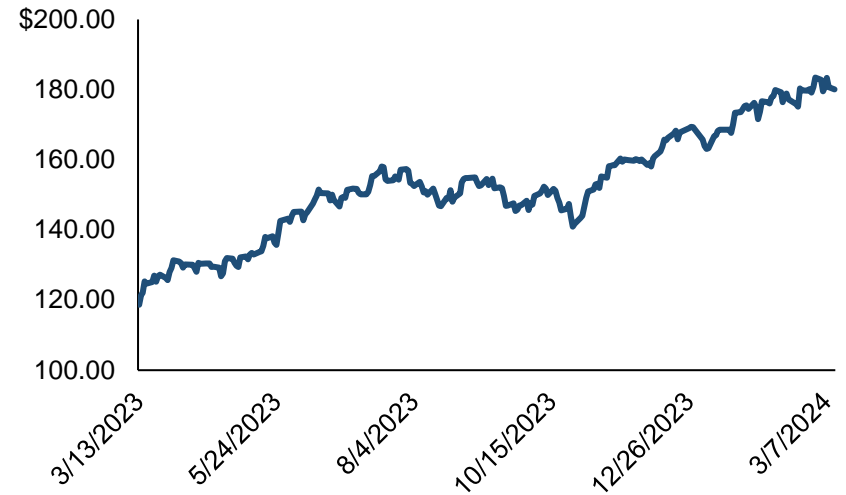


Invesco NASDAQ 100 ETF | One-Year Price Chart



Position Details

- Invesco NASDAQ 100 ETF | QQQM
- Underlying Price: \$181.06
- Bull Call Spread
- Expiration Date: June 21, 2024

Equity Derivatives Sector

Analyst

Sean Cherry
seancherry0@gmail.com

President

Phil Sullivan
philsullivan10@gmail.com

Vice President

Owen Perry
owenperry0429@gmail.com

Chief Investment Officer

Adi Wodeyar
adiwodeyar@gmail.com

Table of Contents

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



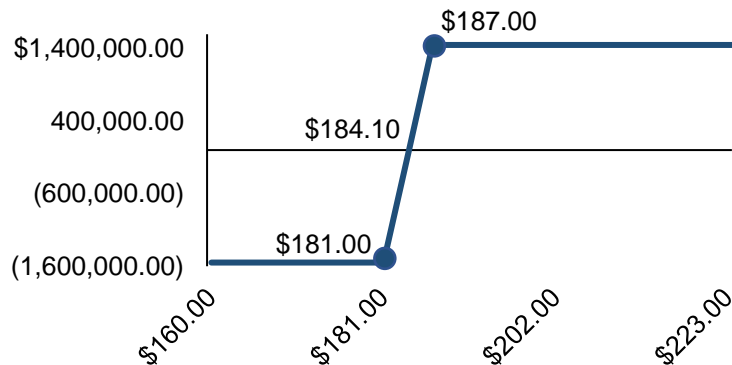
I. Product & Position Overview

Product & Position Overview

Product Description

- **Invesco NASDAQ 100 ETF**
 - The Invesco NASDAQ 100 ETF tracks the investment results of an index composed of the 100 largest-capitalization U.S. equities that are listed on the NASDAQ stock exchange; it includes the Magnificent Seven
 - This ETF provides diversification across the various sectors in the broader NASDAQ index, tracking the largest, most established innovative companies within the NASDAQ
- **Top QQQM Sector Weightings**
 - Information Technology | 51.07%
 - Communication Services | 15.60%
 - Consumer Discretionary | 13.13%
 - Consumer Staples | 6.49%

Payoff Diagram



Trade Breakdown

- **Bull Call Spread**
 - This strategy benefits from relatively bullish price movements in the underlying product
- **Setup**
 - We Buy – 5.00 k ITM \$181.00 Calls | QQQM
 - We Sell – 5.00 k OTM \$187.00 Calls | QQQM
 - Max Profit - \$1,450,000.00
 - Max Loss – (\$1,550,000.00)
- **Expiration**
 - Date: June 21, 2024

Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
 - **\$187.00 / \$185.50 / \$181.00**
 - Breakeven – \$184.10
- **Methodology**
 - The Equity Derivatives Sector aims to benefit from a ~3.50% bullish movement in the price of the underlying before the contract reaches expiration
- **Hedge Strategy**
 - In the event the underlying does not increase as anticipated, the Sector will look to reverse trade



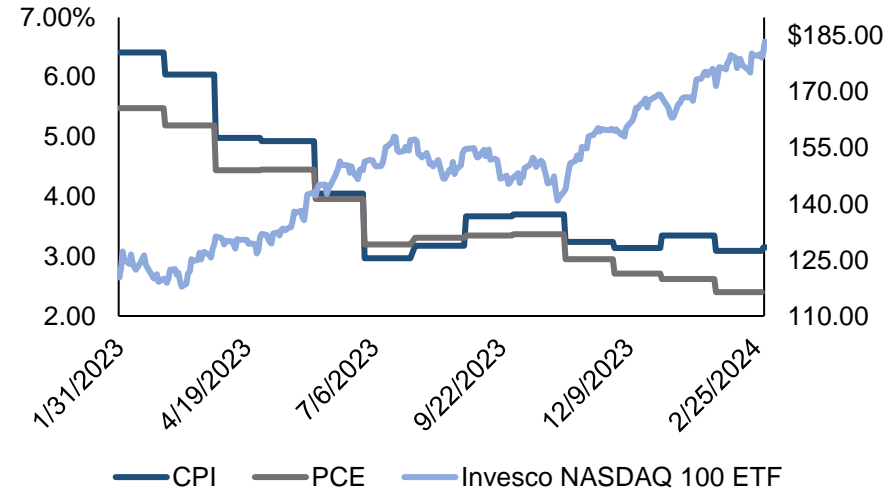
II. Macroeconomic Thesis

Macroeconomic Thesis

Macroeconomic Summary

- **Rate Cuts on the Horizon**
 - January's 353.00 k job gain was revised down to 229.00 k. Additionally, the unemployment rate rose from 3.70% to 3.90% in February – a sign of a cooling labor market
 - PCE has seen consistent downward movement towards 2.00% despite CPI stagnating at a level above 3.00%
 - Jerome Powell still views policy as restrictive, with the FOMC “not far” from having the confidence to cut rates
- **Households Can Help Contribute to Further Equities Rally**
 - Households are currently sitting on near record levels amount of liquid assets at an amount of \$18,031.42 bn
 - As of January 10, the wealthiest 10.00% of Americans owned 93.00% of stocks, with the bottom 50.00% of citizens holding under 1.00% of stocks
- **Leading Tech Companies Continuing to See Strong Demand while Maintaining Strong Valuations**
 - The Atlanta Fed GDPNow model estimated a 2.50% real GDP growth rate as of March 7, 2024 – a 1.10% upward revision from an initial Federal Reserve projection
 - Leading technology companies have strong fundamentals, demand, and balance sheets – proving justified earnings
 - Nvidia trades at 32.00 times its expected earnings over the next 12.00 months – its two-year average is 38.00 times expected earnings

CPI vs. PCE vs. QQQM | ~13.00-Month Chart



Market Pros & Cons

- Nvidia (NVDA) continues to beat expectations
- AI allows large-cap stocks to further cut costs
- Inflation sees strong and consistent upticks
- U.S. restrictions on semiconductor exports deepen



III. Risk Analysis

Risk Analysis

Directional & Magnitude Risk

- **Delta Analysis**

- The Delta value for this trade is 0.1208
- For every \$1.00 change in the underlying asset, the contract will gain or lose \$0.1208
- The trade benefits from bullish movements in the underlying price of the ETF

- **Gamma Analysis**

- The Gamma value for this trade is 0.0006
- Gamma has a small impact on this trade
- If the underlying changes by \$1.00, the value of Delta will change by 0.0006 in that respective direction

Implied Volatility Risk

- **Vega Analysis**

- The Vega value for this trade is 0.0113
- The implied volatility for both legs of the trade is 20.00%
- Vega is positive due to the underlying currently being below the breakeven point at the beginning of the trade. The trade will benefit from a swing in prices, in particular to the upside

