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Experience & Discipline

CB GLOBAL COMMODITY PORTFOLIO

February 2025

Commodity markets

Investing in commodities

CB Global Commodity Portfolio

Commodity universe

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Commodity sectors and their main constituents

Hard Commodities				Soft Commodities			
							
Base Metals	**Precious Metals**	**Ferrous Complex**	**Energy**	**Softs**	**Grains**	**Livestock**	**Alternative Commodities**
Copper Aluminum Nickel Zinc Lead Tin	Gold Silver Palladium Platinum	Iron ore Steel	Brent WTI Gasoline Gasoil Heating Oil US natural gas European gas	Coffee Cocoa Sugar Orange juice	Corn Soybean Soybean meal Soybean oil Wheat	Live cattle Feeder cattle Hogs	Coal LNG Ethanol Brazilian corn Palm oil Freight German power Singapore gasoil Uranium Carbon credit Chinese Commodities

Alternative commodities can span across traditional commodity sectors and have some of the following characteristics: They are traded by hedgers rather than speculators, have more inelastic supply & demand, have lower trading volumes hence lower capacity, are traded on smaller exchanges, are cleared futures or swaps or OTC swaps i.e. require dedicated trading infrastructure.

Historical prices and diversification

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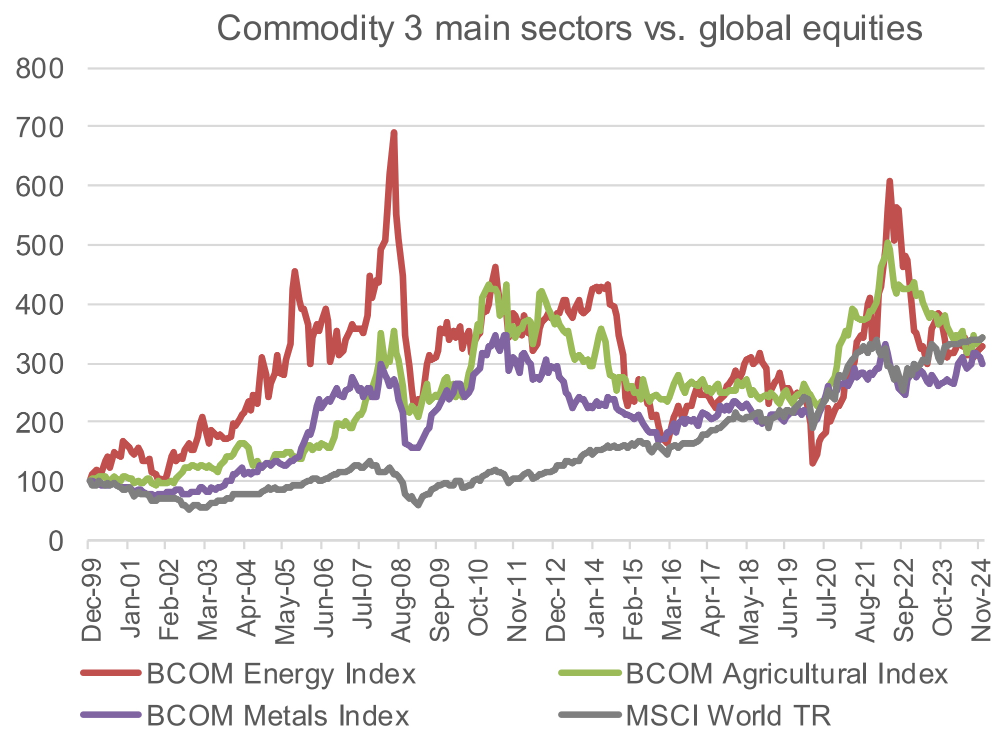
- Commodities can perform strongly
- But are volatile and can correct sharply



- Commodity sectors have low correlations to each others
- Commodities have low correlation to equities

		1	2	3	4	5	6	7	8	Average
1	BCOM Index	1.00	0.83	0.68	0.46	0.59	0.50	0.17	0.46	0.53
2	BCOM Energy Index	0.83	1.00	0.39	0.18	0.21	0.24	0.12	0.31	0.32
3	BCOM Industrial Metals Index	0.68	0.39	1.00	0.39	0.31	0.40	0.13	0.54	0.40
4	BCOM Precious Metals Index	0.46	0.18	0.39	1.00	0.27	0.27	0.01	0.21	0.25
5	BCOM Grains Index	0.59	0.21	0.31	0.27	1.00	0.37	0.00	0.24	0.28
6	BCOM Softs Index	0.50	0.24	0.40	0.27	0.37	1.00	0.04	0.26	0.30
7	BCOM Livestock Index	0.17	0.12	0.13	0.01	0.00	0.04	1.00	0.10	0.08
8	MSCI World TR	0.46	0.31	0.54	0.21	0.24	0.26	0.10	1.00	0.30

➡ Commodities / commodity sectors offer a high diversification potential

Source: Bloomberg. Based on Bloomberg Commodity (BCOM) Spot Return indices. Data Jan 2000 to Dec 2024.

