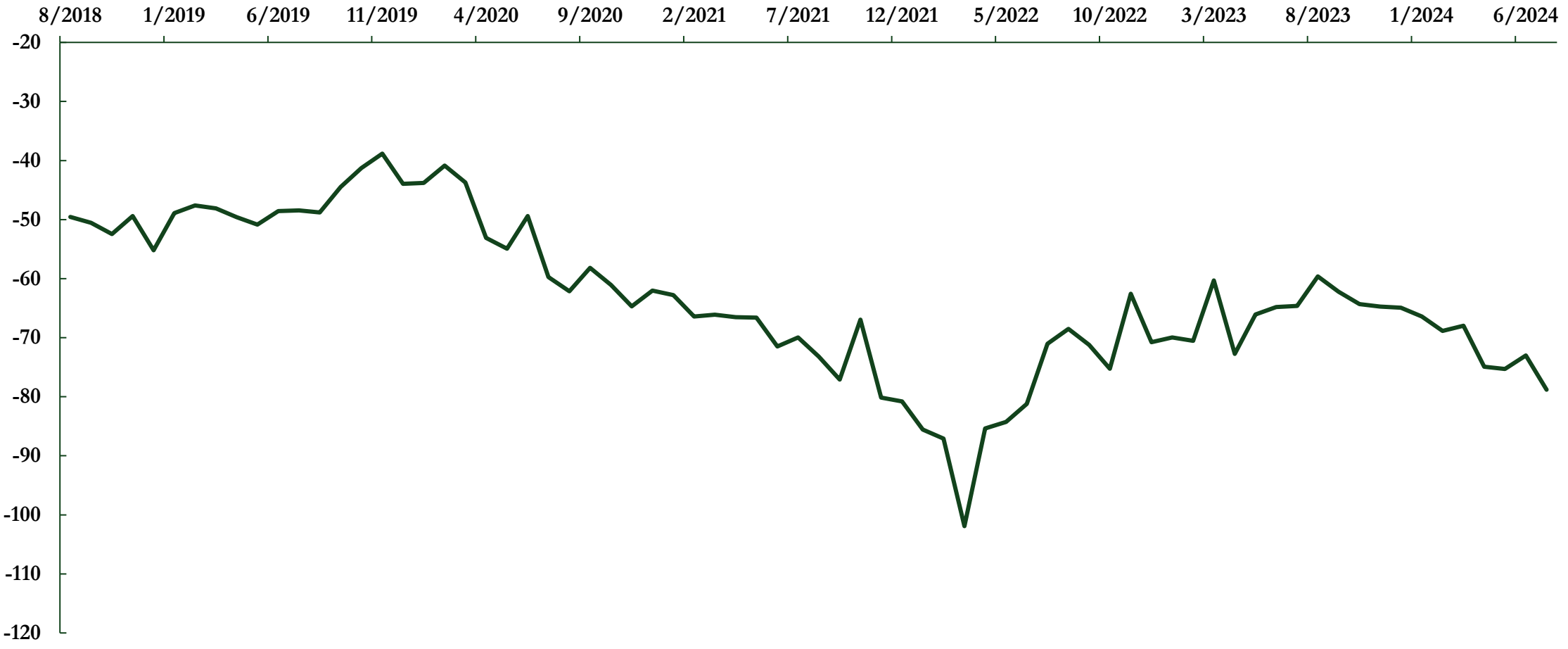


Unemployment Rate

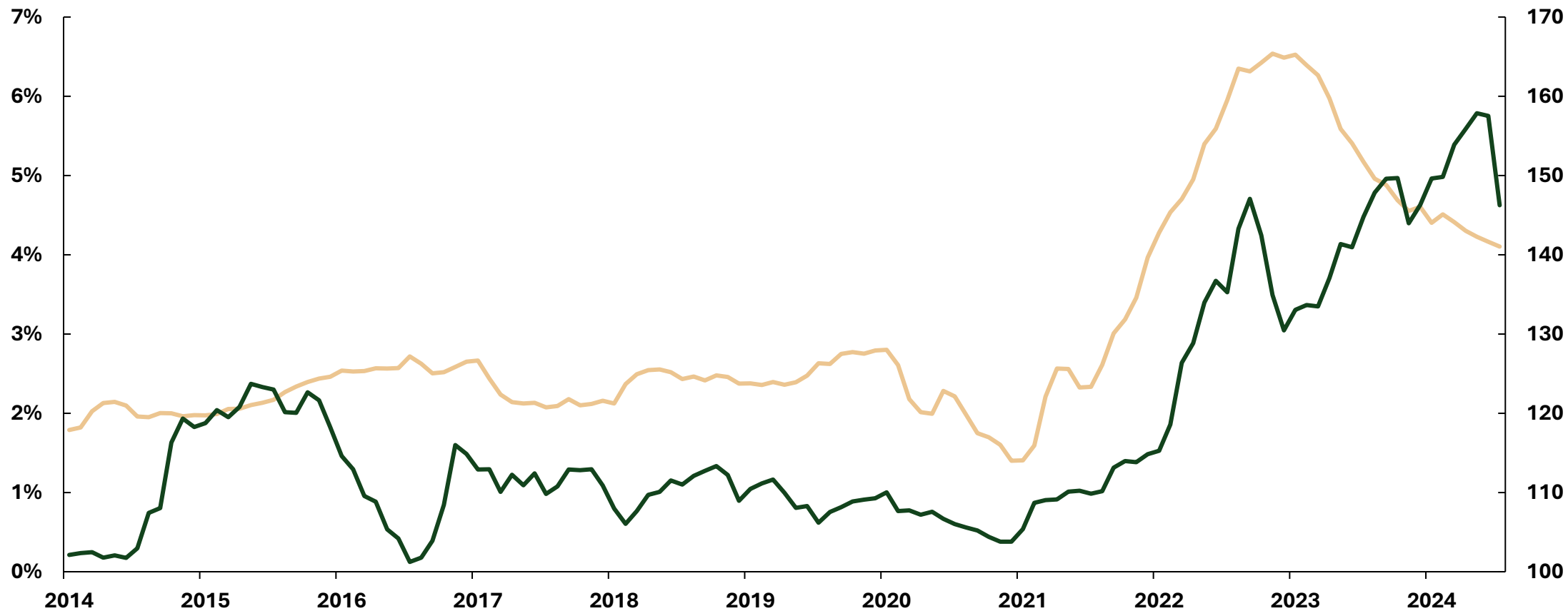
- The ADP employment report revealed that there was only 90,000 jobs added in august
- Layoffs rose to 1.8 million in March 2024, the highest level since December 2020
- The unemployment rate rose to 4.3% in July 2024



