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#### **Related ETFs**

Please click below for fund holdings and important performance information.

QCLR- Global X Nasdaq 100 Collar 95-110 ETF

XCLR- S&P 500 Collar 95-100 FTF

#### **GLOBAL X ETFs RESEARCH**

# The Case for Managing Risk with Collar ETFs

On August 26th, 2021, we listed the Global X Nasdaq 100 Collar 95-110 ETF (QCLR) on the Nasdaq exchange and the Global X S&P 500 Collar 95-110 ETF (XCLR) on the New York Stock Exchange (NYSE). In this piece, we explain why investors may want to consider collar strategies and how QCLR and XCLR can be efficient ways of gaining this exposure.

#### **Key Takeaways**

- Collar strategies typically combine owning equity securities with buying an out-of-the-money (OTM) put option and selling an OTM call option on those same securities.
- A collar bounds performance between a specific range through the options' expiration date.
   Downside is limited to the extent of the put option's strike price, while gains are limited to the call option's strike price. Depending on the collar design, the options contracts can be a net debit (meaning they cost money to implement), net credit (meaning they generate positive income), or zero cost
- Investors seeking less extreme moves in their equity holdings may find collar strategies useful tools for their portfolios.
- QCLR and XCLR offer investors efficient access to collar strategies, utilizing professional portfolio
  managers to purchase three month 5% OTM puts and sell 10% OTM calls. The strategies are 'net
  debit', as the cost of the put option is expected to exceed the premiums received from selling the
  call option.

#### What Are Collar Strategies?

Collar strategies typically own an underlying asset, such as equities, and overlay the purchase of an out-of-the-money (OTM) put option and the sale of an OTM call option on the same asset. They are designed to confine returns within a fixed range over the length of the options contracts. For example, the Global X Nasdaq 100 Collar 95-110 ETF (QCLR) is designed to invest in the securities of the Nasdaq 100 Index, while capping upside at 10% over the three-month option period, and limiting downside to 5%. Collar strategies can come in several variations based on the potential upside, downside, cost to implement, underlying asset, and time frame, among other variables.





# COLLAR 95-110 (3-MONTH 5% OUT-OF-THE-MONEY PUT OPTION AND 3-MONTH 10% OUT-OF-THE-MONEY CALL OPTION)



Collar strategies effectively combine the payoff structure of a protective put with a covered call.

Protective put strategies are widely associated with mitigating downside risk because they seek to put a floor on potential losses. A protective put consists of buying a security and coupling that with the purchase of a put option on the same security. A put option gives the buyer the right, but not the obligation to sell a security at a pre-determined strike price within a given time frame. In exchange for paying a premium to buy a put option, an investor owns a contract that can rise in value if the underlying security declines.

The cost of buying a put option varies based on several factors, but a major input is the strike price. Generally, the higher the strike price, the more expensive the option, but the greater protection that option affords the investor. For example, buying stock XYZ and an at-the-money (ATM) put option at XYZ's current share price effectively hedges against downside moves. But it is also usually a very expensive option and could expire worthless if XYZ rises. Buying an OTM put option that is 5% below XYZ's strike price will likely cost less, but only begin to protect against losses in excess of 5%.

Covered call strategies involve purchasing equities and selling a corresponding call option on those assets. A call option gives the buyer the right, but not the obligation to buy a security at a pre-determined strike price within a given time frame. The call option strike price can be customized to the investor's liking. It can be ATM if an investor is willing to give up all of the security's upside potential, or OTM if the investor would like to retain more of that upside potential. The tradeoff is that an ATM call option will generate higher premiums compared to an OTM call option.

Combining the economics of the protective put and covered call results in a collar strategy that bounds returns between a lower floor and upper ceiling over the length of the options contracts. Exactly where those floors and ceilings are set can impact whether the collar strategy costs money to implement, is zero cost, or

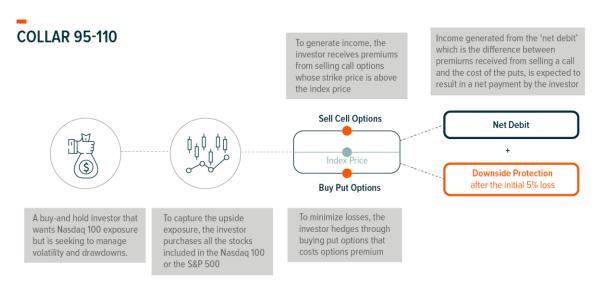




generates income. If a collar is designed to generate income, it often features greater downside exposure than upside. This is the case with our risk managed income strategies (QRMI and XRMI), which seek to generate income from a "net credit" collar strategy. But collars can also be net debit, i.e. cost money to implement, particularly if they seek to maintain greater upside than downside potential. This is the case with our 95-110 collar strategies (XCLR and QCLR).

#### Why Should Investors Consider Collar Strategies

Investment returns can of course be volatile and unpredictable. In a given year, an investor may experience a euphoric rally, a crushing selloff, or simply see their investments meander in the middle. Not all investors want to experience such great volatility, particularly on the downside. Instead, they'd prefer to set expectations ahead of time for the range of possible outcomes. Collar strategies can help achieve this. Perhaps most importantly, they can mitigate downside risks through the purchase of a protective put. But by selling a covered call, the strategy can also help limit the cost of the put in exchange for limiting upside potential.



