

HOW TO OPTIMISE A COMMODITY PORTFOLIO

Commodities have a very important role in a strategic investment portfolio. They provide meaningful diversification as their correlation with traditional asset classes is typically low. They are therefore often perceived as a hedge against downside risks. Additionally, they provide protection against inflation.

Individual commodities however have very idiosyncratic characteristics and prices can often be volatile. For this reason, a broad diversified allocation to commodities such as the Bloomberg Commodity Index (BCOM), which invests in 23 commodities chosen for liquidity and economic significance, across the 4 major sectors (precious metals, industrial metals, energy and agriculture) could be considered.

But holding a passive investment strategy benchmarked to BCOM may not be the optimal way to invest in commodities and performance of BCOM since the global financial crisis has not been encouraging (see Figure 1). A few different solutions are on offer in the market which aim to optimise commodity portfolios- all of which aim to take a more active approach in how the commodity futures curves are traded. We believe the Optimised Roll Commodity Index could be an efficient solution as it has consistently delivered attractive returns at the lowest level of risk among its peers. This is driven by its robust investment strategy.

FIGURE 1: PERFORMANCE OF BCOM SINCE THE GLOBAL FINANCIAL CRISIS HAS BEEN DISAPPOINTING

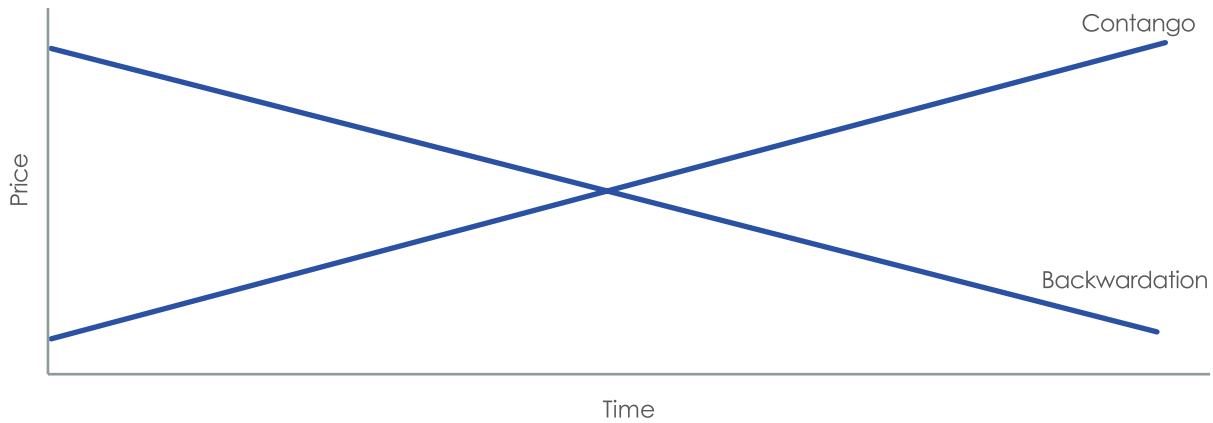


Sources: WisdomTree, Bloomberg. Data from 31 May 2001 to 30 April 2019 and based on monthly returns. The Optimised Roll Commodity Total Return Index started its live calculation on 30 July 2013. Calculations are based on total return indices and include backtested data. Index rebased to 100 on 31 May 2001. **Historical performance is not an indication of future performance and any investments may go down in value.**

COMMODITY CURVES EXPLAINED:

Before looking at the investment strategy for the Optimised Roll Commodity Index, it would be useful to revisit commodity futures curves and how they influence returns.

BOX 1: BACKWARDATION AND CONTANGO



Roll yield is the yield captured by an investor when their long futures position converges to the spot price as the contract approaches expiry. A long commodity futures investor who wants to avoid physical delivery sells the existing futures contract at the spot price and buys another futures contract at the new price. This way the investor effectively rolls the position along the curve.

BOX 2: ROLL YIELD EXPLAINED

		Roll Yield	Explanation
Contango	Spot price < forward price	Negative	Futures contract is sold at the spot price and bought again at a higher price. A loss is therefore incurred on rolling the contract
Backwardation	Forward price < spot price	Positive	Futures contract is sold at the spot price and bought again at a lower price. A profit is therefore made on rolling the contract

Source: WisdomTree.