US Trade Balance (\$Billions)



US Core CPI vs. USD/Yen Exchange Rate

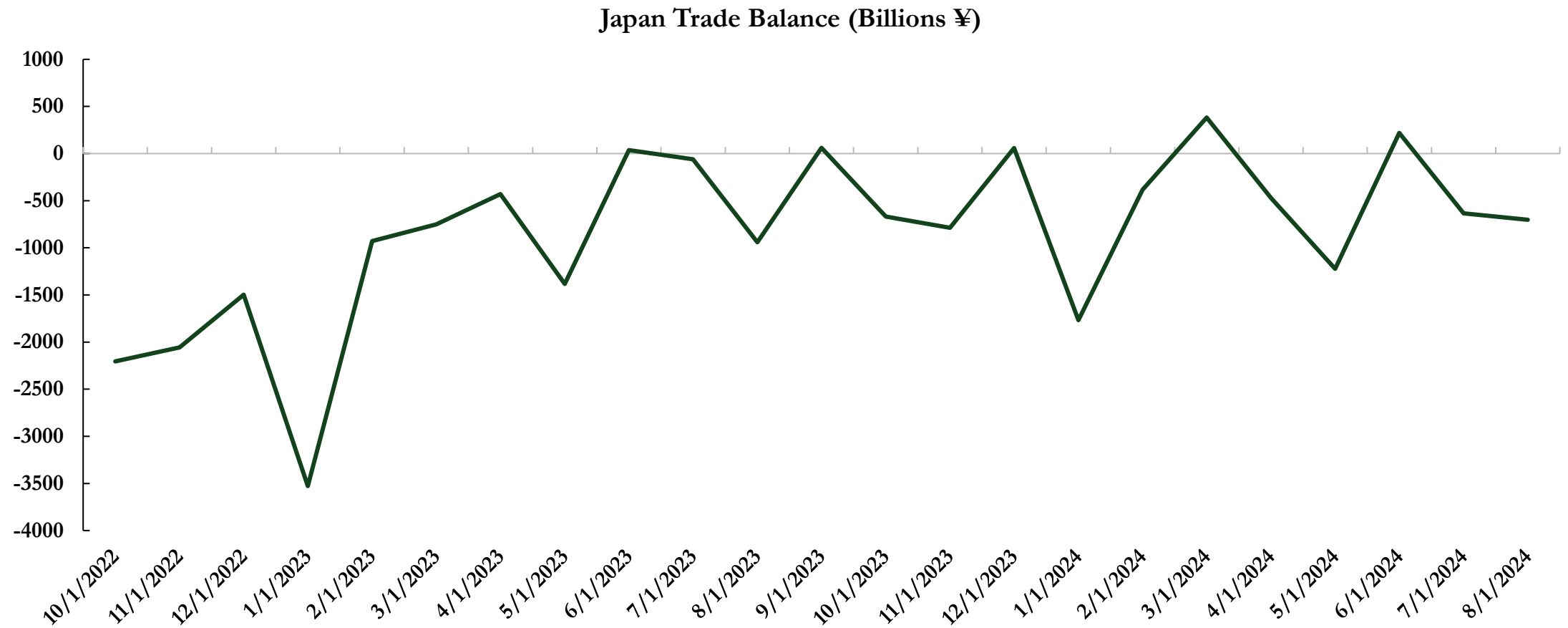


Japan Macro Indicators

Japan Economy Overview

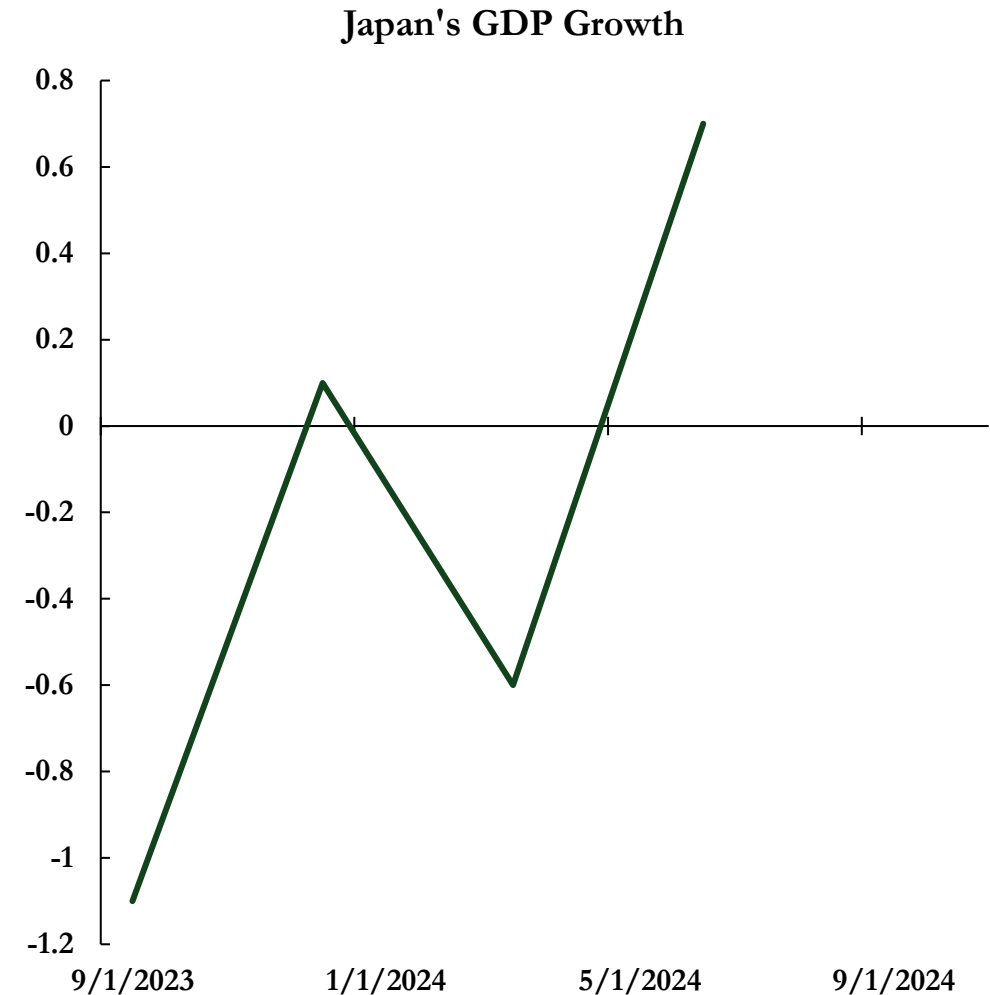
- The BOJ is like the FED and the next meeting is Dec 18th
- Big manufacturers' business confidence was +13 which is unchanged from June
- Big companies are expected to increase capex by 10.6%
- BOJ has a target rate of 2% inflation but is currently at 3%
- BOJ ended negative interest rates in March and raised its short-term policy rate to 0.25%