#### Global X 95-110 Collar Strategies, Explained

Global X's 95-110 collar ETFs, QRMI and XRMI, are both passive ETFs that implement systematic strategies designed to set a range of upper and lower bound returns for investors. They follow similar processes, but track different underlying indexes: the Nasdaq 100 and S&P 500, respectively.¹ Using QRMI as an example, its starts by owning all the stocks in the Nasdaq 100. Global X's professional portfolio managers then purchase a 5% OTM put option on the Nasdaq 100 with an expiration date in three months. Then, they sell a three month call option on the Nasdaq 100 that is 10% OTM. On the options contracts' expiration date, the portfolio managers settle the previous options and enter into new three month contracts.





The goal is that over each 3 month option period, losses are limited to approximately 5% and gains are capped at 10%, before fees and expenses.

## **COLLAR 95-110 PROCESS EXPLAINED**

As an example of how an ETF implements a net-debit collar strategy, the Global X Nasdaq 100 Collar 95-110 ETF (QCLR) maintains exposure to the stocks in the Nasdaq 100, while buying put options & selling call options on the index every 3 months.

QCLR buys all the stocks in the Nasdaq 100 Index QCLR buys 5% OTM put options & sells 10% OTM Nasdaq 100 Index call options that will expire in 3 months. A net-debit collar is created since the premiums received from the calls are less than the premiums for the puts purchsed. This process is repeated, QCLR buys & sells new Nasdaq 100 Index options (NDX) that will expire every 3 months.

As discussed earlier, there are costs associated with utilizing a net debit collar strategy. QCLR and XCLR seek to strike a balance between limiting downside and retaining upside potential, while not making the strategy too costly to implement.

Below are calculations based on the Black-Scholes options pricing model that estimate the historic net cost for collar strategies on both the Nasdaq 100 and S&P 500 that buy a three month 5% OTM put option sell a 10% OTM call option. As we can see, during periods like the global financial crisis and COVID-19 pandemic, the cost of risk mitigation became more expensive due to higher bouts of volatility, whereas the cost was less significant in less volatile periods.



**ABOUT** 



## CALCULATED 3-MONTH COST OF BUYING 5% OTM PUT. SELLING 10% OTM CALL

Source: Bloomberg. Data from 8/18/06 to 8/20/21. These are estimated options premiums using the Black Scholes model.<sup>2</sup> Actual premiums may have varied.



#### Incorporating the QCLR and XCLR Collar Strategies in a Portfolio

A wide range of investors may want to consider incorporating QCLR or XCLR in their portfolios. First, investors concerned about downside risk in the near term could tactically add the collar strategies to help mitigate the risks of an impending selloff. Second, investors who are not tactically looking to play the markets, but simply do not want the experience of major selloffs over the longer term could incorporate these strategies into a portfolio to help manage risk. Third, investors who have significant exposure to fixed income and are looking to diversify their portfolio without adding substantial risk could find these strategies appealing. Last, investors who are already implementing options strategies in their portfolio, but would prefer to outsource the management to other portfolio managers, may appreciate the efficiency of the ETF structure.

#### **Related ETFs**

QCLR: The Global X Nasdaq 100 95-110 ETF (QCLR) invests in the securities of the Nasdaq 100 and applies a 3-Month 5% Out-of-the-Money (OTM) Put and 3-Month 10% Out-of-the-Money (OTM) Call collar option overlay in an effort to mitigate downside risk while offsetting some of the cost of the long (purchased) put by selling a call.

XCLR: The Global X S&P 500 Collar 95-100 ETF (XCLR) invests in the securities of the S&P 500 and applies a 3-Month 5% Out-of-the-Money (OTM) Put and 3-Month 10% Out-of-the-Money (OTM) Call collar option overlay in an effort to mitigate downside risk while offsetting some of the cost of the long (purchased) put by selling a call.





#### Endnotes:

- QCLR tracks the Nasdaq 100 Quaterly Collar 95-110 Index and the XCLR tracks the Cboe S&P 500 3-Month Collar 95-110 Index.
- 2. The Black Scholes model is a flagship model to calculate the fair price for an option contract using current stock price, expected dividends, strike price of an option, expected interest rates, time to expiration and expected volatility. The model assumes that dividends are not paid, the option can only be exercised at expiration, risk-free rate and volatility of the underlying are known and constant, no transaction costs are involved in buying the option, markets are efficient, and the returns are log-normally distributed.

Investing involves risk, including the possible loss of principal. Concentration in a particular industry or sector will subject the Funds to loss due to adverse occurrences that may affect that industry or sector. Investors in the Funds should be willing to accept a high degree of volatility in the price of the fund's shares and the possibility of significant losses.

The Funds engages in options trading. By selling covered call options, the fund limits its opportunity to profit from an increase in the price of the underlying index above the exercise price. By purchasing put options, in return for the payment of premiums, the Fund may be protected from a significant decline in the price of the Nasdaq 100 Index if the put options become in the money (Nasdaq 100 closes below the strike price as of the expiration date); but during periods where the Nasdaq 100 Index appreciates, the Fund will underperform due to the cost of the premiums paid. A liquid market may not exist for options held by the Fund. While the fund receives premiums for writing the call options, the price it realizes from the exercise of an option could be substantially below the indices current market price. QCLR is non-diversified.

Shares of ETFs are bought and sold at market price (not NAV) and are not individually redeemed from the Fund. Brokerage commissions will reduce returns.

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