Enhancing Your Yield: Monetizing Volatility With Nasdaq-100 Volatility Index Futures

October 2021

EQD

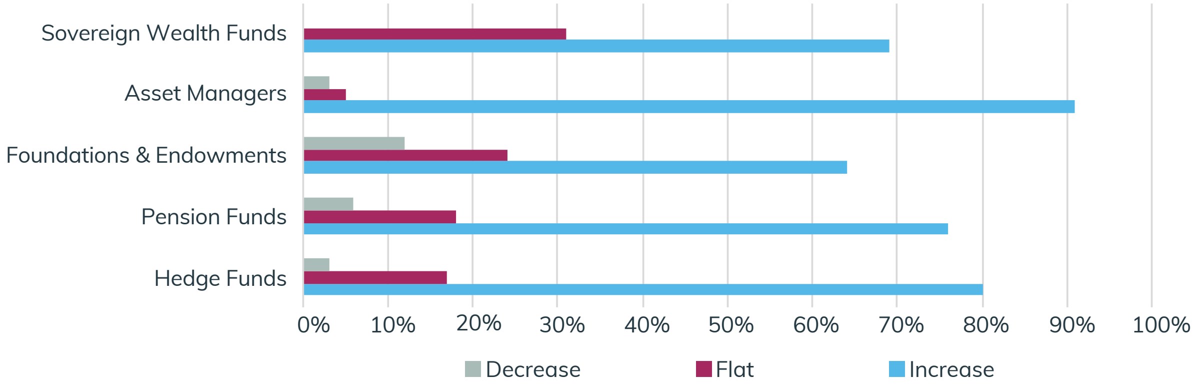
As stocks such as Tesla, Microsoft, Intel and the FANG complex increasingly form a greater weighting of retail and institutional equity portfolios, during a period where the classic 60% equities/40% bonds portfolio is being torn apart, investors increasingly require a tool that allows you to hedge exposure to or express a view on the implied volatility of the Nasdaq-100. Nasdaq-100 Volatility Index (VOLQ) Futures fill that void, offering investors an effective tool to express a view on the forward volatility of the Nasdaq-100. EQDerivatives has engaged portfolio managers and traders in the Americas, Europe, Middle East and Asia Pacific on how retail and institutional investors can apply VOLQ futures to express a view on the percent daily move of the Nasdaq-100, in arbitrage strategies and through effective portfolio hedging.

Introduction

It is no longer acceptable to be agnostic to volatility. That message is clear among portfolio managers, investors and traders coming out of the Covid-19 crisis. The market, and its participants, have moved into a regime where fears surrounding the next fragility event dominate – whether that be rising inflation, the impact of real rates spiking or another unknown factor.

Protecting portfolios against the next fragility event is one growing investment theme but so too is diversification. The bull market in fixed income appears to be behind us and investors are subsequently allocating to assets that offer greater risk premium. This is leading to the 60/40 portfolio construction technique evolving to become more equities heavy, with Nasdaq-100 constituents experiencing a greater weight in portfolios as investors seek exposure to companies at the forefront of innovation that are driving global economies. Across all of the buyside segments interviewed by EQDerivatives, the majority expect to increase allocations towards constituents of the Nasdaq-100 over the next six months.

Do You Expect To Increase Your Allocation Weighting Towards Nasdaq-100 Constituents In The Next Six Months?

