

# UBS Commodities

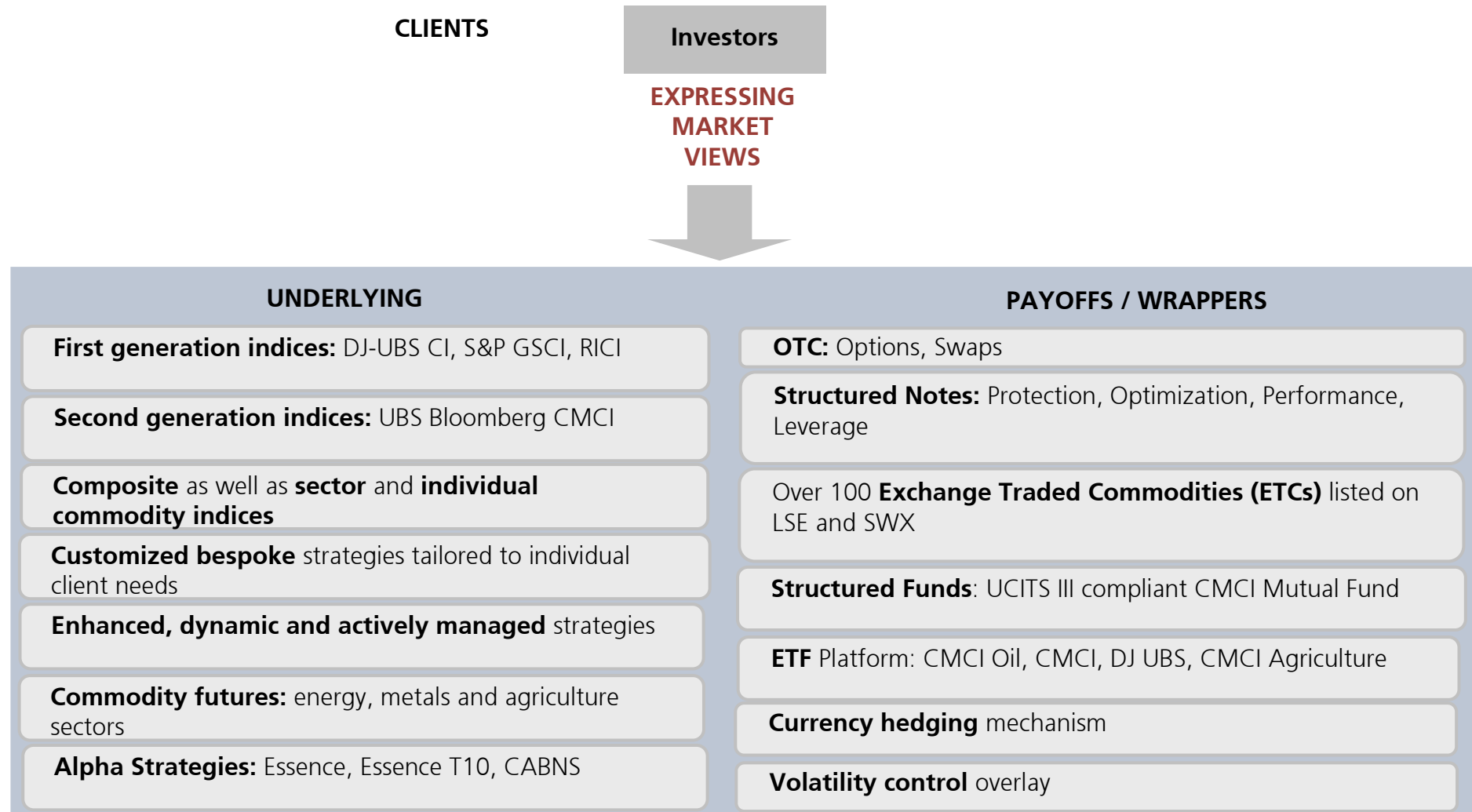
## UBS Bloomberg CMCI

July 2013



# A Leader in Commodities Space

UBS offers services to a broad spectrum of investor profiles, allowing any counterparty the possibility to express their view or to position themselves in the markets for which they have a particular view



## Section 1

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# Roll Yield Concept

# The Concept of Roll Yield

Commodity investors are often limited to the use of commodities futures to gain exposure to the commodity space due to high costs of carry associated with holding a physical commodity.