Cycles and recent strong performers

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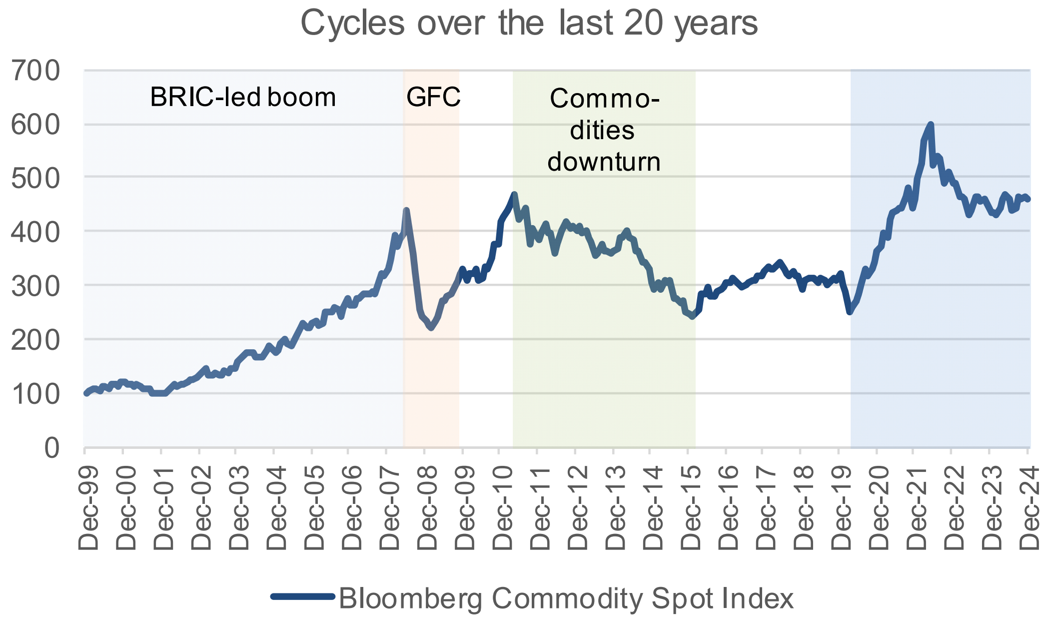
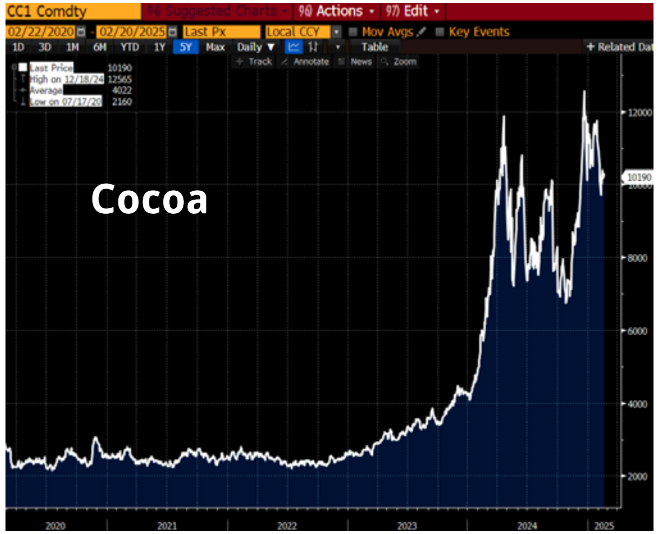
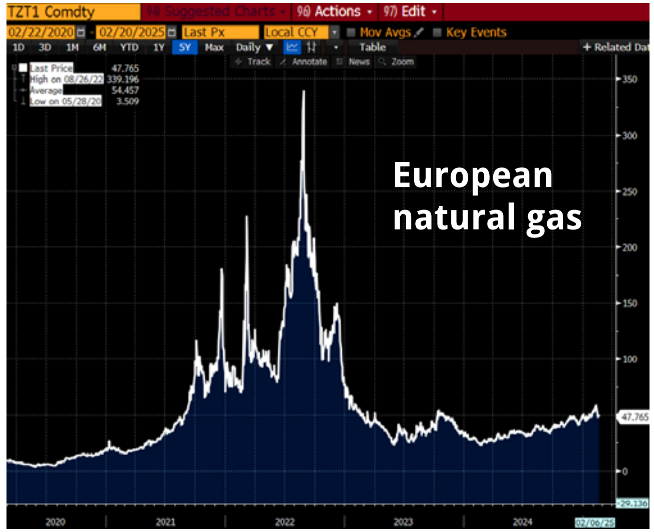
- Commodity (super)cycles are caused mainly by persistent supply / demand imbalances
  - US industrialization (1910s)
  - China industrialization (2000s)
  - Green revolution (2020s) ?



- Recent large price moves driven by S&D, weather, green revolution, war in Ukraine





Source: Bloomberg.

Current valuation and inflation hedge

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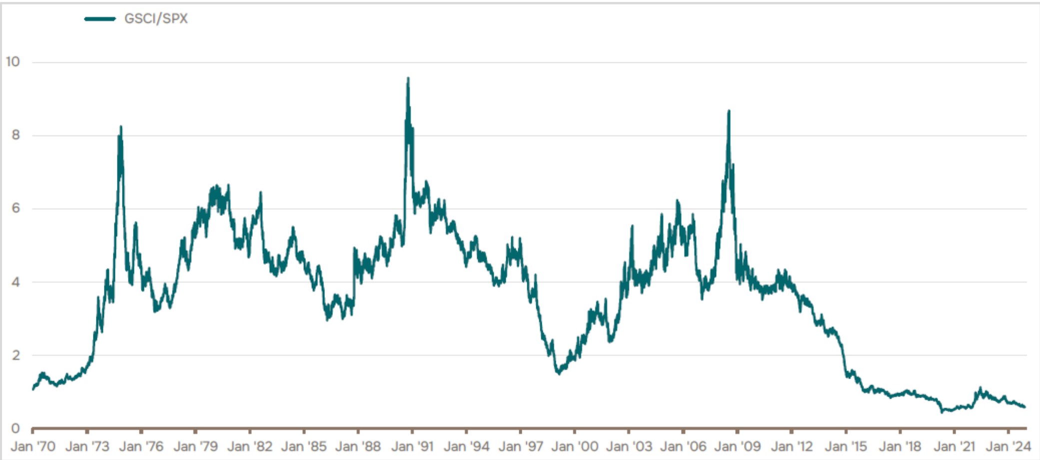
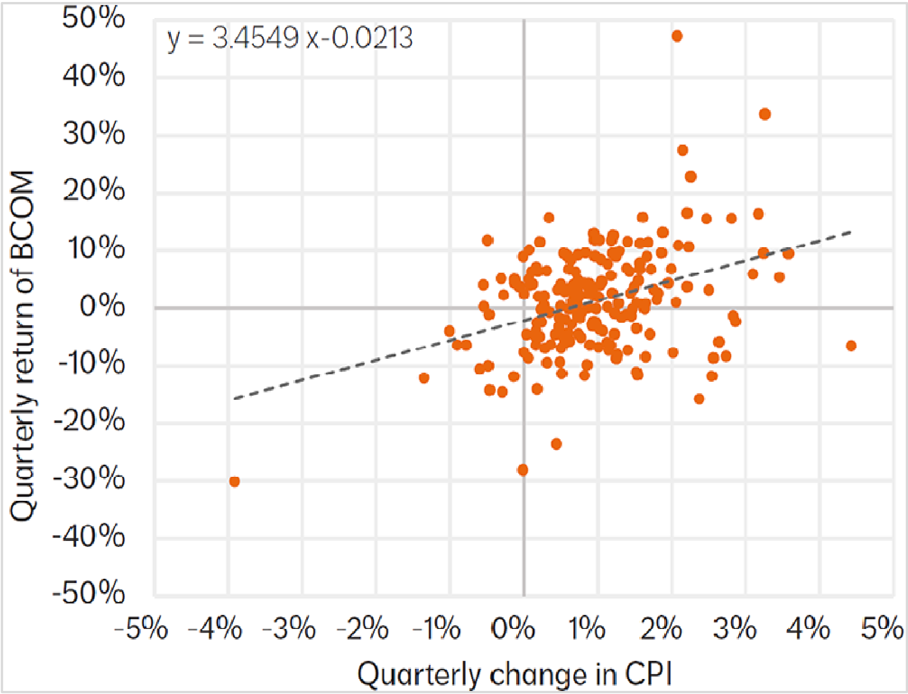
- Looking at the last 120 years, commodities are currently deeply undervalued vs. equities (ratio commodity prices / S&P 500)

- Long-term, commodities have positive correlation to inflation and are thus a hedge against inflation
- The below chart shows the positive relationship between US CPI and BCOM during 1970-2020





Commodity markets

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Long only: Spot is NOT Total Return (TR)

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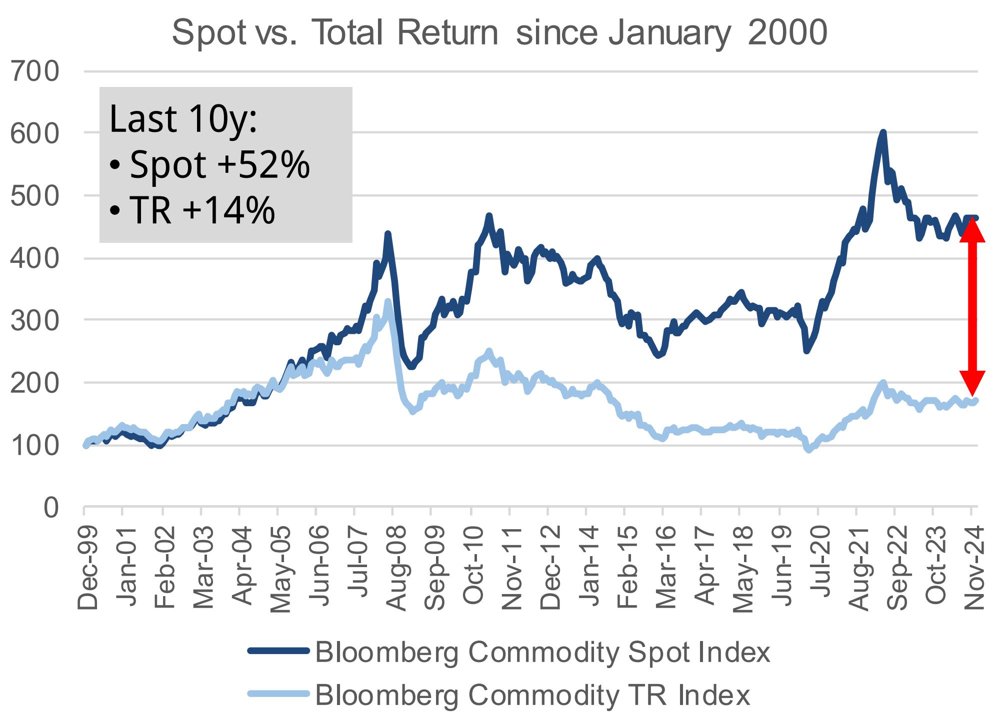
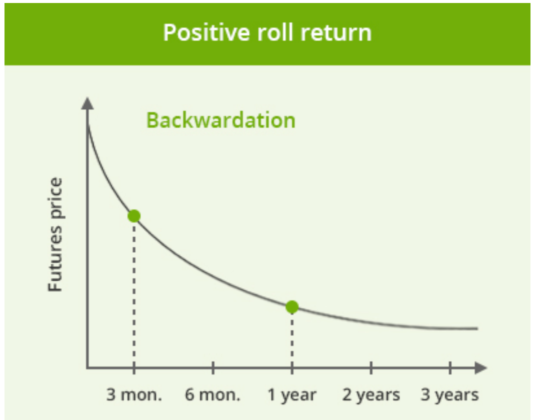
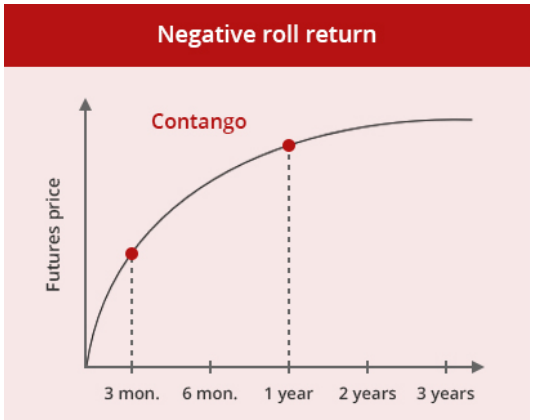
- As commodity investors invest through futures, they cannot reproduce commodity spot returns (exception are precious metals)
- Investors (e.g. ETF) get TR which depends on the shape of the futures curves