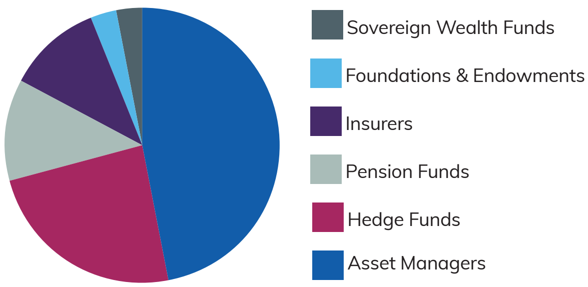


Source: EQDerivatives

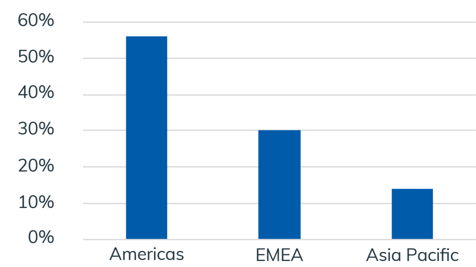
As this trend continues to grow, so will demand among portfolio managers, retail, traders and investors to express a view on the percent daily move of the Nasdaq-100, to hedge volatility market conditions and to establish positions through spread trades. VOLQ futures, listed on CME Group, address this demand by offering a way to hedge exposure to, or express a view on, the implied volatility of the Nasdaq-100 Index.

EQDerivatives has interviewed buyside users across the globe to determine how VOLQ futures will be deployed. Driving interest in VOLQ futures are predominantly asset managers and hedge funds. Specifically within the asset management space, multi-asset, macro and multi-strat funds showed the most interest in trading VOLQ futures. Yet, appetite for VOLQ futures is present across a diverse range of users across multiple regions. This is reflected by the increased allocations towards equities, in particular Nasdaq-100 constituents, as well as demand for a tool that provides an effective hedge to a modern and ever evolving portfolio.

VOLQ Institutional User Demand



Global Appetite For VOLQ Futures

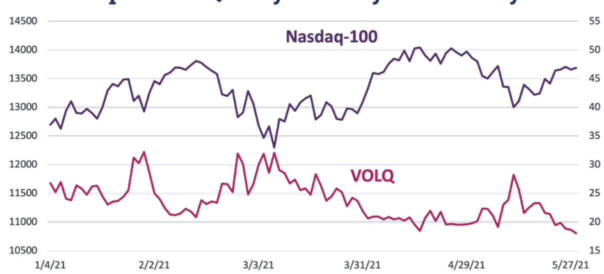


Source: EQDerivatives

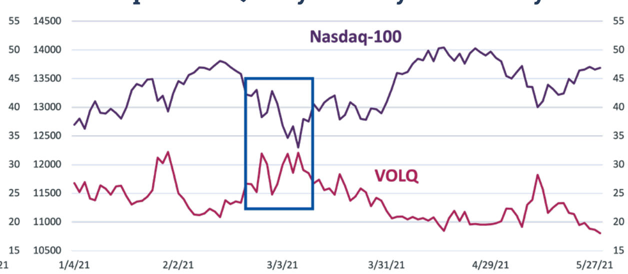
VOLQ: It's All In The Construction

VOLQ is unique by construction. It is the primary indicator for 30-day expected volatility for the Nasdaq-100 and has a calculation methodology that focuses on near at-the-money Nasdaq-100 option contracts, resulting in a more accurate predictor of subsequent realized volatility than many other volatility indices. This at-the-money focus results in a measure that is more reflective of price changes both to the upside and downside relative to methods that consider a full strip of option contracts.

Nasdaq vs. VOLQ Daily January 2021 to May 2021



Nasdaq vs. VOLQ Daily January 2021 to May 2021



Sources: Bloomberg, EQDerivatives

As shown in the charts above, VOLQ reacts with quick upside moves when the Nasdaq 100 performs to the downside, and vice a versa. Showing the daily closing prices over the first five months of 2021, VOLQ can effectively identify when the Nasdaq-100 is reaching the end of an upward trend or the end of a downtrend.

VOLQ is unique and geared toward generating returns. The product is being increasingly adopted by retail and institutional traders to confirm trends or identify a change market trend. Around earnings, for example, VOLQ will incorporate the anticipation of large market moves for the underlying index due to a pending earnings announcement by a major component of the Nasdaq-100. This may not be said of other volatility indexes.

For those active in systematic trading, VOLQ is also a key tool that offers traders the ability to compare market price action to what option pricing was expecting. This can lead to traders identifying whether a systematic option selling or option buying strategy would be more suitable.[1]

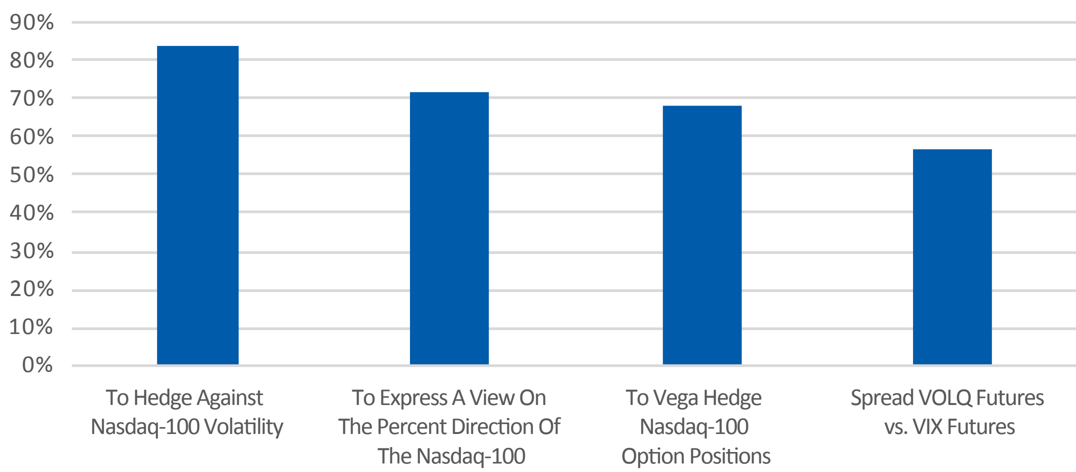
VOLQ Futures: The At-The-Money Profile Drives Interest

For portfolio managers, investors and traders, the benefit of trading VOLQ futures is clear: it offers a clear and precise method of expressing a view on or ability to hedge exposure related to the forward volatility of the Nasdaq-100 Index.[2] The prominent feature of VOLQ futures that is attracting buysiders is that they are an at-the-money measure of the Nasdaq-100 Index forward volatility. This leads to a different resultant volatility than a variance swap approach, a method that is preferred by portfolio managers, as reflected in this white paper.

> "VOLQ is unique and geared toward generating returns."

According to more than 90% of portfolio managers and investors interviewed by EQDerivatives, VOLQ futures' at-the-money measure of the Nasdaq-100 index forward volatility reduces a potential mismatch. For example, if a portfolio manager is short vol on Nasdaq, VOLQ futures could offer a better tail hedge as the manager would not be required to replicate as the futures offer an at-the-money profile.

How Would You Deploy VOLQ Futures



Source: EQDerivatives

1. To understand more around the construction of VOLQ and how the product is an essential tool for the retail and institutional traders' toolbox, head to EQDerivatives' exclusive whitepaper on VOLQ, here.

2 To learn more about trading VOLQ futures, head to: https://www.cmegroup.com/education/courses/learn-about-volq-futures/trading-the-volq-futures-contract.html.

Monetization Scenario: VOLQ vs. VIX

VOLQ and VOLQ futures are considered by the asset management community as a complement to VIX, as opposed to a competitor of VIX. VOLQ has historically priced greater than VIX, reflected by the more volatile nature, historically, of the Nasdaq-100. Portfolio managers are increasingly analyzing how you can spread Nasdaq-100 volatility vs. S&P 500 volatility, implemented through VOLQ futures and VIX futures.

