



Equities

Covered Calls Uncovered

November 30, 2015

Many investors seek to protect their portfolios by purchasing equity index options. As a result, options tend to include a risk premium as a form of compensation to option sellers. Covered calls, which are short options, collect this volatility risk premium in addition to the equity risk premium earned from their long equity exposure. Because of option convexity, covered calls also embed active equity exposure that behaves like a reversal strategy.

The authors contend that covered calls are rarely considered in terms of their risk exposures. In this paper, they introduce a novel performance attribution methodology that decomposes the strategy's return into its passive and active equity and short volatility exposures. Not only does the performance attribution of their samples allow covered call investors to better understand the strategy's characteristics, but it also allows portfolio managers to assess the risk and return impact of portfolio construction decisions, such as the call option's strike and maturity, so that they may improve their strategy.

As an example, the paper proposes a risk-managed covered call to hedge away the uncompensated active equity exposure, which the authors say is a significant contributor to the covered call's risk. They contend that their proposed strategy has similar expected returns to the original covered call, but with lower risk, lower downside beta, and a higher Sharpe ratio. They added that while the motivation for covered calls is often confusing and muddled by a number of myths, the motivation for the risk-managed covered call is clear: earn the equity and volatility risk premium by constructing a portfolio with long equity and short volatility exposure.

This document is not intended to, and does not relate specifically to any investment strategy or product that AQR offers. It is being provided merely to provide a framework to assist in the implementation of an investor's own analysis and an investor's own view on the topic discussed herein.

This document has been provided to you solely for information purposes and does not constitute an offer or solicitation of an offer or any advice or recommendation to purchase any securities or other financial instruments and may not be construed as such. The factual information set forth herein has been obtained or derived from sources believed by the author and AQR Capital Management, LLC ("AQR") to be reliable but it is not necessarily all-inclusive and is not guaranteed as to its accuracy and is not to be regarded as a representation or warranty, express or implied, as to the information's accuracy or completeness, nor should the attached information serve as the basis of any investment decision. This document is not to be reproduced or redistributed to any other person. The information set forth herein has been provided to you as secondary information and should not be the primary source for any investment or allocation decision. Past performance is not a guarantee of future performance. Diversification does not eliminate the risk of experiencing investment losses.

This material is not research and should not be treated as research. This paper does not represent valuation judgments with respect to any financial instrument, issuer, security or sector that may be described or referenced herein and does not represent a formal or official view of AQR. The views expressed reflect the current views as of the date hereof and neither the author nor AQR undertakes to advise you of any changes in the views expressed herein.

The information contained herein is only as current as of the date indicated, and may be superseded by subsequent market events or for other reasons. Charts and graphs provided herein are for illustrative purposes only. The information in this presentation has been developed internally and/or obtained from sources believed to be reliable; however, neither AQR nor the author guarantees the accuracy, adequacy or completeness of such information. Nothing contained herein constitutes investment, legal, tax or other advice nor is it to

be relied on in making an investment or other decision. There can be no assurance that an investment strategy will be successful. Historic market trends are not reliable indicators of actual future market behavior or future performance of any particular investment which may differ materially, and should not be relied upon as such. Diversification does not eliminate the risk of experiencing investment losses.

The information in this paper may contain projections or other forward-looking statements regarding future events, targets, forecasts or expectations regarding the strategies described herein, and is only current as of the date indicated. There is no assurance that such events or targets will be achieved, and may be significantly different from that shown here. The information in this document, including statements concerning financial market trends, is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons.