# RTM Analytics Alternative Commodity Algorithmic Program A Non-Correlated Portfolio Diversification Alternative

#### November 2024

The information in this presentation is for illustrative purposes only. Hypothetical results relating to the Alternative Commodity Algorithmic Program ("ACAP<sup>©</sup>") do not reflect actual investment results or the trading of an actual account and are achieved by the retroactive application of market and other trading data. Hypothetical results have many inherent limitations, including that they are prepared with the benefit of hindsight. Hypothetical results do not involve financial risk. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in preparation of hypothetical results, all of which can adversely affect actual trading results.

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#### PAST PERFORMANCE IS NO GUARANTY OF FUTURE RESULTS

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## The Problem

- Since 2006, a paradigm shift in the commodity market forward curves, from primarily backwardated to primarily contango (carry), significantly diminished the expected return profile from long-only commodity exposures at the same time decreasing their non-correlated diversification benefits<sup>1</sup>. This development can be attributed largely to the massive increase in passive long-only funds entering the asset class.
- The utilization of various long-only commodity strategies offered by high-fee managers have been replicated by cost-effective mutual fund and ETF offerings. While these offerings provide lower costs, we do not believe that they address the primary shortcomings of long-only exposures: high correlation to equites and negative roll yields.
- Additionally, in our view, many of these lower cost programs utilize excess leverage to generate returns, have fee structures incompatible with the returns generated, utilize illiquid investments, and may have counter-party risk issues.



Updated through October 2024

<sup>1</sup> Source: "Alternative Commodity Investing for a New Paradigm"; Sultan, J. , Murphy, R. (2017) Presented at the Institute for Higher Business Studies, Carthage - Tunisia (IHEC Carthage).

## The Solution

- The Alternative Commodity Algorithmic Program Total Return (ACAP) provides consistent non-correlated diversification to a core 60/40 equity/fixed income portfolio compared to long-only commodity programs.
- The Alternative Commodity Algorithmic Program- Strategy (ACAP-S) is the hypothetical performance of ACAP accounting for estimated management, performance, and transaction fees.
- ACAP transacts only in highly-liquid, US Exchange listed futures contracts, substantially diminishing the potential issues associated with counter-party risk inherent in many alternative investments.