Time Risk

- **Theta Analysis**

- The Theta value for this trade is (0.0028)
- Theta is negative due to the decreasing opportunity for the trade to reach maximum profit as expiration nears each day, thus devaluing the position by \$0.0028 per day
- Bullish movement in the underlying would help offset this negative Theta value and indicate an increased chance of the trade potentially reaching maximum profit

Interest Rate Risk

- **Rho Analysis**

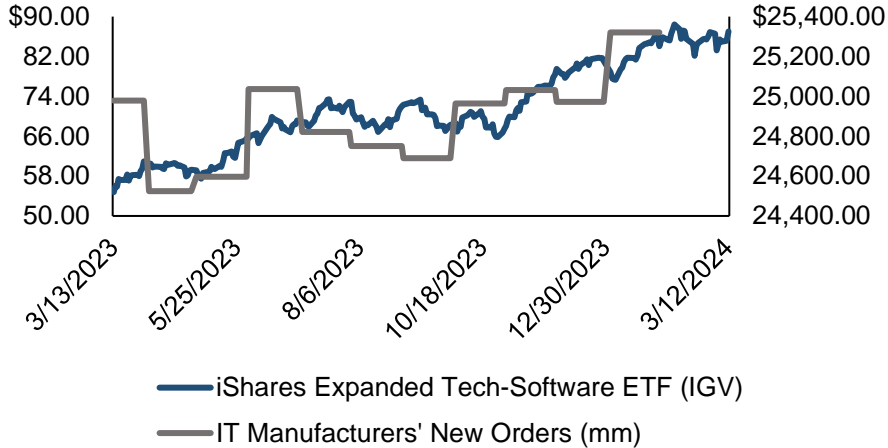
- The Rho value for this trade is (0.0069)
- The value of Rho is small due to the offsetting nature of the trade created by buying and selling two call contracts simultaneously. If rates are cut earlier than expected, the Rho value will turn positive. For every 1.00% change in interest rates, the contract will lose \$0.0069



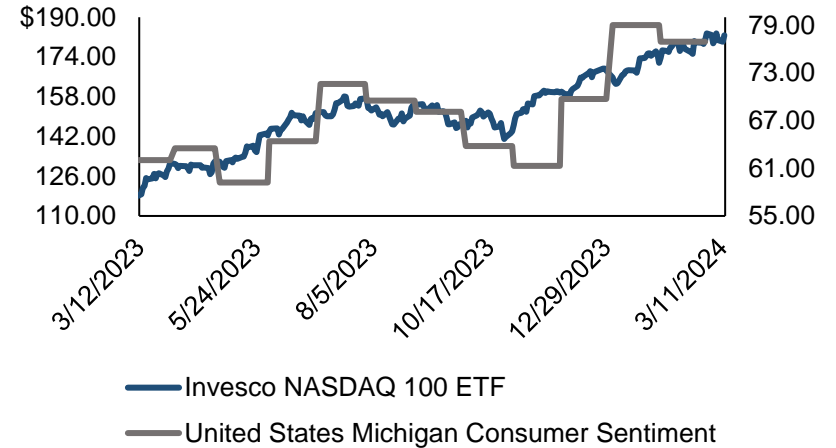
IV. Technical Bias & Fair Value

Technical Bias & Fair Value

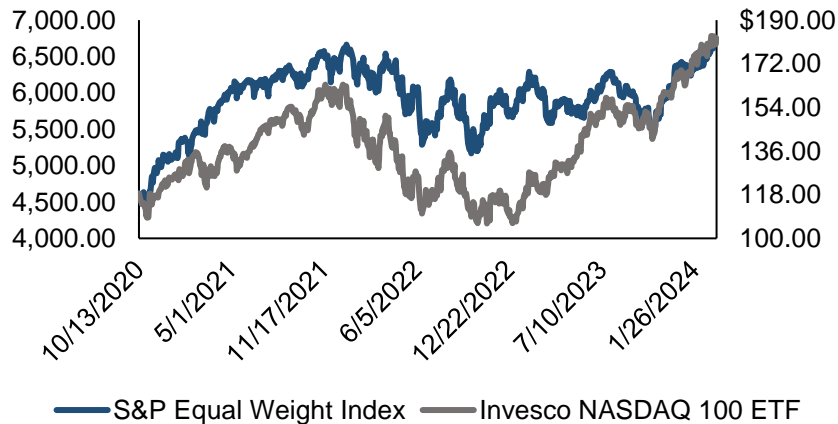
iShares Expanded Tech-Software ETF (IGV) vs IT Manufacturers' New Orders (mm) | One-Year Chart