AN OVERVIEW OF THE STRATEGY:

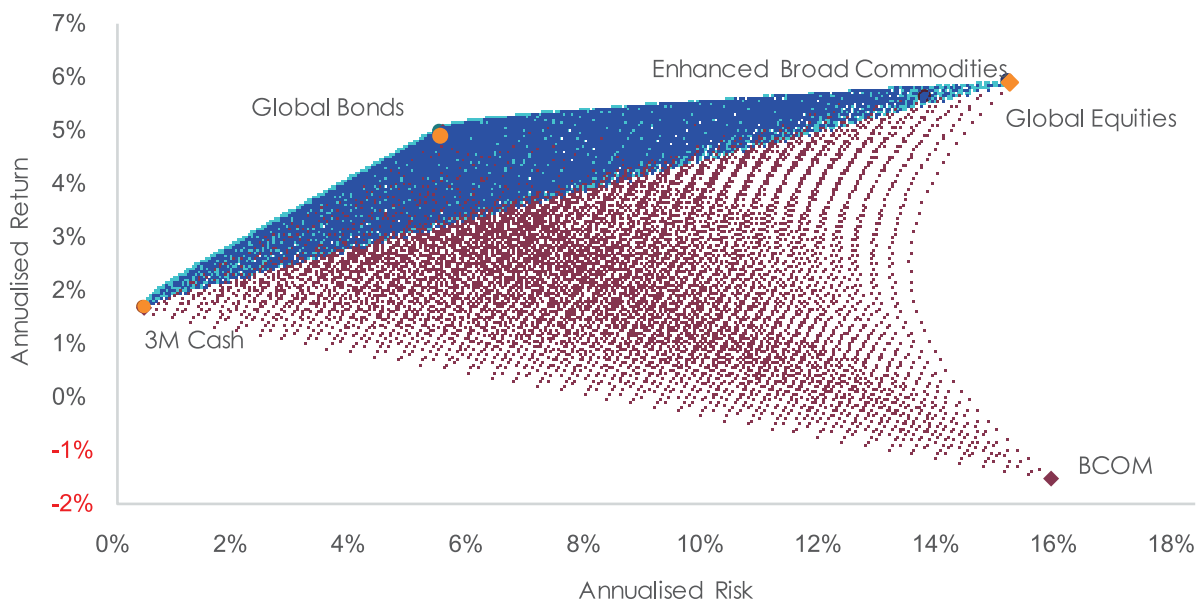
The WisdomTree Enhanced Commodities UCITS ETF (WCOA) tracks the Optimised Roll Commodity Total Return Index (EBCIWTT), an index built upon two pillars:

- 1 Bloomberg Commodity Index (BCOM) constituents and starting weights
- 2 S&P GSCI® Dynamic Rolling Methodology

The optimised strategy therefore adds value above the BCOM benchmark by investing in the most optimal contract on the futures curve for the underlying commodities. This is the contract that maximises the positive roll yield if the futures curve is backwardated or minimises the negative roll yield if the futures curve is in contango. If the contract held still qualifies as optimal, it may not need to be rolled reducing monthly rolling costs compared to the BCOM benchmark which invests only in the front month contract on the futures curve. The strategy also typically reduces the level of risk as front month prices can be more volatile compared to points further along the curve. It has also historically delivered a higher return by achieving a better roll yield compared to the BCOM benchmark.

In the chart below we illustrate the historical return and risk profile for different asset classes. Points labelled represent a 100% allocation in that asset class whereas all other points represent portfolios which blend the other asset classes. The closer you are to a label on the chart, the higher the weight of that asset class in the blended portfolio. It is clear from the chart that whilst commodities (BCOM) have struggled, the optimised strategy has outperformed BCOM by around 6% per annum since 2001 and achieved this at a lower level of risk.

FIGURE 2: ENHANCED BROAD COMMODITIES COULD IMPROVE THE RISK-ADJUSTED RETURNS OF MIXED ASSET PORTFOLIOS, WHILE NON-OPTIMISED STRATEGIES HAVE HISTORICALLY STRUGGLED



Sources: WisdomTree, Bloomberg. Data from 31 May 2001 to 30 April 2019. The following indices were used: J.P. Morgan Agg Bond Index (Global Bonds), MSCI World Index (Global Equities), 3M US Cash Libor Index (3M Cash), Optimised Roll Commodity Index (Enhanced Broad Commodities), Bloomberg Commodity Index (BCOM). The Optimised Roll Commodity Index started its live calculation on 30 July 2013. **Historical performance is not an indication of future performance and any investments may go down in value.**

Comparison with alternative strategies

As noted above, WisdomTree’s Enhanced Commodities strategy which tracks the Optimised Roll Commodity Index is not the only strategy which aims to outperform a front month BCOM Index. The table below compares the basis features of the Optimised Roll Commodity Index with those of its key competitors:

FIGURE 3: ENHANCED COMMODITY STRATEGIES- INDEX METHODOLOGY COMPARISON

	Optimised Roll Commodity Index	Bloomberg Commodity 3 Month Forward Index	UBS Bloomberg CMCI Index	DBLCI Optimum Yield Balanced Index
Bloomberg Ticker	EBCIWTT	BCOMF3T	CMCITR	DBLCBUTN
Roll Methodology	Implied Roll Yield Rolls to futures which generate the maximum implied roll yield	3 Month Forward Roll Rolls based on pre-defined schedule to the lead and next futures in 3 calendar months' time	Constant Maturity Roll Maintains exposure across whole commodity curve by holding multiple contracts per commodity	Implied Roll Yield Rolls to contract with max implied roll yield only when current future is close to expiry
Weighting Methodology	BCOM Weights, USD Production and Liquidity Weighted	BCOM Weights, USD Production and Liquidity Weighted	CMCI Weights, Economic Liquidity Weighted	DBLCI-OY Balanced Weights
# of Constituents	23 (18 components)	23	29	14
Weight Capping	Only one of 18 components can reach 35%. All remaining components capped at 20%.	Commodity: 15%. Group: 25%. Sector: 33%.	Commodity: 20%.	No caps.
Latest Target Weights	Agriculture and livestock: 35.89%. Energy: 30.34%. Industrial Metals: 17.65%. Precious Metals: 16.13%.	Agriculture and livestock: 35.89%. Energy: 30.34%. Industrial Metals: 17.65%. Precious Metals: 16.13%.	Agriculture: 32.2%. Energy: 34.5%. Industrial Metals: 27.3%. Precious Metals: 6.1%.	Agriculture: 30%. Energy: 35%. Industrial Metals: 18%. Precious Metals: 17%.
Review And Rebalance	Annually (Reweighted back to BCOM weights). Daily cap weights apply	Annually	Monthly rebalance. Target weights set annually.	Annually (Reweighted back to target weights).

Sources: WisdomTree, Bloomberg, UBS, Deutsche Bank. Last rebalance of the Optimised Roll Commodity Total Return Index (EBCIWTT) as at 16 January 2019. The Optimised Roll Commodity Total Return Index started its live calculation on 30 July 2013. * Fundamental Weights derived from a combination of primary economic indicators such as CPI, PPI, and GDP, as well as commodity-level consumption data. **Historical performance is not an indication of future performance and any investments may go down in value.**

Note that commodity investors are exposed to three components of total return:

$$\text{Total Return} = \text{Spot Return} + \text{Roll Return} + \text{Collateral Yield}$$

(Return associated with spot price of commodity) (Return from maintaining futures exposure by rolling positions from one contract to another) (Return from collateral used to guarantee futures position)

WisdomTree's Enhanced Commodity strategy, which tracks the Optimised Roll Commodity Index, is robust due to several reasons:

- + It reduces spot return volatility as it can invest in contracts further along the curve compared to both BCOM and BCOM 3-Month Forward Indices which can be more volatile
- + It is well-diversified with 23 constituents across 4 commodity sectors with caps on individual components to maintain diversity. On the contrary DBLCI strategy only has 14 constituents and no caps on individual commodities
- + It maximises the roll return by selecting the contract on the futures curve which provides the best roll yield and rolls the contract only when the optimal contract changes. This maximises the roll yield and minimises the roll costs. Conversely, the UBS Bloomberg CMCI strategy maintains a constant maturity exposure by constantly buying and selling contracts such that the weighted average of contract maturities remains the same.

IMPROVED RISK COULD LEAD TO ADJUSTED RETURNS

The Optimised Roll Commodity Index consistently demonstrates lower level of risk across all time horizons compared to its peers for the reasons noted above. This is achieved without necessarily compromising on returns which are higher for the Optimised Roll Commodity Index since common inception of all strategies.