#### Alternative Commodity Algorithmic Program - Strategy vs Comparable Investable Commodity Programs

				Expense					Since	Sharpe	Adjusted	Max	Correl to	Sharpe Ratio for
Program	Symbol	AUM	Inception Date	Ratio	YTD	3 yr	5yr*	10 yr*	Inception	Ratio	Sharpe <sup>1</sup>	Drawdown	SPY <sup>2</sup>	diversified portfolio <sup>3</sup>
Alternative Commodity Algorithmic Program - Strategy	ACAP-S	-	11-28-2014 (10.09yrs)	1.20% est	+3.59%	+20.60%	+20.06%	+19.40%	+19.56%	2.58	2.38	-7.00%	-0.08	0.97
Invesco Optimum Yield Diversified Commodity Strategy N	PDBC	\$4,528,470,000	11-28-2014 (10.09yrs)	0.59%	+2.09%	+4.50%	+8.31%	+2.77%	+1.76%	0.00	0.00	-44.52%	+0.41	0.58
Alternative Commodity Algorithmic Program - Strategy	ACAP-S	-	10-31-2013 (11.17yrs)	1.20% est	+3.59%	+20.60%	+20.06%	+19.40%	+17.78%	2.36	2.16	-7.00%	-0.09	1.04
First Trust Global Tactical Commodity Strategy Fund	FTGC	\$2,193,260,000	10-31-2013 (11.17yrs)	1.02%	+9.94%	+6.88%	+9.80%	+1.68%	+0.43%	-0.09	-0.08	-57.64%	+0.44	0.64
Alternative Commodity Algorithmic Program - Strategy	ACAP-S	-	02-28-2006 (18.84yrs)	1.20% est	+3.59%	+20.60%	+20.06%	+19.40%	+17.02%	2.31	1.97	-7.00%	-0.08	0.93
Invesco DB Commodity Index Tracking Fund	DBC	\$1,441,190,000	02-28-2006 (18.84yrs)	0.87%	+2.17%	+4.58%	+8.30%	+2.86%	+0.60%	-0.05	-0.04	-74.55%	+0.47	0.53
Alternative Commodity Algorithmic Program - Strategy	ACAP-S	-	10-31-2014 (10.17yrs)	1.20% est	+3.59%	+20.60%	+20.06%	+19.40%	+19.27%	2.53	2.36	-7.00%	-0.08	0.98
iShares GSCI Cmd Dyn Roll Stgy ETF	COMT	\$871,820,000	10-31-2014 (10.17yrs)	0.48%	+5.96%	+5.75%	+5.66%	+2.51%	+0.48%	-0.08	-0.06	-46.59%	+0.42	0.57
Alternative Commodity Algorithmic Program - Strategy	ACAP-S	-	07-31-2006 (18.42yrs)	1.20% est	+3.59%	+20.60%	+20.06%	+19.40%	+16.88%	2.28	1.95	-7.00%	-0.08	0.94
iShares S&P GSCI Commodity-Indexed Trust	GSG	\$900,320,000	07-31-2006 (18.42yrs)	0.75%	+8.52%	+8.36%	+6.08%	+0.09%	-4.49%	-0.26	-0.20	-88.68%	+0.47	0.46
Alternative Commodity Algorithmic Program - Strategy	ACAP-S	-	01-31-2012 (12.92yrs)	1.20% est	+3.59%	+20.60%	+20.06%	+19.40%	+16.18%	2.22	2.03	-7.00%	-0.07	1.15
LoCorr Long/Short Commodity Strategies Fund	LCSIX	\$631,880,000	01-31-2012 (12.92yrs)	0.00%	-8.30%	-1.95%	+3.54%	+5.03%	+3.48%	0.27	0.22	-22.96%	-0.15	0.90

<sup>1</sup> Adjusted Sharpe is the Sharpe Ratio adjusted for serial correlation

\* Time period covered may be less than column label

<sup>2</sup> SPY is the SPDR S&P 500 Trust ETF

<sup>3</sup> Diversified Portfolio is comprised of 51% SPY ETF, 34% iShares Core US Aggregate Bond ETF, and 15% of the listed rpogram

Updated through 12/31/24



#### The ACAP program accounts for the paradigm shift in the commodity futures forward curve

Please see the Disclaimers in the front of this document for further information on hypothetical performance and its limitations. There is always a substantial risk of loss.

### ACAP provides diversification during equity stress periods

Period	Description of Crisis	Equity Returns <sup>1</sup>	Managed Futures Returns <sup>2</sup>	SPGSCITR <sup>3</sup>	ACAP-S Returns <sup>4</sup>
SEP 2000 - NOV 2000	USS Cole; Mad Cow outbreak; Bush v Gore	- 5.93%	- 3.99%	- 1.15%	+ 3.19%
FEB 01 - MAR 01	Bush inaugurated; US and Britain attack Iraq	- 14.61%	+ 2.47%	- 5.26%	+ 1.73%
JUL 01 - SEP 01	Events leading up to 9/11 attacks	- 14.49%	+ 3.31%	- 9.89%	+ 5.70%
APR 02 - SEP 02	Enron and WorldCom; End of tech bubble	- 28.01%	+ 14.28%	+ 11.55%	+ 9.39%
DEC 02 - FEB 03	War in Iraq; SARS outbreak	- 9.22%	+ 3.74%	+ 32.63%	+ 4.03%
JUN 08 - FEB 09	Global financial crisis (The Great Recession)	- 46.32%	+ 4.66%	- 64.66%	+ 18.87%
MAY 10 - JUN 10	Greek crisis	- 12.71%	+ 3.80%	- 12.83%	+ 1.28%
MAY 11 - SEP 11	Eurozone debt crisis; US credit downgrade	- 16.22%	- 2.09%	- 22.14%	+ 17.57%
APR 12 - MAY 12	Continuing European crises	- 6.63%	- 3.21%	- 13.42%	- 0.58%
AUG 15 - SEP 15	Chinese currency crisis	- 8.49%	- 5.19%	- 6.05%	+ 2.50%
DEC 15 - JAN 16	Draghi stimulus fiasco; first Fed hike since 2006	- 6.62%	+ 0.23%	- 13.35%	+ 1.18%
FEB 20 - MAR 20	Corona Virus pandemic	- 19.42%	+ 3.58%	- 35.35%	+ 3.83%
1 Equity Returns represented by the S	SPDR S&P 500 Trust ETF	- 188.67%	+ 21.57%	- 139.92%	+ 68.70%