Invesco NASDAQ 100 ETF (QQQM) vs U.S. Michigan Consumer Sentiment | One-Year Chart



S&P Equal Weight Index vs Invesco NASDAQ 100 ETF (QQQM) | Maximum Historical Chart



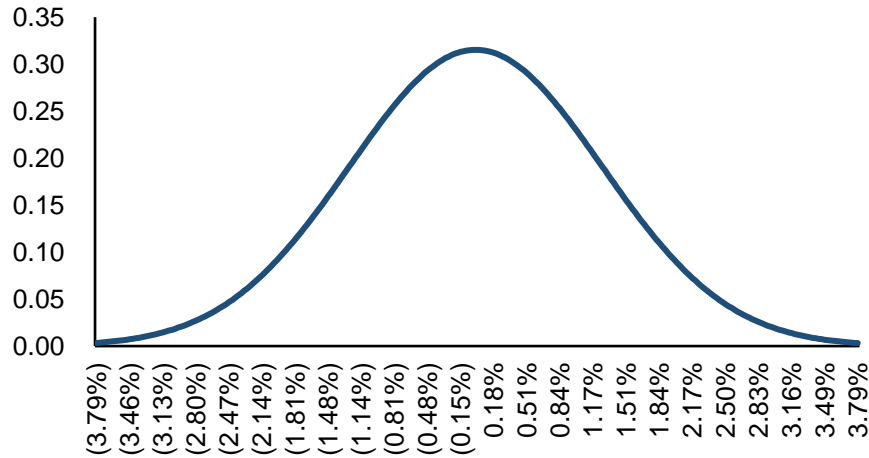
Synopsis

- Demand for IT manufacturers have remained strong along with growth in the price of an ETF that holds purely IT companies. After 4Q2023 earnings, many tech companies increased outlooks
- As economic growth has accelerated and inflation has started to fade, consumer sentiment has risen. Consumer sentiment will continue to rise as real wage growth continues to prove resilient
- Although technology companies have performed extraordinarily well thus far in 2024, fears of a bubble can be slightly abated by the increase in market breadth and the SPXEW reaching an all time high