VOLQ Futures At CME Group

A relatively new innovation at CME Group is the micro equity index futures market, which is considered by many to be the most successful new listed derivative product launch in over a decade. Micro futures on the Nasdaq-100 are the most actively traded contracts among these new contracts, an indication that the Nasdaq-100 is attracting traders and hedgers alike, either due to the higher Nasdaq-100 volatility or because managers need to hedge exposure that replicates the Nadaq-100 more than other broad based indexes.[3]

The market is therefore increasingly paying attention to the evolution of the Nasdaq ecosystem at CME Group, a reflection of the growth in trading among the buyside of gaining market exposure to the Nasdaq-100. With this Nasdaq ecosystem flourishing at CME Group, portfolio managers are not restricted to looking at VOLQ futures as part of a spread strategy purely against volatility products, such as VIX futures. For example, portfolio managers, traders and investors can consider VOLQ futures spread with E-mini Nasdaq-100 futures, listed on CME Group. VOLQ futures can also be spread against other products on CME Group, maximising the potential spread opportunities. This is in addition to the other key benefits of VOLQ futures including accessing a similar payoff to straddles while foregoing active management of delta, gamma and theta exposures.[4]

Expanding The Nasdaq Volatility Ecosystem

Amid increased interest from traders and institutional investors in VOLQ and VOLQ futures, as well as the family of Nasdaq futures and options, Nasdaq plans early in 2022 to launch options on the volatility index. The launch of options will mark a new phase in the expansion of the VOLQ ecosystem, in partnership with CME Group, providing additional opportunities for portfolio managers, investors and traders to capture exposure to volatility. VOLQ options would be cash-settled with a European-style expiry. Portfolio managers and investors interviewed by EQDerivatives are supportive of the launch of VOLQ options with a further expansion of the Nasdaq volatility ecosystem and attracting investment bank market makers key to grow liquidity in VOLQ further.

Conclusion

On a daily basis the leading components of the Nasdaq-100 are in focus for portfolio managers and traders. The result is an ever growing representation of these stocks in portfolios or trader's accounts. By association listed products associated with the Nasdaq-100 have grown in popularity, either through an increase in assets under management or higher volumes. This results in market participants looking to manage their exposure to expected volatility for the Nasdaq-100. VOLQ futures are by far the most appropriate trading vehicle for managers and traders to offset this risk, to express a view or monetize spreads, leading to buysiders increasingly engaging with market makers and CME Group to trade this innovative product.

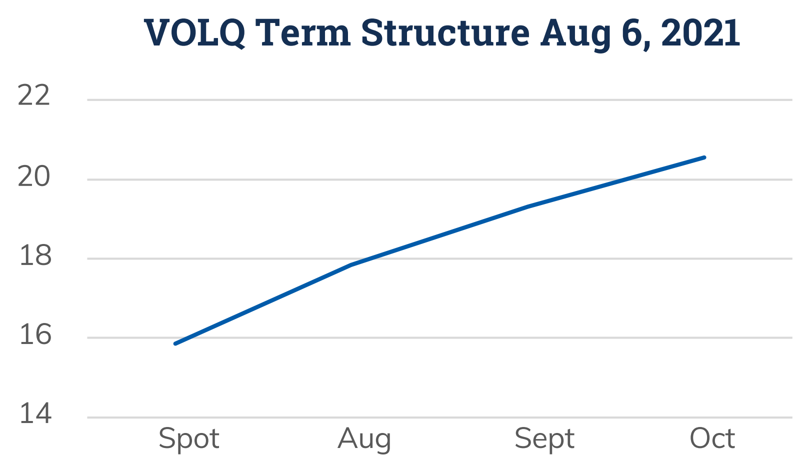
3. https://www.cmegroup.com/markets/equities/nasdaq/micro-e-mini-nasdaq-100.html
4. https://www.cmegroup.com/education/files/volq-fact-card.pdf