#### Historical Performance of Equities, Managed Futures, a Long Only Commodity Index and ACAP<sup>©</sup> during Crises

2 Managed Futures Returns represented by the Societe General CTA Index

3 SPGSCI-TR is the S&P Goldman Sachs Commodity Index - Total Return - a collateralized long only, production weighted commodity index

4 ACAP-S represents HYPOTHETICAL returns for the Alternative Commodity Algorithmic Program net of expected transaction costs and management fees

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	+ 0.26%	+ 0.70%	+ 0.17%	- 1.56%	+ 3.31%	+ 3.62%	+ 1.89%	+ 1.28%	+ 0.08%	+ 2.81%	+ 1.56%	+ 1.06%	+ 16.15%
2001	+ 4.44%	+ 2.99%	- 1.46%	- 0.08%	- 0.98%	+ 0.86%	+ 1.07%	+ 0.78%	+ 2.89%	- 4.76%	- 1.95%	+ 1.76%	+ 5.35%
2002	- 0.77%	+ 0.04%	+ 1.85%	+ 0.31%	+ 2.31%	- 0.79%	+ 0.65%	+ 3.84%	+ 3.09%	+ 0.61%	+ 1.24%	+ 1.45%	+ 14.61%
2003	- 0.61%	+ 3.35%	+ 0.06%	+ 1.54%	+ 3.44%	+ 0.72%	+ 3.65%	+ 0.23%	- 2.42%	- 0.74%	+ 4.07%	+ 0.04%	+ 13.91%
2004	+ 1.04%	+ 3.06%	+ 2.67%	+ 3.18%	+ 1.73%	+ 1.37%	+ 0.37%	+ 0.66%	+ 4.53%	+ 0.45%	+ 0.29%	+ 0.51%	+ 21.64%
2005	+ 0.97%	- 1.88%	+ 2.79%	+ 1.09%	+ 2.94%	- 0.06%	+ 1.74%	+ 5.41%	+ 0.82%	+ 2.45%	+ 2.73%	- 0.99%	+ 19.34%
2006	+ 1.72%	+ 0.66%	+ 2.47%	+ 2.43%	+ 1.67%	+ 1.87%	+ 0.54%	+ 1.52%	+ 2.19%	+ 3.43%	+ 2.54%	+ 0.44%	+ 23.69%
2007	+ 1.44%	+ 1.15%	- 0.64%	+ 2.56%	+ 0.33%	- 0.40%	- 0.74%	+ 3.05%	+ 1.58%	- 0.29%	+ 2.08%	+ 3.68%	+ 14.56%
2008	+ 3.25%	+ 5.43%	+ 6.21%	+ 1.86%	- 1.07%	+ 3.47%	+ 7.59%	+ 3.28%	+ 5.51%	+ 0.12%	- 0.88%	- 2.05%	+ 37.37%
2009	- 0.81%	+ 0.45%	+ 1.08%	+ 1.77%	+ 1.38%	+ 3.39%	+ 1.64%	+ 2.77%	+ 1.85%	- 1.82%	+ 1.44%	- 2.16%	+ 11.37%
2010	+ 4.18%	- 0.32%	+ 2.73%	+ 0.03%	+ 1.89%	- 0.48%	- 0.04%	- 0.25%	+ 2.67%	+ 0.34%	- 0.10%	+ 1.05%	+ 12.20%
2011	- 1.56%	+ 1.07%	+ 0.81%	+ 0.16%	+ 2.28%	+ 4.07%	+ 1.90%	+ 3.10%	+ 3.75%	+ 2.32%	+ 1.27%	- 2.36%	+ 17.91%
2012	- 0.67%	+ 1.81%	- 2.10%	+ 0.29%	- 0.79%	+ 2.55%	- 0.03%	+ 2.19%	+ 1.40%	+ 1.91%	- 1.57%	+ 2.34%	+ 7.44%