- A commodity in **backwardation** will add positive carry to the spot price
- A commodity in **contango** will add negative carry to the spot price



Investor rolls expiring futures contract into lower priced futures contract (positive roll yield).



Investor rolls expiring futures contract into higher priced futures contract (negative roll yield).

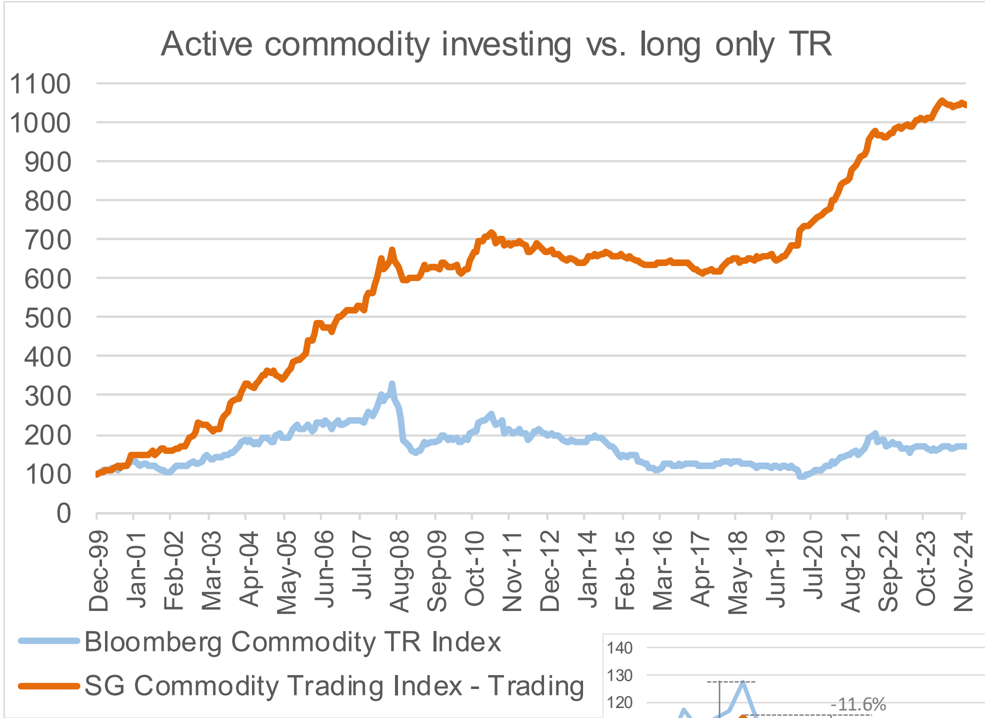
"Roll Select" ETFs can reduce the negative roll yield.

Source: Bloomberg, justETF Research.

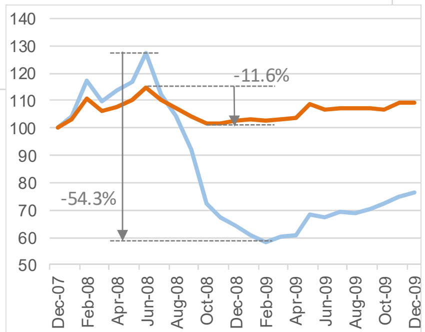
Active management: Full flexibility

- Commodity hedge funds are like Macro funds:
  - Indifferent to be long or short, i.e. can perform in bull and bear markets
  - Can trade outright directional (e.g. long crude oil) or RV (e.g. long corn / short soybeans), i.e. bright opportunity set
  - Can trade actively, cut positions
  - Focus on convex return profile, benefit from higher volatility
  - Can focus on a single commodity sector (deep expertise)
  - Trade exchange listed futures and options, no/little equities, swaps in case of alternative commodities

- Difference between Commodity hedge funds (live index) and passive long only investing:



- A key difference: Capital preservation in 2008



Source: Bloomberg.