Japan Trade Balance



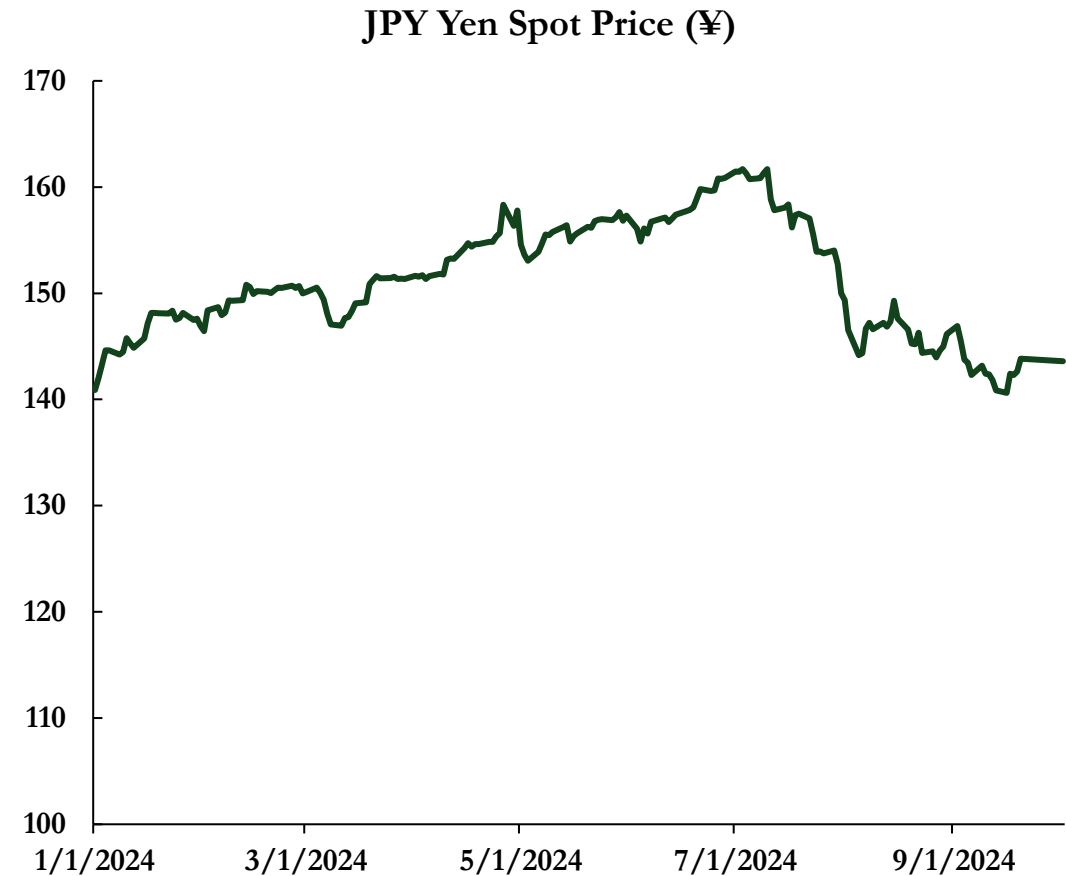
GDP

- The service sector makes up almost 70% of Japan's GDP
- Growth will be difficult with central bank tightening monetary policy and yen will continue to depreciate
- Japan's public debt is equal to approximately 9.2 trillion USD

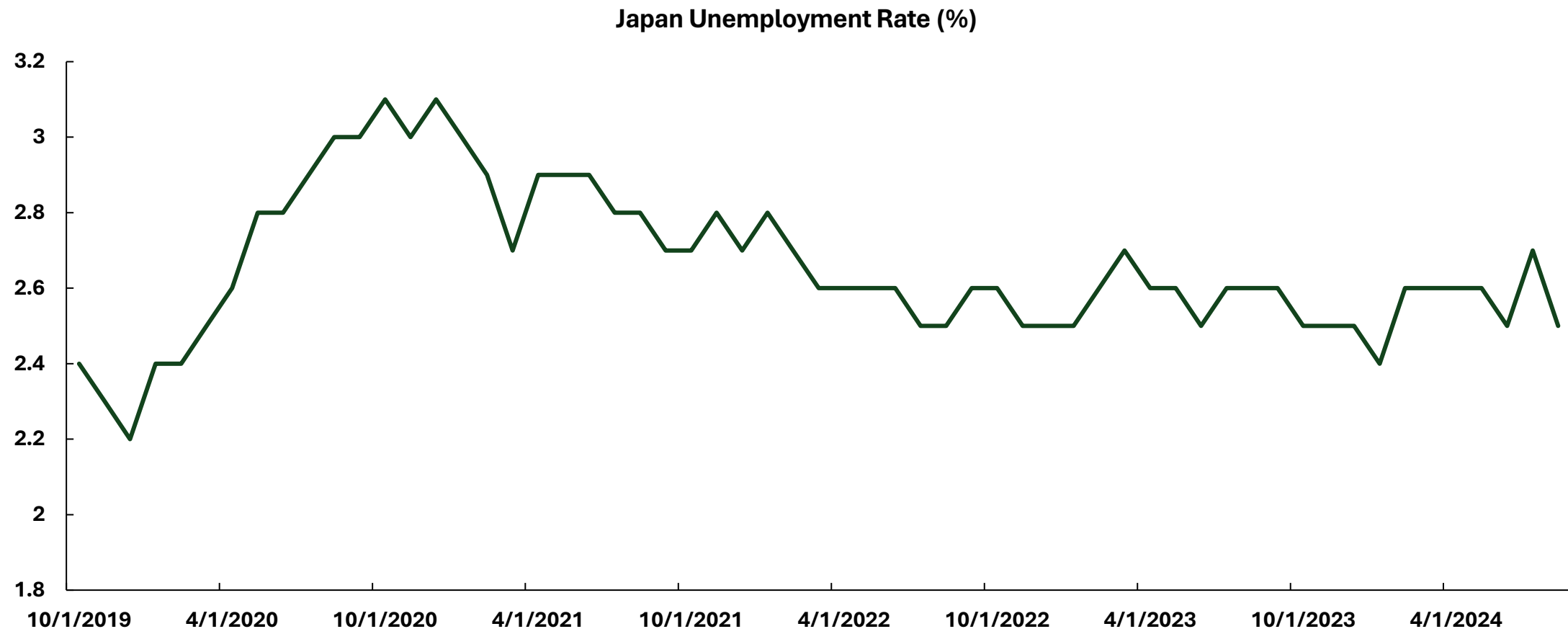


JPY Yen Spot Price

- Currently sitting at 146.09 USD Yen
- The Yen found some support as escalating conflict in the Middle East prompted investors to rush into safe assets