Appendix

The VOLQ Curve

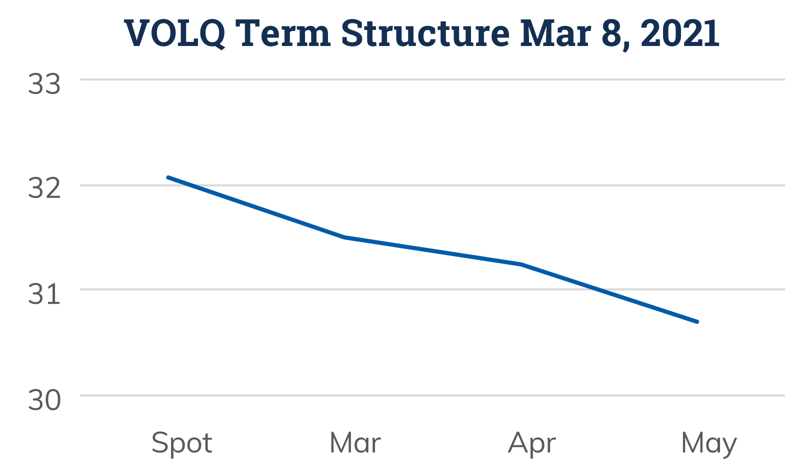
There are typically three monthly VOLQ futures expirations available for trading and the result is the ability to create a term structure combining those futures with spot VOLQ. Like other listed volatility futures markets this term structure is fluid, shifting from contango to backwardation based on the market's outlook for expected Nasdaq-100 volatility.

The typical shape of volatility futures term structure is contango where the futures prices rise based on the time to expiration. The figure below shows the VOLQ term structure from August 6, 2021 when VOLQ was at the low end of the historical range.



Source: Bloomberg

This curve is typical when volatility expectations are relatively low. Volatility is a mean reverting measure, so when a volatility index moves to elevated levels the futures pricing will be at a discount to the index. An example of this occurred on March 8, 2021 when VOLQ closed over 30.



Source: Bloomberg

Note on this second term structure chart that the spot index is higher than each future price and the future prices move lower as the time to expiration increases. The lower futures pricing is an indication that the market expects the spot index to revert to lower levels.

Methodology

The foundation of this white paper, titled: 'Enhancing Your Yield: Monetizing Volatility With Nasdaq-100 Volatility Index Futures.', was detailed interviews with portfolio managers and investors across the globe. Interviewees were asked to provide data and perspectives with a member of EQDerivatives' Research and Data team. Data and perspectives were collected from February through September. In total, this report uses data and perspectives provided by 67 institutional investors and portfolio managers. All those buysiders that provided data and perspectives are active in U.S. derivatives markets. Participants came from 13 countries around the globe, creating a truly world-wide response. Follow-up correspondence and conversations were held with numerous participants to clarify answers and further explore certain areas on how they would apply VOLQ futures in their portfolios. These buyside firms included asset owners and major asset managers, with representation from all regions: Americas, Europe, Middle East, and Asia Pacific. Respondents were thoughtful in supplying their feedback taking an average of more than 14 minutes to provide their perspectives. Participants provided input with the understanding that all individual responses were confidential; with data being reported only in aggregate or summary form. This policy provided the foundation for honest and open commentary, adding valuable color to this white paper report. We believe that the data and perspectives gathered provide a representative picture of the anticipated growth in usage of VOLQ futures, as well as other instruments in the Nasdaq ecosystem listed on CME Group.

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About EQDerivatives

EQDerivatives is the premier provider of volatility derivatives and alternative risk premia news, research and event content for investors, portfolio managers and service providers. We connect and educate the leading thinkers in the space globally by delivering the latest strategies from the practitioners buying and structuring investments. EQD's data reports are recognized as the definitive source of market intelligence across derivatives markets, quantitative investing and ESG. Through a curated network of portfolio managers, execution traders, CIOs and heads of asset allocation at institutional investors, EQD can map global markets and products through the lens of the buyside.To learn more, visit https://eqderivatives.com/research/derivatives-data.

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