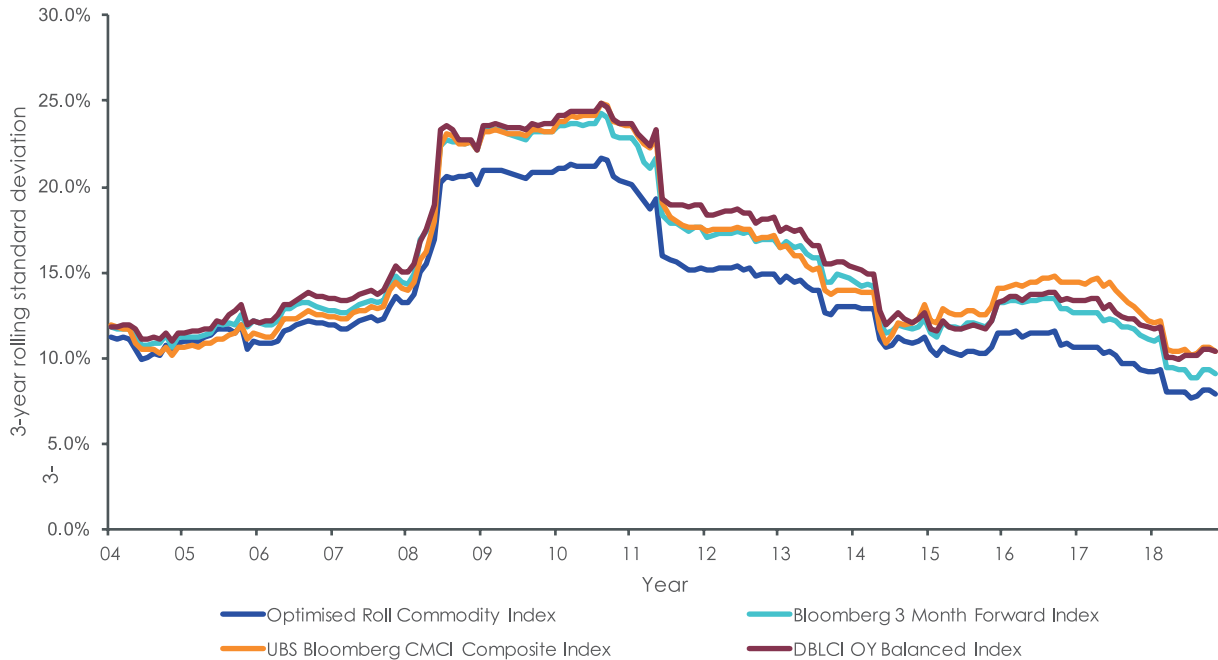
FIGURE 4: WISDOMTREE’S ENHANCED COMMODITY STRATEGY (OPTIMISED ROLL COMMODITY INDEX) HAS THE LOWEST LEVEL OF RISK AMONG ITS PEERS

Period	YTD		1 Year		3 Year		5 Year		10 Year		Since Common Inception	
	Return	Risk	Return	Risk	Return	Risk	Return	Risk	Return	Risk	Return	Risk
Optimised Roll Commodity Index	4,3%		-7,5%		1,3%	7,0%	-6,5%	9,5%	-0,3%	12,0%	5,6%	13,8%
Bloomberg 3 Month Forward Index	5,9%		-6,9%		1,1%	7,9%	-7,3%	11,1%	-0,9%	13,6%	4,3%	15,3%
UBS Bloomberg CMC Composite Index	9,1%		-4,8%		4,3%	9,4%	-6,2%	12,8%	0,5%	14,3%	5,3%	15,6%
DBLCI-OY Balanced Index	6,6%		-9,0%		1,7%	9,3%	-7,6%	12,1%	-1,1%	14,7%	4,7%	15,9%

Sources: WisdomTree, Bloomberg. Data from 31 May 2001 to 30 April 2019 and based on monthly returns. Common Inception of Data is 31 May 2001. The Optimised Roll Commodity Total Return Index started its live calculation on 30/07/13. Calculations are based on total return indices and include backtested data. Standard deviation is the measure of risk. All risk and return numbers are annualised. *DBLCI-OY Balanced Index represents the TRAC (total return after costs) Index. **Historical performance is not an indication of future performance and any investments may go down in value.**

Critically, the Optimised Roll Commodity Index not only achieves a lower level of risk when looking at discrete time periods but also on a rolling basis. We observe the 3-year rolling standard deviation for all 4 strategies and note that the Optimised Roll Commodity Index has the lowest level of risk on this measure 93% of the times. Moreover, the rolling 3-year standard deviation is lowest for the Optimised Roll Commodity Index 100% of the times since February 2006.

FIGURE 5: OPTIMISED ROLL COMMODITY INDEX CONSISTENTLY HAS THE LOWEST 3-YEAR ROLLING STANDARD DEVIATION



Sources: WisdomTree, Bloomberg. Data from 31/05/01 to 30/04/19 and based on monthly returns. The Optimised Roll Commodity Total Return Index started its live calculation on 30/07/13. Calculations are based on total return indices and include backtested data. All numbers are annualised. *DBLCI-OY Balanced Index represents the TRAC (total return after costs) Index.

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Commodities have an important place in a strategic portfolio given their diversification benefits. How the commodity bucket is executed however can have a material impact on the effectiveness of the investment strategy. We believe WisdomTree Enhanced Commodities UCITS ETF (WCOA) which tracks the Optimised Roll Commodity Index (EBCIWTT) is built on robust principles of diversification and maximises return while minimising risk. The strategy consistently delivers attractive returns among its peers at the lowest level of risk. This makes it the most favourable among investment strategies actively seeking to outperform a passive allocation to broad commodities.

RELATED PRODUCTS:

WisdomTree Enhanced Commodity UCITS ETF - USD Acc

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