Unemployment



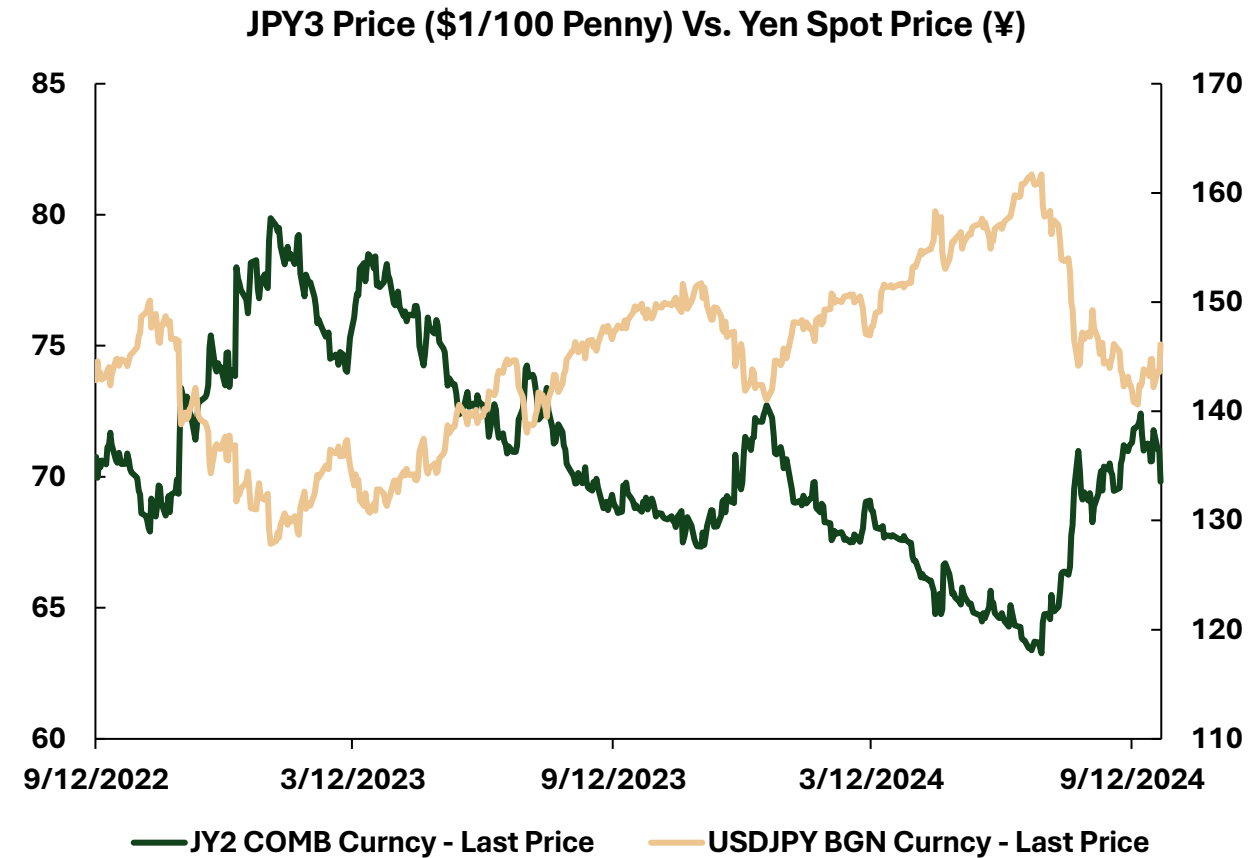
Carry Trade Arbitrage

Carry Trade Arbitrage

- Takes advantage of the interest rate difference between two currencies
- Borrow in low interest rate currency and convert the funds into a currency with a higher interest rate and invest in high-yield assets
- Arbitrage trader needs two different brokers who have slightly different bid/ask prices for the trade to be profitable
- The current Fed funds rate is 4.75%-5.00%
- Another 50bps cut is predicted to happen by the end of the year
- BOJ rates are at 0.25%
- Predicted to be around 0.5% in 2025

Role of Carry Trades in the Play

- \$350 billion invested in assets under the strictest definition of carry trade
- Currency futures and forwards can be for leverage
- Sensitive to central bank news
 - Fed rate cut of 50 bps
 - BOJ increase of 25 bps
 - Yen drove up 13% MoM July – August 2024

