### NOVEMBER 2024

## MerQube US Large-Cap Vol Advantage Index

# J.P.Morgan

#### PERFORMANCE UPDATE

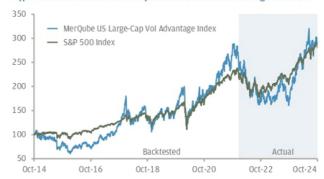
The MerQube US Large-Cap Vol Advantage Index attempts to provide a dynamic rulesbased exposure to an unfunded rolling position in E-Mini S&P 500% futures (the "Futures Contracts"), which reference the S&P 500% Index, while targeting a level volatility of 35%, with a maximum exposure to the Futures Contracts of 500% and a minimum exposure to the Futures Contracts of 0%.

The Index is subject to a 6.0% per annum daily deduction.

The Index was established on February 11, 2022.

Levels are published on Bloomberg using the ticker MQUSLVA.

#### Hypothetical and actual historical performance: Oct 2014 through Oct 2024



Please see the footnotes at the bottom of this page and "Backtesting" on the following page for information on backtested performance and proxies.

#### Hypothetical and actual historical returns and volatilities: Oct 2014 through Oct 2024

|  | 1 Year Return | 3 Year Return<br>(Annualized) | 5 Year Return<br>(Annualized) | 10 Year Return<br>(Annualized) | 10 Year Volatility<br>(Annualized) |
|--|---------------|-------------------------------|-------------------------------|--------------------------------|------------------------------------|
| MerQube US Large-Cap Vol Advantage Index | 69.57%        | 0.86%                         | 13.32%                        | 10.85%                         | 29.93%                             |
| S&P 500 Index                            | 36.04%        | 7.40%                         | 13.44%                        | 10.95%                         | 17.86%                             |

#### Historical exposure at end-of-day: Aug 2024 through Oct 2024

|             | October 2024 |             | September 2024 |             | A  |
|-------------|--------------|-------------|----------------|-------------|----|
| Period      | Exposure     | Period      | Exposure       | Period      |    |
| 10/01-10/03 | 233.65%      | 09/03-09/05 | 256.69%        | 08/01       | 1  |
| 10/04-10/10 | 211.56%      | 09/06-09/12 | 162.80%        | 08/02-08/08 | 1  |
| 10/11-10/17 | 256.83%      | 09/13-09/19 | 207.41%        | 08/09-08/15 | 1  |
| 10/18-10/24 | 308.73%      | 09/20-09/26 | 273.72%        | 08/16-08/22 | 26 |
| 10/25-10/31 | 220.51%      | 09/27-09/30 | 233.65%        | 08/23-08/29 | 26 |
|             |              |             |                | 08/30       | 25 |

#### Hypothetical and actual historical monthly and annual returns: Jan 2015 through Oct 2024

|      | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul    | Aug     | Sep     | Oct     | Nov    | Dec     | Year    |
|------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|--------|---------|---------|
| 2015 | -8.86%  | 10.90%  | -8.39%  | -0.41%  | 3.29%   | -4.65%  | -0.09% | -17.29% | -4.40%  | 17.28%  | -3.38% | -6.60%  | -24.07% |
| 2016 | -11.03% | -1.49%  | 13.77%  | -0.53%  | 4.22%   | -2.68%  | 10.44% | -0.64%  | -4.01%  | -6.30%  | 5.37%  | 3.35%   | 8.14%   |
| 2017 | 3.01%   | 14.83%  | -2.43%  | -0.25%  | 4.00%   | 1.42%   | 7.49%  | -1.03%  | 6.02%   | 9.87%   | 12.43% | 2.31%   | 73.07%  |
| 2018 | 22.09%  | -15.93% | -12.41% | -1.20%  | 4.38%   | 0.66%   | 9.31%  | 8.66%   | 0.99%   | -15.25% | 0.42%  | -14.51% | -18.54% |
| 2019 | 13.69%  | 6.76%   | 0.32%   | 11.77%  | -15.83% | 14.02%  | 0.84%  | -6.78%  | 2.30%   | 5.26%   | 12.28% | 7.23%   | 59.16%  |
| 2020 | 0.92%   | -19.13% | -6.92%  | 9.72%   | 4.51%   | -0.46%  | 7.27%  | 13.10%  | -6.15%  | -6.30%  | 10.42% | 6.16%   | 8.44%   |
| 2021 | -4.27%  | 1.18%   | 6.10%   | 11.97%  | 0.66%   | 3.71%   | 5.66%  | 6.76%   | -12.19% | 17.25%  | -1.83% | 4.30%   | 42.86%  |
| 2022 | -12.36% | -4.54%  | 4.68%   | -14.75% | -0.98%  | -12.93% | 13.14% | -8.48%  | -12.75% | 8.73%   | 7.38%  | -11.77% | -40.09% |
| 2023 | 9.72%   | -5.83%  | 2.08%   | 2.25%   | -0.08%  | 13.69%  | 7.68%  | -7.89%  | -14.22% | -5.38%  | 18.61% | 11.26%  | 30.15%  |
| 2024 | 2.69%   | 12.36%  | 6.58%   | -10.73% | 11.20%  | 7.81%   | 0.11%  | 2.99%   | -1.14%  | -4.20%  |        |         | 28.50%  |

Historical performance measures for the Index represent hypothetical backtested performance through February 10, 2022 (labeled "Backtested" in the chart above); and actual performance from February 11, 2022 through October 31, 2024 (labeled "Actual" in the chart above).

The hypothetical backtested and historical levels presented herein have not been verified by J.P. Morgan, and hypothetical historical levels have inherent limitations. PAST PERFORMANCE AND BACKTESTED PERFORMANCE ARE NOT INDICATIVE OF FUTURE RESULTS. Please see the Disclaimer on the following page.

Investing in the notes linked to the Index involves a number of risks. See "Selected Risks" on page 2 of this document, "Risk Factors" in the relevant product supplement and underlying supplement and "Selected Risks" considerations" in the relevant pricing supplement.

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- The Index may be significantly uninvested.
- The Index may be adversely affected if later futures contracts have higher prices than an expiring futures contract included in the Index.
- The Index is an "excess return" index and not a "total return" index because it does not reflect interest that could be earned on funds notionally committed to the trading of futures contracts.
- The Index, which was established on January 7, 2022, has a limited operating history and may perform in unanticipated ways.
- The Index is subject to significant risks associated with futures contracts, including volatility.
- Concentration risks associated with the Index may adversely affect the value of investments linked to the Index.
- Suspension or disruptions of market trading in the futures contracts included in the Index may adversely affect the value of investments linked to the Index.
- The official settlement price and intraday trading prices of the relevant futures contracts included in the Index may not be readily available.
- Changes in the margin requirements for the underlying futures contracts included in the Index may adversely affect the value of investments linked to the Index.
- The Index may not be successful or outperform any alternative strategy that may be employed in respect of the futures contracts.

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The 10 Year Volatility (Annualized) on the previous page is a measure of market risk, calculated as of the square root of two hundred and fifty-two (252) multiplied by the sample standard deviation of the daily logarithmic returns of each applicable index or portfolio (considering only days for which levels are available for all three) over the preceding 10 years.

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