Active management example

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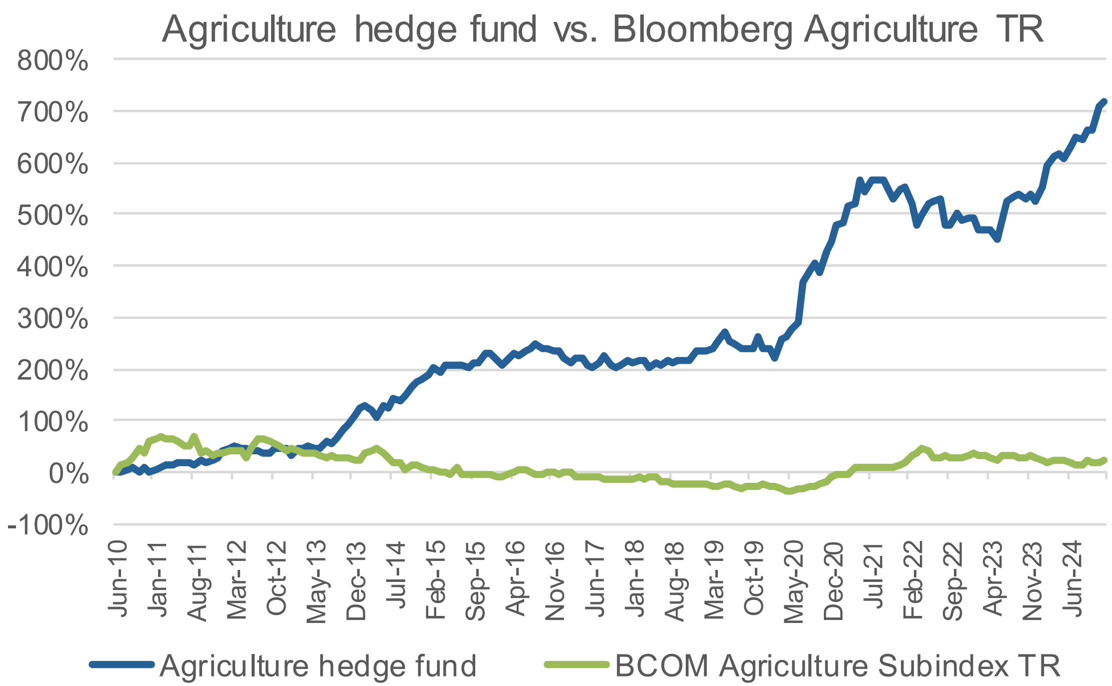
- This agriculture hedge fund is included in CB Global Commodity Portfolio
  - Manager has an agriculture physical trading background
  - Trades agricultural commodities directional (long or short) and through spreads (time spreads, product spreads)
  - Generated positive performance in up and down markets



Source: Bloomberg, Crossbow.

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Objective

- Generate attractive, uncorrelated risk-adjusted returns by capitalizing on the multi-dimensional opportunity set (supply & demand imbalances, weather and seasonality effects, substitution effects, etc.) that is uniquely available within commodity markets

Concept

- Implemented through flexible, actively traded, directional and relative value strategies managed by seasoned Commodity managers with proven track records
- Crossbow's disciplined fund selection and monitoring process identifies managers generating superior risk-adjusted performance on a consistent basis
- Robust portfolio construction focused on low correlated convictions provides diversification across sub-strategies, investment styles, commodity sectors and time horizons

Commodity Trading strategies

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Commodity Trading strategies

- Typically deploy long and short directional as well as relative value positions across commodities through liquid instruments
- Active trading approach, advanced trade structuring and stringent risk management contribute to limited downside
- Broad universe as Commodity strategies can spread across the following dimensions:

trade type	directional	⟷	relative value
investment style	discretionary	⟷	systematic
input	fundamental	⟷	technical
time horizon	short-term	⟷	long-term

- Trade examples:
  - long WTI futures / short Brent futures
  - short WTI futures and long puts WTI
  - long Dec 2024 corn futures / short Sep 2025 corn futures
  - long soybeans / short corn
  - long calls copper

Stable and consistent outperformance

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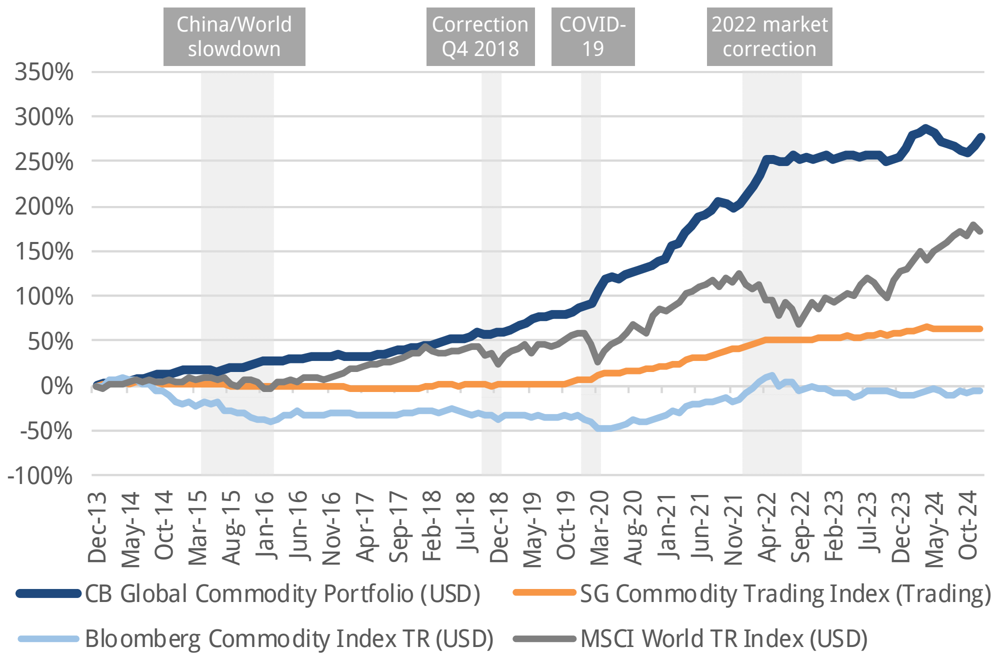