2013	+ 1.28%	+ 0.74%	- 0.62%	+ 0.92%	+ 1.15%	+ 0.49%	+ 0.81%	- 0.73%	- 0.02%	- 0.81%	+ 0.68%	- 0.65%	+ 3.25%
2014	- 0.40%	+ 1.33%	- 1.03%	+ 0.71%	+ 1.38%	+ 0.70%	+ 1.42%	- 0.31%	+ 2.69%	- 2.78%	- 1.04%	+ 2.95%	+ 5.60%
2015	- 1.62%	- 0.41%	+ 0.61%	+ 1.40%	+ 0.50%	+ 4.79%	+ 4.05%	+ 1.70%	+ 0.43%	+ 1.05%	- 0.18%	+ 2.17%	+ 15.29%
2016	- 0.76%	- 0.29%	+ 1.79%	+ 2.80%	+ 0.99%	- 0.08%	+ 4.27%	+ 2.48%	- 1.70%	+ 0.86%	+ 3.85%	+ 1.84%	+ 17.05%
2017	- 0.30%	+ 0.79%	+ 2.67%	+ 4.09%	- 1.49%	+ 2.72%	+ 4.45%	+ 0.38%	+ 1.74%	+ 1.11%	- 0.72%	+ 0.13%	+ 16.50%
2018	- 1.55%	+ 0.09%	+ 3.64%	+ 2.36%	+ 0.01%	+ 3.77%	+ 4.17%	+ 0.72%	+ 2.76%	+ 5.00%	+ 4.40%	+ 0.74%	+ 29.15%
2019	- 0.29%	+ 0.45%	- 0.13%	+ 1.56%	+ 5.71%	- 0.40%	+ 1.33%	+ 2.77%	- 0.81%	+ 0.74%	+ 2.56%	+ 1.88%	+ 16.30%
2020	+ 3.38%	+ 3.12%	+ 1.27%	- 1.11%	- 0.11%	- 1.51%	+ 3.67%	+ 2.62%	+ 0.59%	- 0.57%	+ 4.25%	+ 5.14%	+ 22.49%
2021	- 2.71%	+ 4.92%	+ 2.98%	- 0.78%	+ 1.16%	+ 1.37%	- 0.89%	+ 1.26%	+ 1.14%	- 1.19%	+ 5.24%	+ 2.83%	+ 16.08%
2022	+ 2.44%	+ 5.98%	+ 4.18%	+ 3.75%	+ 0.32%	+ 3.84%	+ 1.27%	+ 0.17%	+ 2.49%	+ 3.84%	+ 0.88%	+ 1.54%	+ 35.17%
2023	+ 2.82%	- 0.18%	+ 1.25%	+ 4.52%	+ 2.09%	+ 0.57%	+ 3.53%	- 0.32%	+ 3.43%	+ 2.49%	+ 2.64%	+ 0.05%	+ 25.26%
2024	+ 3.39%	+ 3.09%	+ 2.43%	- 2.08%	- 1.39%	+ 0.27%	- 0.37%	- 0.57%	- 2.06%	- 0.99%	+ 2.82%	- 0.78%	+ 3.59%

Alternative Commodity Algorithmic Program – Strategy (ACAP-S) Hypothetical Monthly Returns

NOTE: Returns shown are HYPOTHETICAL, NET of an expected 1.20% annualized management fee debited monthly and an expected .80% of annual transaction fees

Please see the Disclaimers in the front of this document for further information on the hypothetical record and its limitations. There is always a substantial risk of loss.

### The Solution – Part II

ACAP-S provides non-correlated diversification benefits compared to many managed futures programs.