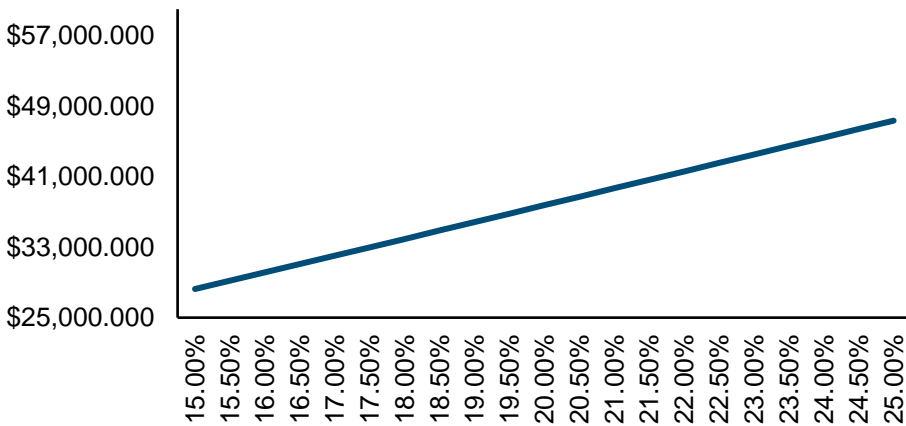
IV. Volatility Analysis

Volatility Analysis

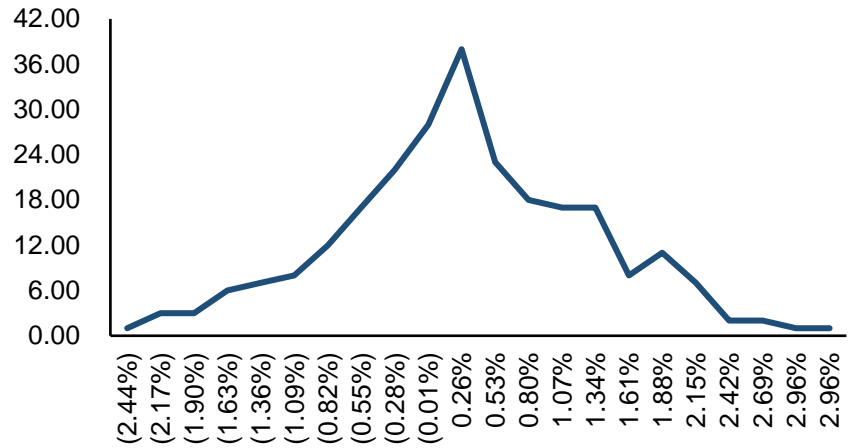
Expected Theoretical Daily Return Distribution



Position Volatility Sensitivity



Historical Daily Return Distribution



Synopsis

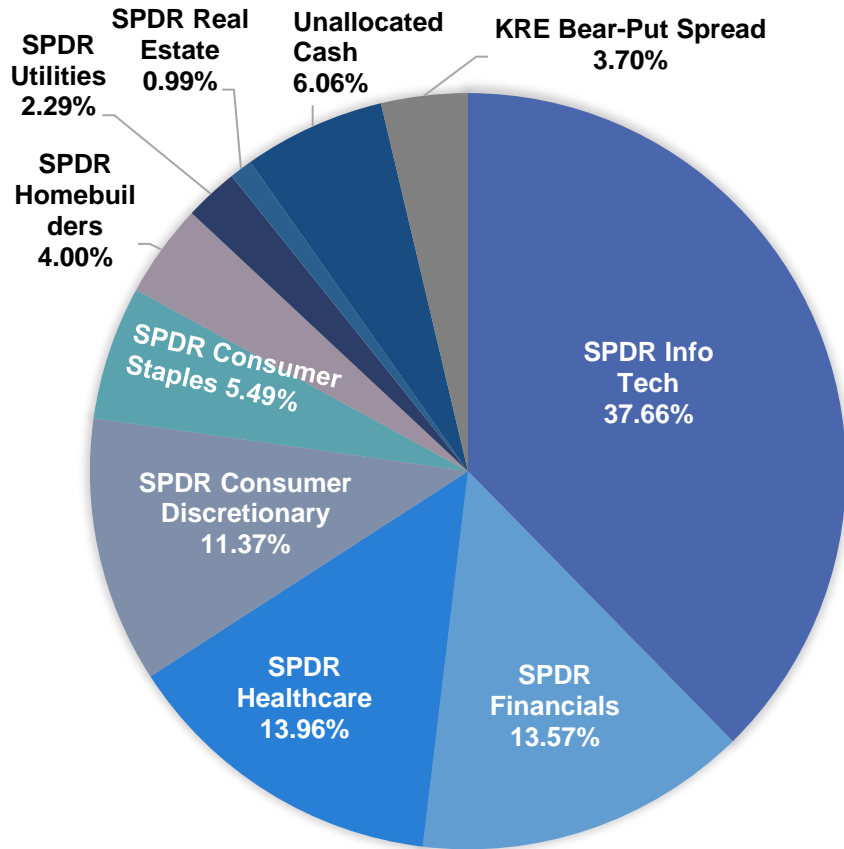
Asset Description	Option Premium
Theoretical Long Call	\$7.5100
Actual Long Call	\$8.6000
Theoretical Short Call	\$5.0400
Actual Short Call	\$5.5000
Theoretical Long Call Adj. for DV1	\$751.0000
Actual Long Call Adj. for DV1	\$860.0000
Theoretical Short Call Adj. for DV1	\$504.0000
Actual Short Call Adj. for DV1	\$550.0000
Theoretical Edge (LP) Assuming 100.00 k Contracts	(\$681,250.0000)
Theoretical Edge (SP) Assuming 100.00 k Contracts	\$287,500.0000
Total Theoretical Edge	(\$393,750.0000)



V. Capital Allocation

Capital Allocation

Current Portfolio Allocation



Proposed Portfolio Allocation