	ann. return	ann. Volatility	Sharpe ratio	max DD	Skewness
CB Global Commodity Portfolio (USD)	12.82%	5.76%	1.94	-7.20%	0.96
SG Commodity Trading Index (Trading)	4.52%	3.44%	0.83	-7.95%	1.22
Bloomberg Commodity Index TR (USD)	-0.54%	13.84%	-0.16	-53.18%	-0.38
MSCI World TR Index (USD)	9.48%	14.57%	0.54	-25.42%	-0.34

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2024	2.78%	3.75%	0.43%	1.56%	-1.58%	-2.38%	-0.65%	-0.49%	-1.52%	-0.80%	2.23%	2.81%	**6.07%**
2023	1.17%	-1.77%	0.73%	1.02%	-0.14%	-0.93%	0.90%	0.08%	0.17%	-2.42%	0.70%	1.02%	**0.43%**
2022	3.42%	2.88%	4.24%	4.80%	0.06%	-0.83%	0.03%	2.04%	-1.53%	1.30%	-1.24%	0.80%	**16.90%**
2021	0.60%	5.88%	1.24%	5.21%	2.58%	3.61%	0.83%	1.52%	3.39%	-1.01%	-1.54%	1.61%	**26.36%**
2020	1.31%	0.94%	8.03%	5.92%	0.58%	-0.62%	2.23%	1.16%	0.71%	1.11%	0.76%	2.86%	**27.65%**
2019	1.02%	1.92%	3.02%	1.06%	2.28%	2.17%	-0.93%	1.56%	0.31%	0.00%	1.04%	3.67%	**18.44%**
2018	0.60%	-0.31%	2.01%	1.86%	2.72%	-0.95%	0.22%	2.13%	1.91%	-1.25%	-0.19%	1.48%	**10.60%**
2017	-1.72%	-1.25%	0.63%	-0.72%	0.01%	2.07%	1.17%	1.85%	0.38%	0.94%	0.83%	1.27%	**5.53%**
2016	1.62%	0.51%	-0.50%	0.93%	1.01%	1.54%	0.26%	0.74%	0.26%	0.79%	-0.10%	1.79%	**9.20%**
2015	1.83%	-0.57%	0.03%	0.05%	0.23%	-0.59%	0.79%	1.70%	0.69%	0.71%	0.65%	2.23%	**7.99%**

Source: Crossbow Partners, Bloomberg. The returns of CB Global Commodity Portfolio are based on a live portfolio since Oct 2021. Before, performance is simulated and based on an hypothetical portfolio of Commodity managers. All returns are net of fees and in USD. The information in this document is for information purposes only and does not constitute an investment advice. Past performance is no indication or guarantee of future results.

Protection and diversification properties

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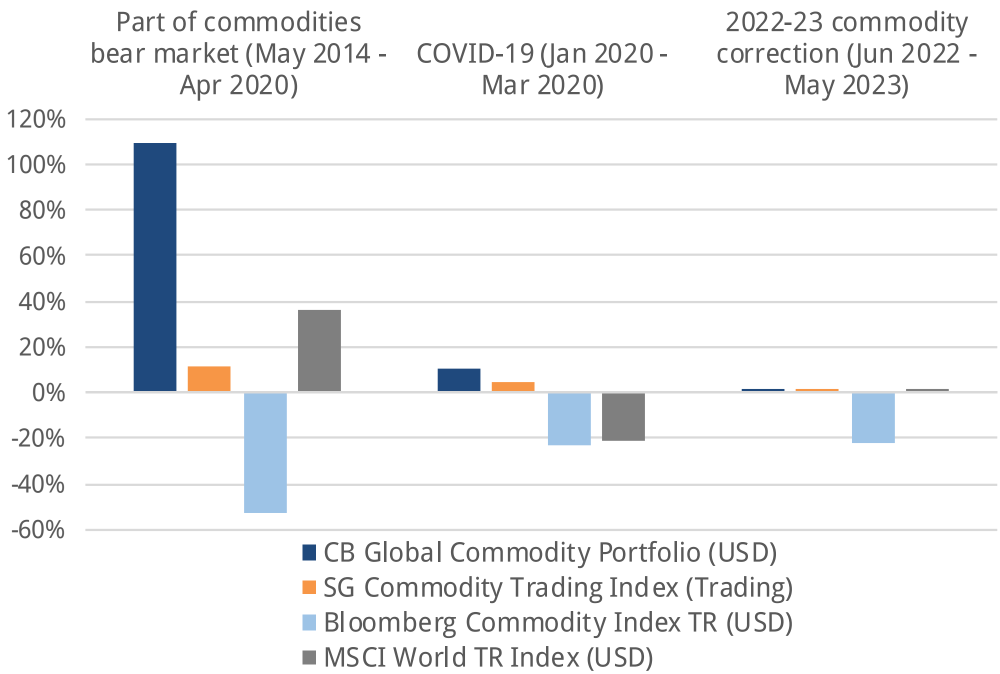
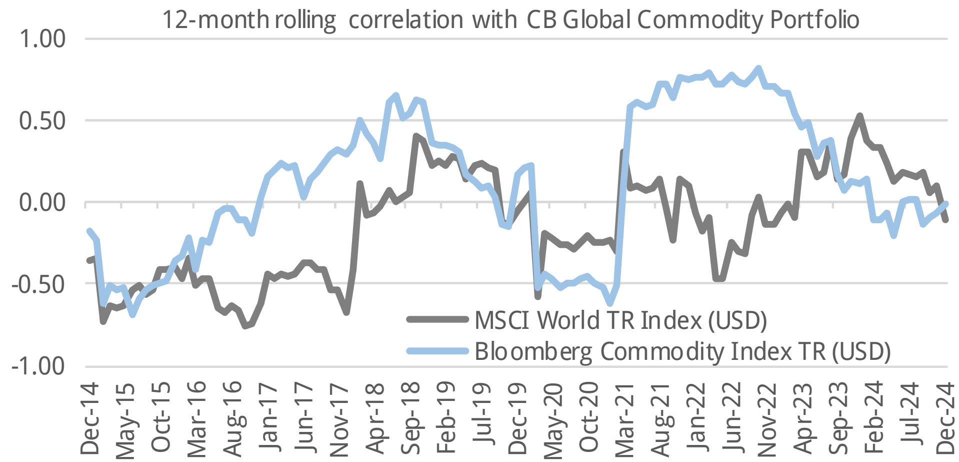
- CB Global Commodity Portfolio achieved downside protection during prolonged and shorter commodity market downturns:



- CB Global Commodity Portfolio has low long-term correlation to commodities and negative correlation to equities:

	1	2	3
1 CB Global Commodity Portfolio (USD)	1.00	0.16	-0.08
2 Bloomberg Commodity Index TR (USD)	0.16	1.00	0.44
3 MSCI World TR Index (USD)	-0.08	0.44	1.00



- Periods of negative and positive rolling correlations

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Unique profile through Alpha generation

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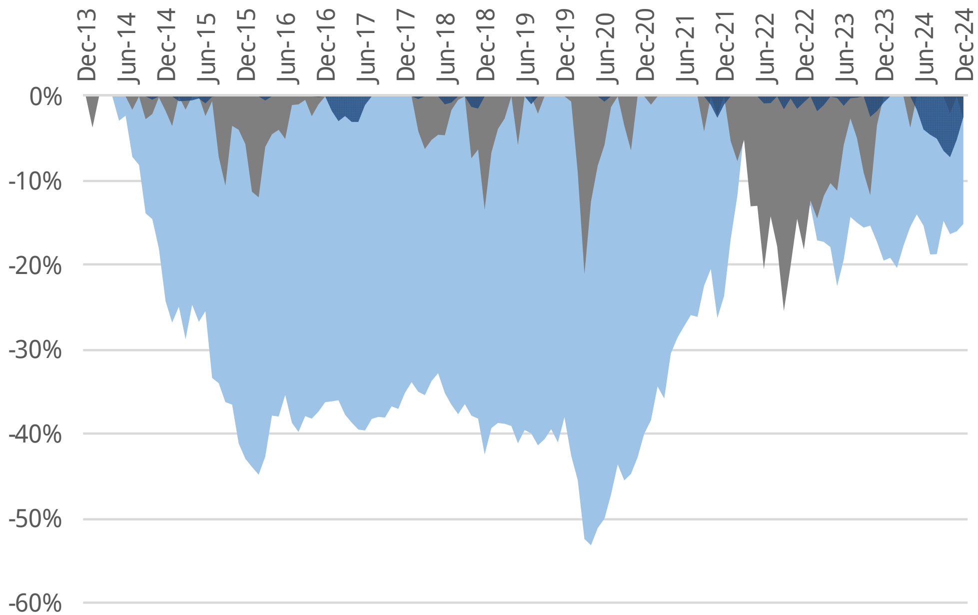
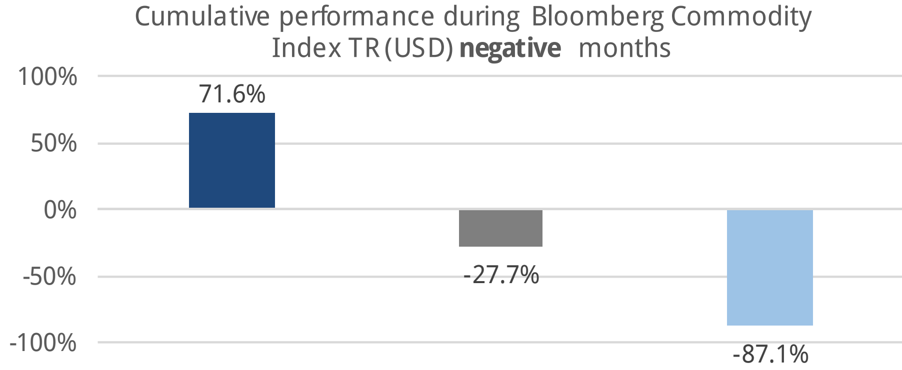
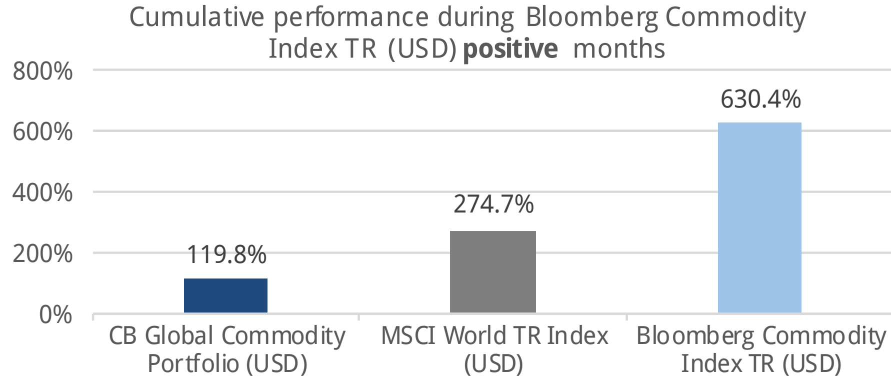
- Effective downside protection compared to long only commodity investments:



- Asymmetric return profile:





- CB Global Commodity Portfolio performed positively during cumulative periods of both negative and positive returns of BCOM TR

Source: Crossbow Partners, Bloomberg. The returns of CB Global Commodity Portfolio are based on a live portfolio since Oct 2021. Before, performance is simulated and based on an hypothetical portfolio of Commodity managers. All returns are net of fees and in USD. The information in this document is for information purposes only and does not constitute an investment advice. Past performance is no indication or guarantee of future results.

Concentrated high-conviction portfolio

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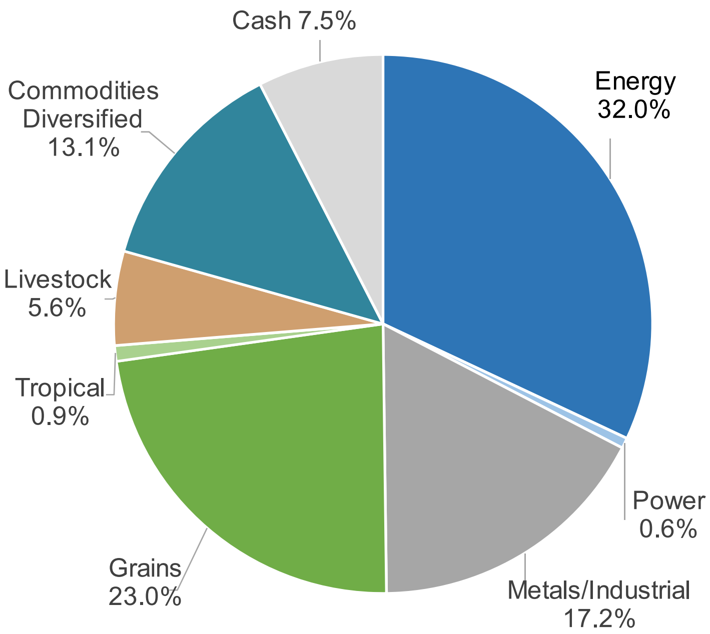
- Portfolio's sector exposures as of December 2024:



- The portfolio is diversified across:
  - Sub-strategies
  - Investments styles
  - Commodity sectors
  - Time horizons

- Robust portfolio construction (data until December 2024):

Underlying funds sector focus:	1	2	3	4	5	6	7	8	9
1 Commodity Diversified	1.00	0.37	0.41	0.32	0.31	0.16	0.16	0.08	0.04
2 Commodity Diversified	0.37	1.00	0.76	0.06	0.32	0.12	0.01	-0.08	-0.10
3 Commodity Diversified	0.41	0.76	1.00	0.14	0.23	0.02	0.13	-0.13	0.02
4 Commodity Diversified	0.32	0.06	0.14	1.00	0.01	-0.03	0.22	0.20	0.34
5 Energy - Petroleum	0.31	0.32	0.23	0.01	1.00	0.21	-0.13	0.19	-0.14
6 Energy - Natural Gas	0.16	0.12	0.02	-0.03	0.21	1.00	-0.01	0.04	-0.18
7 Agriculture & Livestock	0.16	0.01	0.13	0.22	-0.13	-0.01	1.00	0.03	0.03
8 Agriculture & Livestock	0.08	-0.08	-0.13	0.20	0.19	0.04	0.03	1.00	0.07
9 Metals	0.04	-0.10	0.02	0.34	-0.14	-0.18	0.03	0.07	1.00
Average	0.23	0.18	0.20	0.16	0.12	0.04	0.06	0.05	0.01

- 0.12 average portfolio cross-correlation

Source: Crossbow Partners, Bloomberg. The returns of CB Global Commodity Portfolio are based on a live portfolio since Oct 2021. Before, performance is simulated and based on an hypothetical portfolio of Commodity managers. All returns are net of fees and in USD. The information in this document is for information purposes only and does not constitute an investment advice. Past performance is no indication or guarantee of future results.

Summary

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- Product exclusively focused on Commodity Trading strategies and targeting a convex return profile
- Exposure to specialized Commodity managers providing access to uncorrelated alpha sources
- Portfolio diversified across sub-strategies, investment styles, commodity sectors and time horizons
- Ability to take advantage of rising and declining commodity markets through directional and RV trades
- Commodity managers trade liquid exchange traded futures and options. No or limited equity positions
- Commodity markets provide a fertile ground to seasoned managers due to their intrinsic return drivers and volatility. Moreover, commodities are currently at historical lows compared to other risk assets (equities) and have historically provided a hedge against inflation

Contact information

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Crossbow Partners supports PluSport, the umbrella organization for disability sports in Switzerland. PluSport supports people with disabilities by offering programs for all types of recreational and competitive sports, for all target groups and all ages, and for all types of disabilities – always with the goal of promoting integration and inclusion.

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