#### Alternative Commodity Algorithmic Program - Strategy vs Managed Futures Programs Updated through 12/31/24 Sharpe Ratio for Adjusted Correl to Expense Sharpe Max Since SPY<sup>2</sup> Sharpe<sup>1</sup> diversified portfolio **Inception Date** Ratio Inception Ratio Drawdown Symbol AUM YTD 3 vr 5vr\* 10 vr\* Program +20.60%+20.06% Alternative Commodity Algorithmic Program - Strategy ACAP-S 01-31-2014 (10.92yrs) 1.20% est +3.59% +19.40% +18.26% 2.42 2.23 -7.00% -0.09 1.04 -PIMCO TRENDS Managed Futures Strat I2 PQTPX \$2,520,000,000 0.00% -3.08% +1.12% +5.25% +2.63% 0.25 0.27 -19.98% 0.82 01-31-2014 (10.92yrs) -0.29 +4.14% Alternative Commodity Algorithmic Program - Strategy ACAP-S 08-29-2014 (10.34yrs) +3.59%+20.60%+20.06%+19.40% 2.26 -7.00% 0.98 1.20% est +18.90%2.45 -0.09 -10.75% American Beacon AHL Mgd Futs Strat Y AHLYX \$3,040,000,000 08-29-2014 (10.34yrs) +1.52% +4.44% -0.17 0.74 0.00% +5.79%+3.49%+4.52%0.29 0.28 Alternative Commodity Algorithmic Program - Strategy ACAP-S 07-31-2014 (10.42yrs) 1.20% est +3.59% +20.60%+20.06%+19.40% +18.71%2.43 2.25 -7.00% -0.09 1.00 Abbey Capital Futures Strategy I +4.58% -15.24% ABYIX \$2,710,000,000 07-31-2014 (10.42yrs) 0.00% -0.99% +3.88% +2.49% +4.08% 0.27 0.25 -0.14 0.75 Alternative Commodity Algorithmic Program - Strategy +20.06%ACAP-S 09-30-2014 (10.25yrs) 1.20% est +3.59% +20.60%+19.40% +18.77% -7.00% -0.09 0.99 2.43 2.21 -AQR Managed Futures Strategy Fund AQMRX \$1,450,000,000 +7.32% -23.91% 0.75 09-30-2014 (10.25yrs) +4.14% +12.97% -0.280.00% +2.14%+3.02%0.11 0.11 Alternative Commodity Algorithmic Program - Strategy ACAP-S +3.59%+20.60%+20.06%-7.00% 04-29-2011 (13.68yrs) 2.03 1.20% est +19.40%+16.52%2.28 -0.10 1.12 -LoCorr Macro Strategies I LFMIX \$1,600,000,000 04-29-2011 (13.68yrs) 0.00% +6.80%+4.78% +4.02% +2.42% 0.12 0.13 -22.48% -0.00 0.82 +4.00%Alternative Commodity Algorithmic Program - Strategy ACAP-S 05-31-2019 (5.59yrs) 1.20% est +3.59% +20.60%+20.06% +19.45% +19.45% 2.38 2.22 -7.00% -0.04 0.86

+2.98%

+4.48%

0.85%

<sup>1</sup> Adjusted Sharpe is the Sharpe Ratio adjusted for serial correlation

\* Time period covered may be less than column label

+6.37%

+6.37%

+5.28%

0.29

0.33

-17.30%

-0.22

<sup>2</sup> SPY is the SPDR S&P 500 Trust ETF

iMGP DBi Managed Futures Strategy ETF

<sup>3</sup> Diversified Portfolio is comprised of 51% SPY ETF, 34% iShares Core US Aggregate Bond ETF, and 15% of the listed rpogram

DBMF \$1,006,360,000

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05-31-2019 (5.59yrs)