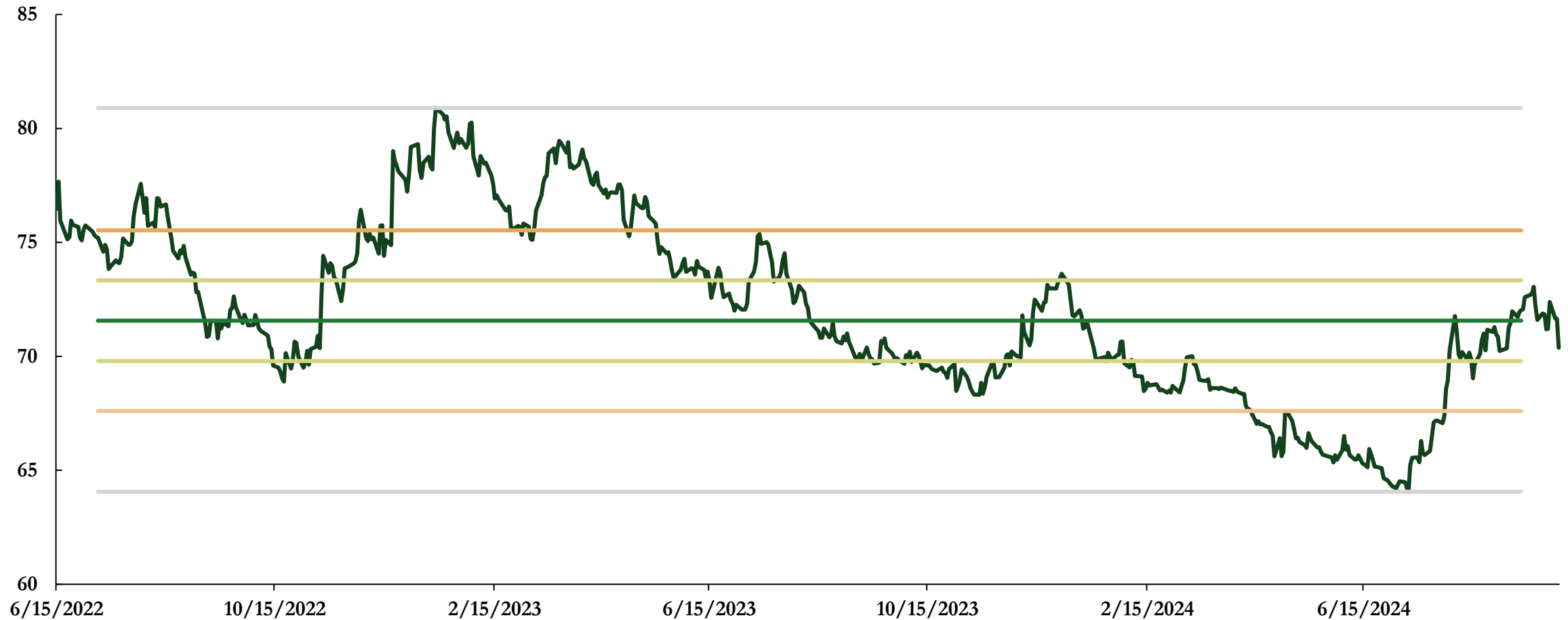


Volatility Drag

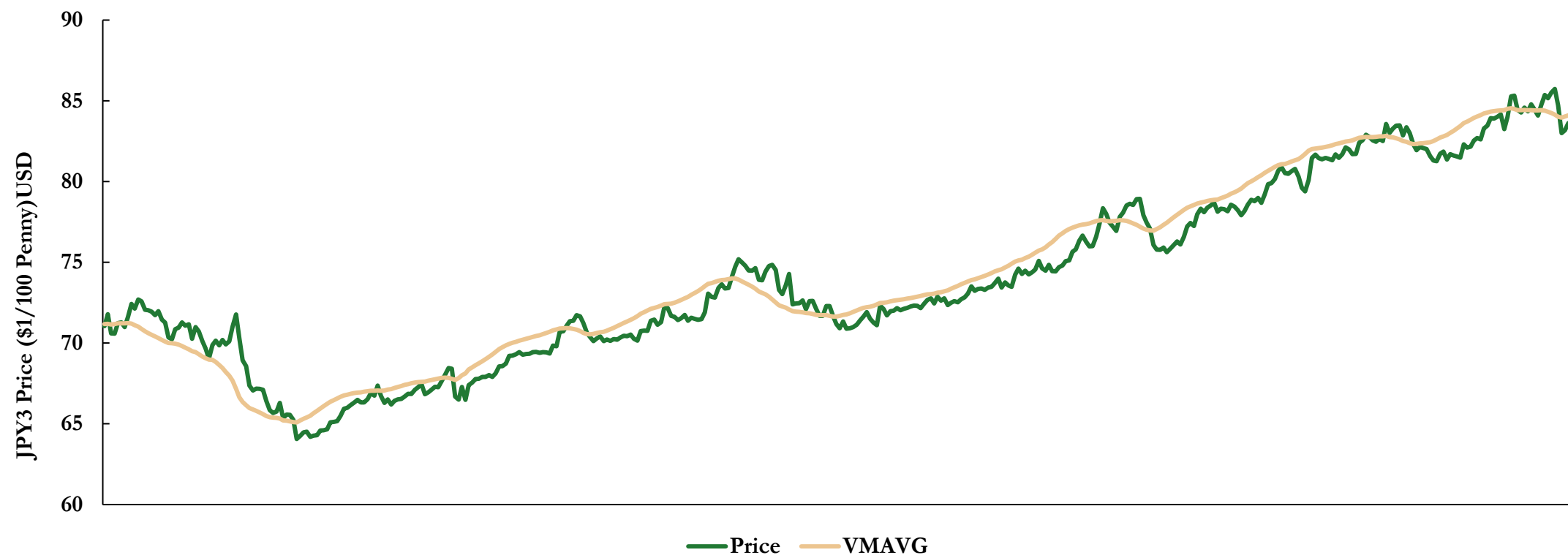
- The difference between an asset's average return and its compound growth rate
- Investment returns are reduced due to the fluctuations in asset prices
- Factors Contributing
 - Market Fluctuations
 - Asset Class Variability
 - Investor Behavior
 - Tracking error
- Example: If a stock drops 20% from \$100 to \$80 per share, and then increases 20% to \$96, the stock would need to increase by 25% to break even

Technical Indicators

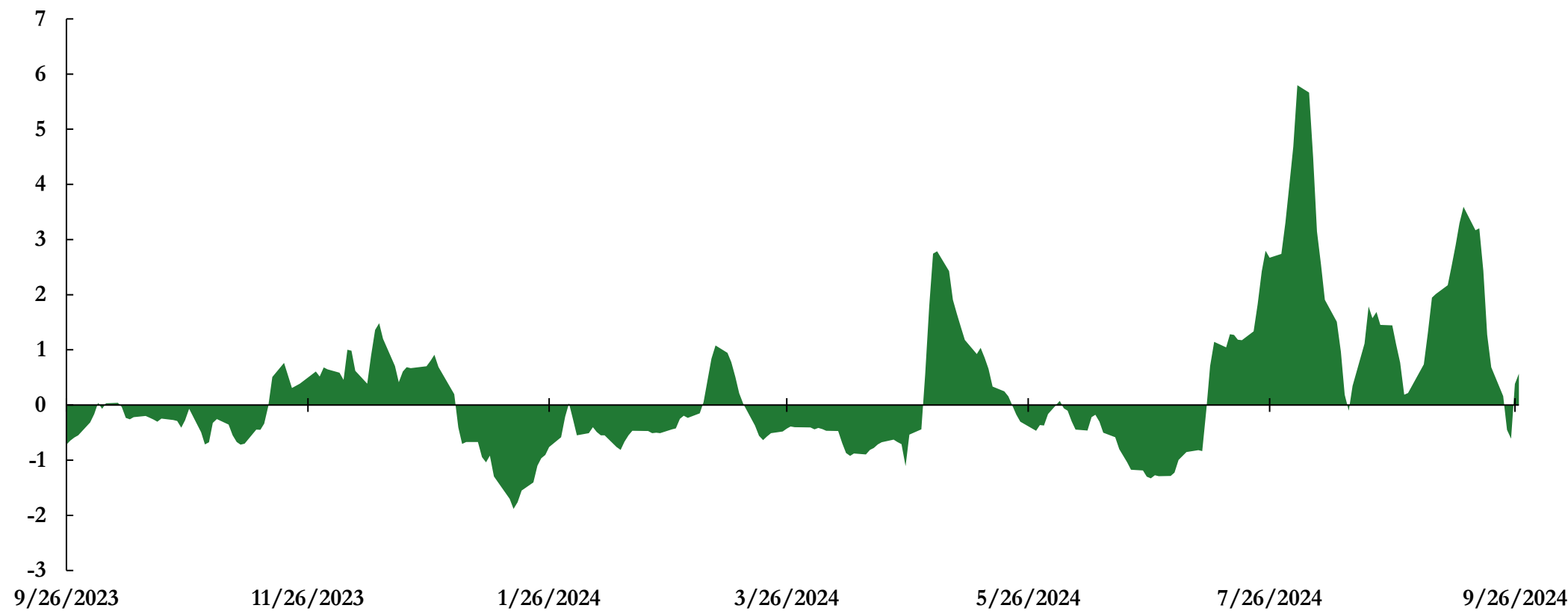
Fibonacci Retracements JPY3 Price (\$1/100 Penny)



Variable Moving Average



Fear & Greed Index



Position Overview

Future Contracts and Their Uses

- Futures contracts are exchange-traded agreements between parties to have a sale of an underlying asset at an agreed-upon price and date
- Futures are used for hedging and speculation of commodities, currencies, interest rates, energy, precious metals, and stock indices
- The buyer of a futures contract is taking on the obligation to buy the underlying asset when the futures contract expires
- The seller of the futures contract is taking on the obligation to provide the underlying asset at the expiration date

Currency Futures

- Futures where the underlying asset is a given currency
- Seller receives currency of their choice and must provide the underlying currency at expiration
- Buyer pays currency of seller's choice and will receive underlying currency at expiration
- The margin to keep the future open is in the underlying currency
- Currency futures are leveraged positions in underlying currency and move a great deal as exchange rates change
- Currency exchange rates are affected by interest rates, inflation rates, debt, import-export balances, and deficits

Interest Rate Parity

- Fundamental equation that governs the relationship between interest rates and currency exchange rates
- Used to predict future exchange rates, though criticized
- Covered – Takes arbitrage into account and will be slightly higher than uncovered. If you borrow from a bank or currency exchange, they will use this rate when using interest
- Uncovered – Does not take arbitrage into account, just interest rate, this is used to predict future spot prices
- Example: $F = S (1+I_j/1+I_{US})$, $F = .00706(1.0025/1.0475)$ $F = .00676Y/1 \text{ USD}$.

Yen Future Specs

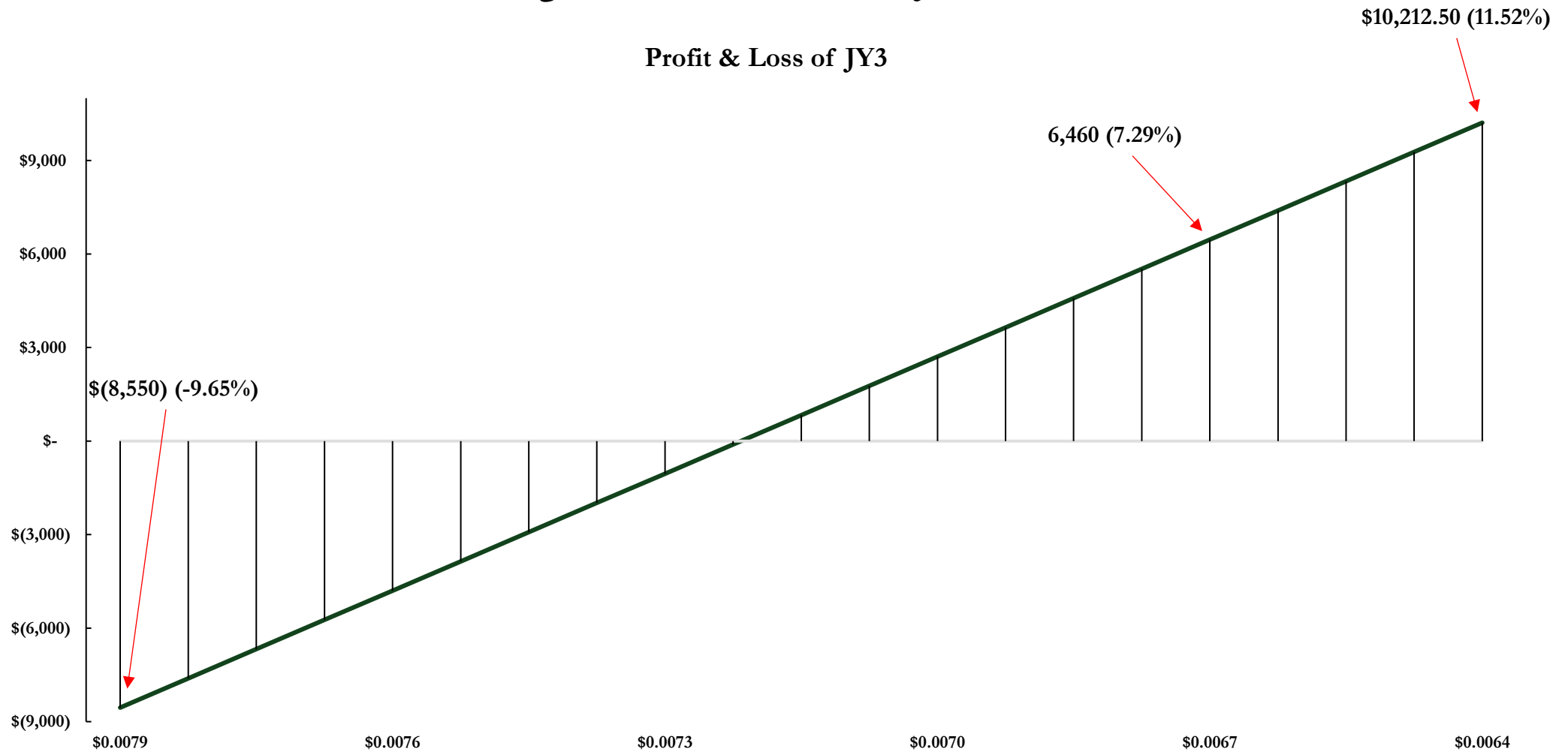
JY3 COMB Currency – Japanese Yen

- Contract Unit – 12,500,000 Yen
 - Priced in cents per Yen
- Price Per Yen – \$0.00709 or 0.709 cents
- Total Contract Value - \$88,625
- Minimum Margin: \$2,450
- The price per Yen would have to fall to 30% collectively from start

Market Contact Information

- Spot Yen Price – 145.39 Yen/USD or \$0.00688/Yen
- Open Interest – 696
- Total Volume – 8
- YTD Price: 1.21%
- Cash Settled

Profit & Loss of JY3 Curncy



Margin Model – Margin Call Scenario

JY3 COMB Curncy					
Day	Price per (Yen/USD)	Futures Price	Gain/Loss	Margin Account Balance	Margin Call
October	0.00709	\$ 88,625.00		\$26,587.50	
November	0.0065	\$ 81,250.00	\$ (7,375.00)	\$19,212.50	
December	0.0057	\$ 71,250.00	\$ (10,000.00)	\$9,212.50	\$ -
January	0.006	\$ 75,000.00	\$ 3,750.00	\$12,962.50	\$ -
February	0.005	\$ 62,500.00	\$ (12,500.00)	\$462.50	\$1,988.00
March	0.0057	\$ 71,250.00	\$ 8,750.00	\$11,200.50	\$ -
April	0.0063	\$ 78,750.00	\$ 7,500.00	\$18,700.50	\$ -
May	0.007	\$ 87,500.00	\$ 8,750.00	\$27,450.50	\$ -
June	0.0071	\$ 88,750.00	\$ 1,250.00	\$28,700.50	\$ -
Contracts	1	Contract Size	\$ 12,500,000		
Maintenance	\$2,450	Orginal Price	\$0.00709		
Gain	\$ 125.00	Initial %	30%		

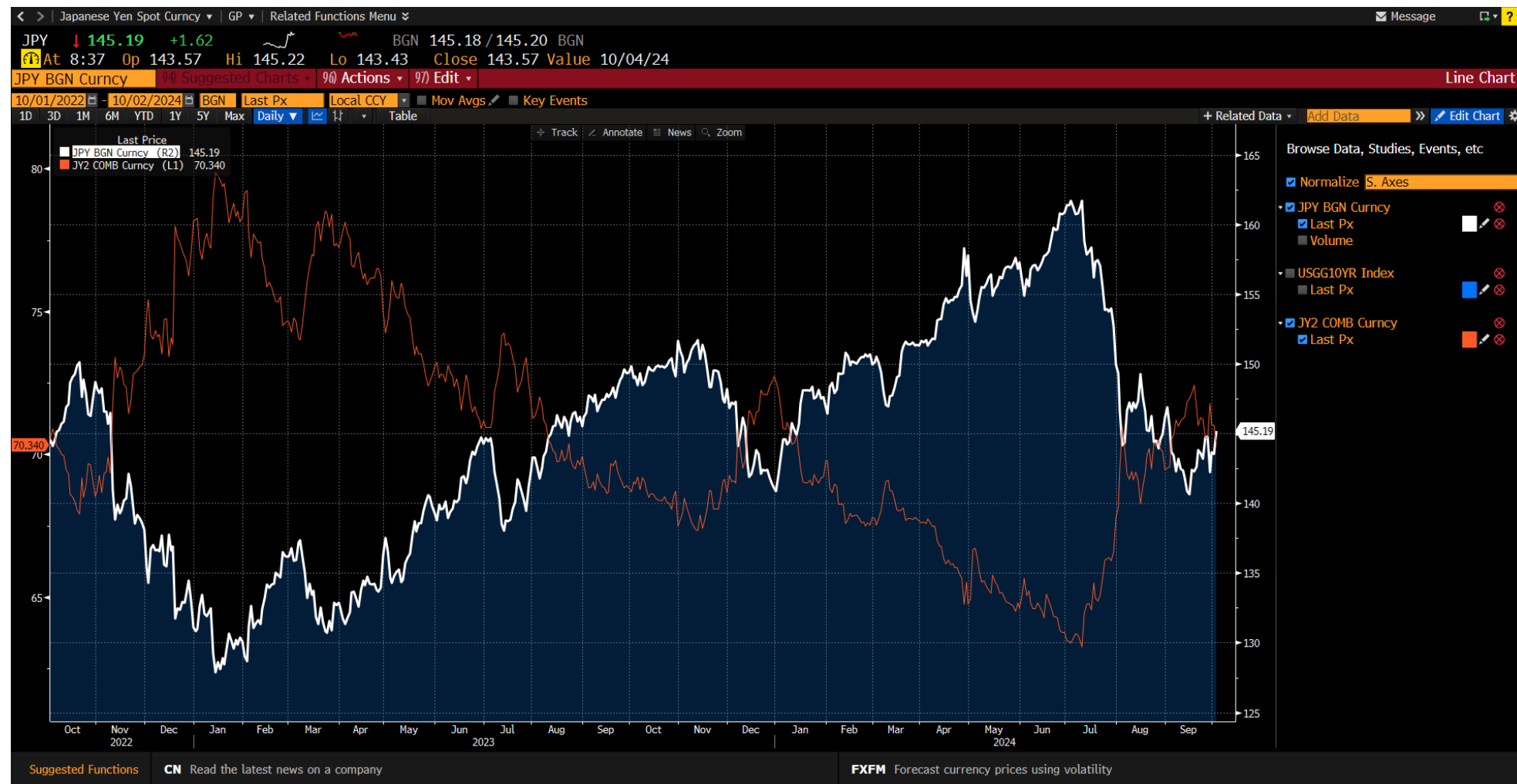
Margin Model – Expected Scenario

Appendix

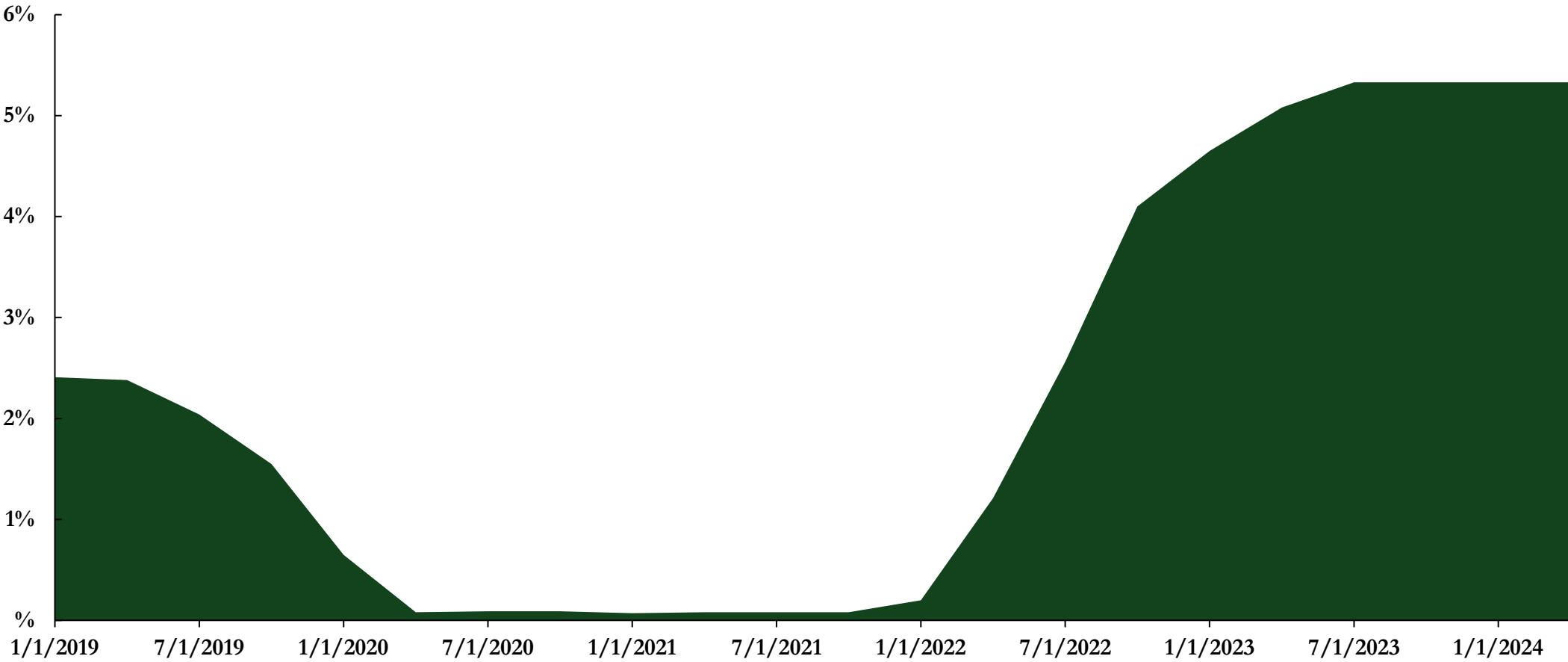
USD/Yen Spot



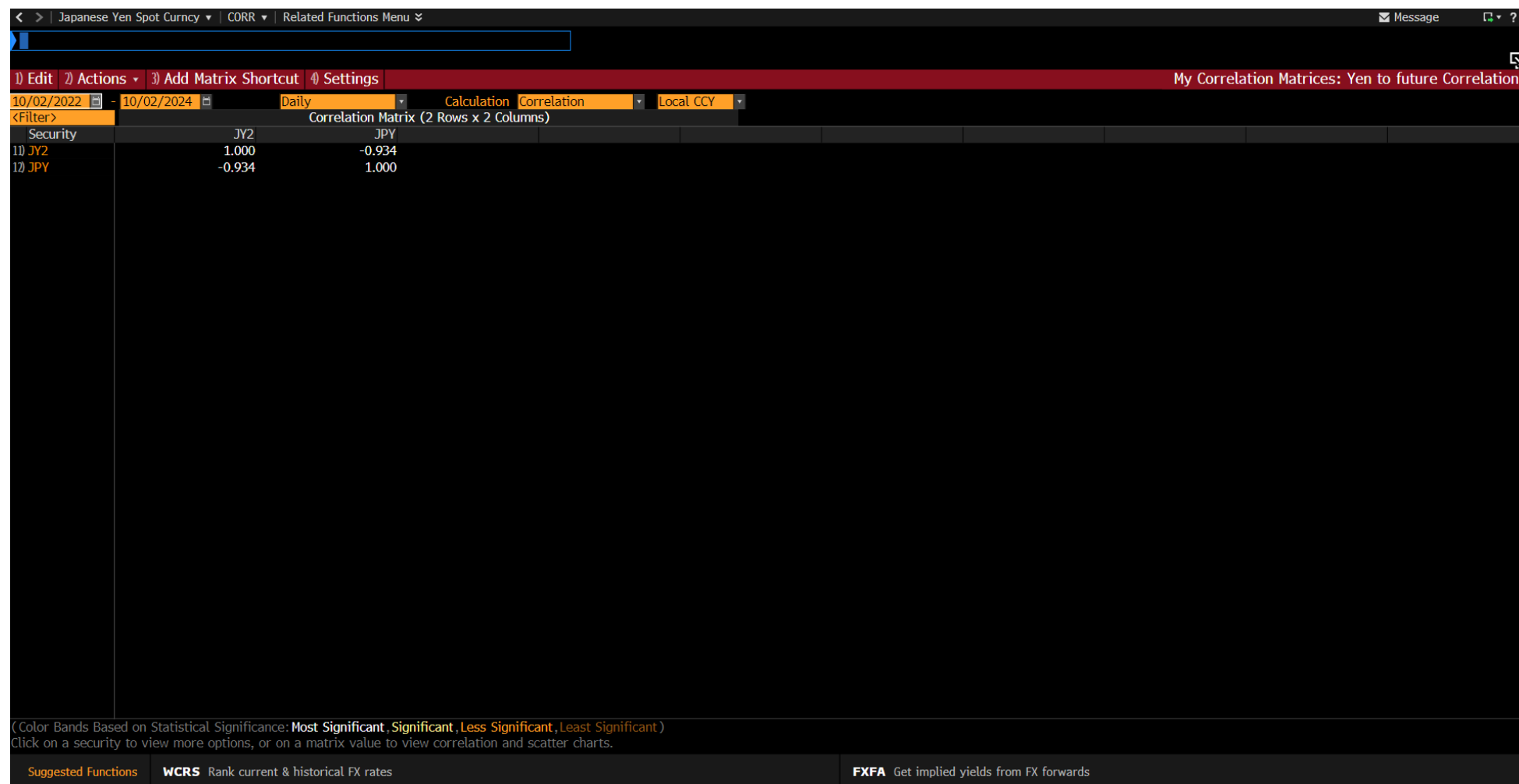
USD/Yen Spot vs. JY3 Futures



Interest Rates and Price Indexes



USD/Yen Spot – JY3 Futures Correlation



JY3 Futures Volume



Japan loan rates

- Uncollateralized Overnight Call Rate: As of September 30, 2024, the average is **0.225%**
- Interest Rate Applied to the Complementary Deposit Facility: As of August 1, 2024, this rate is **0.25%**
- Basic Loan Rate: As of August 1, 2024, this rate is **0.5%**
- Deposit Interest Rate: As of August 2024, this rate is **0.03%**, which is an all-time high
- Japan 10 Year Government Bond Interest Rate: As of September 30, 2024, this rate is **0.89%**
- Japan 5 Year Government Bond Interest Rate: As of September 30, 2024, this rate is **0.47%**
- Japan Bank Lending Rate: As of August 2024, this rate is **1.475%**