0.72

## ACAP-S vs Invesco Optimum Yield Diversified Commodity Strategy (PDBC)

Analysis period:	Alternative Commodity	Invesco Optimum Yield		Invesco Optimum Yield Diversified Commodity Strategy No K-1 ETF
11-2014 to 12-2024	Algorithmic Program - Strategy	Diversified Commodity Strategy		
Symbol	ACAP-S	PDBC		
Category	Alternative Commodity	Commodities Broad Basket	70	
Fees	1.20%	0.59%		
AUM	n/a	\$4,528,470,000	60	
Start date	11/28/2014	11/28/2014		
MTD	-0.78%	+1.33%	50	
YTD	+3.59%	+2.09%		
3 Year*	+20.60%	+4.50%	40	
5 Year*	+20.06%	+8.31%		
10 Year*	+19.40%	+2.77%	20	
10.09 yrs*	+19.56%	+1.76%	30	
Up/down months	+89 / -32	+63 / -57		
Skew	0.138	(0.378)	20	
Sharpe	2.578	(0.004)		
Adjusted Sharpe**	2.380	(0.003)	10	
Sortino	4.20	0.08		
Max Drawdown	-7.00%	-44.52%	-	
MAR ratio	2.80	0.04	100	ron riven here here the tion doe doe doe here the toe toe here here here here here doe doe the the
Correl to SP500	(0.08)	0.41	27/2	
Correl to -5% SP500	0.28	0.64		
* Annualized ** Ad	justed for serial correaltion			
	· J			Diversification for a 60/40 Portfolio PDBC ACAP-S
Comparise	on of PDBC vs ACAP-S when add	ded to a 60/40 portfolio	2 800	
	51% SPY* ; 34% VBMF	X**	2,000	
	w/ 15% ACAP-S	w/ 15% PDBC		
Annualized Ret %	+10.04%	+7.45%	2,300	
StDev	8.52%	9.70%		
Sharpe Ratio	0.97	0.58	1 800	
Max monthy DD	-14.08%	-15.37%	1,800	
			1,300	
PDBC is an actively m	anaged ETF investing in commodi	ty-linked instrument of 14 liquid		
commodities across th	e energy, precious and industrial m	etals, and agriculture sectors. The	0.5 -	
Fund is benchmarked	to the DBIQ Optimum Yield Dive	rsthed UI-Excess Return	800 121	1201 412015 912015 212016 112016 512011 512011 31298 81298 112015 612015 112015 41202 91202 21201 112011 51201 51201 31202 31202 81202 11201



#### PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS

## ACAP-S vs PIMCO TRENDS Managed Futures Strategy Fund – I Class (PQTIX)

Analysis period: 08-2014 to 12-2024	Alternative Commodity Algorithmic Program - Strategy	American Beacon AHL Mgd Futs Strat Y			
Symbol	ACAP-S	AHLYX			
Category	Alternative Commodity	Managed Futures			
Fees	1.20%	0.00%			
AUM	n/a	\$3,040,000,000			
Start date	8/29/2014	8/29/2014			
MTD	-0.78%	+1.42%			
YTD	+3.59%	+1.52%			
3 Year*	+20.60%	+4.44%			
5 Year*	+20.06%	+5.79%			
10 Year*	+19.40%	+3.49%			
10.34 yrs*	+18.90%	+4.52%			
Up/down months	+90 / -34	+65 / -58			
Skew	0.103	0.215			
Sharpe	2.453	0.286			
Adjusted Sharpe**	2.265	0.282			
Sortino	3.68	0.25			
Max Drawdown	-7.00%	-10.75%			
MAR ratio	2.70	0.42			
Correl to SP500	(0.09)	(0.17)			
Correl to -5% SP500 months (11 periods)	0.28	0.64			



PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS

\* Annualized \*\* Adjusted for serial correaltion

Comparison of AHLYX vs ACAP-S when added to a 60/40 portfolio								
51% SPY*; 34% VBMFX**								
	w/ 15% ACAP-S	w/ 15% AHLYX						
Annualized Ret %	+10.00%	+7.90%						
StDev	8.43%	8.32%						
Sharpe Ratio	0.98	0.74						
Max monthy DD	-14.08%	-14.40%						

AHLYX seeks to achieve its investment objective by implementing a quantitative trading strategy and systematic investment process designed to capitalize on price trends in a broad range of global markets by utilizing derivative instruments to seek exposure to stock indices, bonds, currencies, and interest rates. It invests primarily in derivatives, including futures contracts, and forward contracts, such as foreign currency forward contracts and non-deliverable forwards ("NDEs").