- One can invest in futures either by taking a long-dated futures position and holding until future contract's maturity or by taking a position on a short-dated maturity and "rolling" the contract until the desired date in order to avoid physical delivery but still maintain exposure to the market
- **Traditional commodity indices** have been a popular investment vehicles that use the second approach to gain commodity exposure
  - **Fundamentals:** traditional commodity indices represent long only positions in a basket of exchange-traded commodity futures, referencing the first 2-3 nearby futures contracts
  - **Index Rolling Mechanism:** in order to avoid physical delivery yet maintain positions in the futures market, index investments require continuous replacement of the expiring front-month contract with a further-out contract (roll process)
  - **Punctual Roll:** Indices are rules-based, so the exact days of rolls are known (typically 5th to 9th business day of the month) for each index and are transparent to the market
- As a result of the above construction method, **commodity index returns typically have two drivers behind them:**

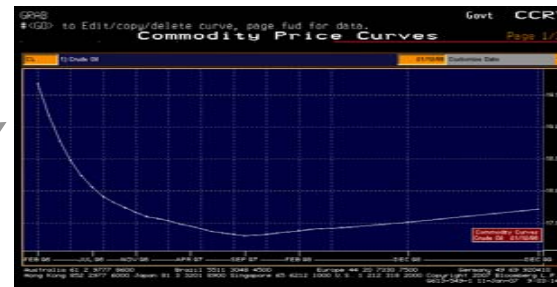
**Price returns:** have commodity futures prices increased or decreased?

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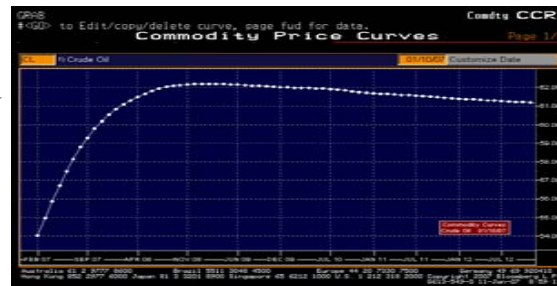
**Roll returns:** Can be either positive or negative (**depending on the shape of the futures curve**) and result from replacing an expiring contract with a further-out contract

Backwardation

Contango



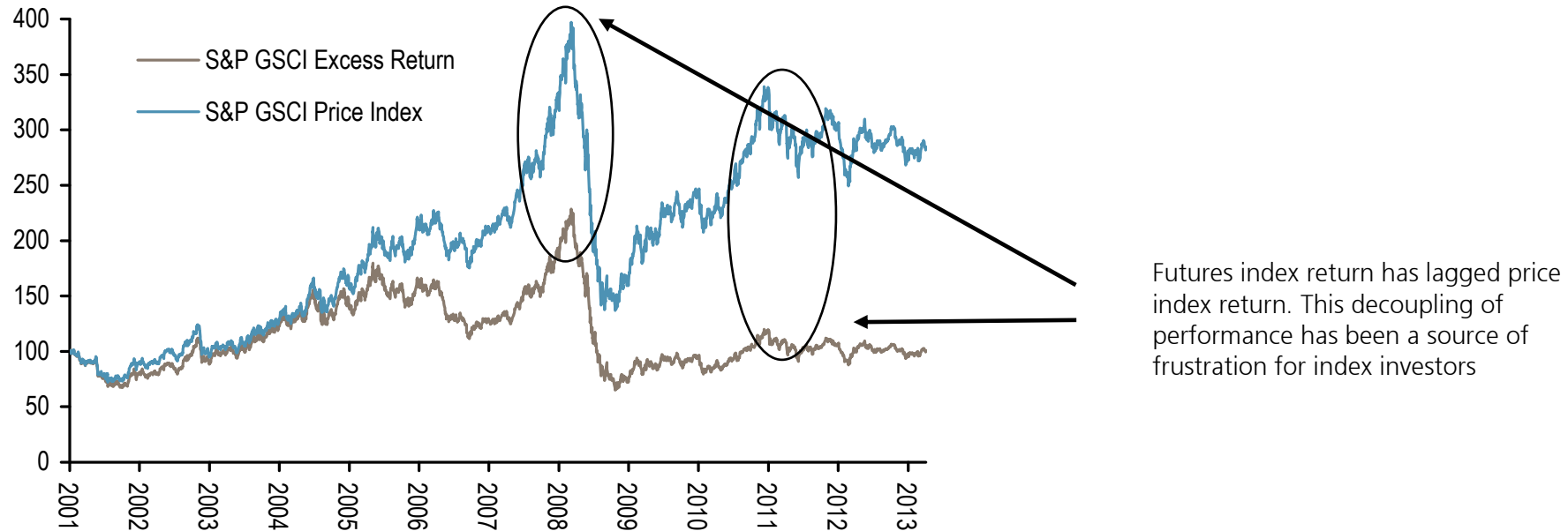
If deferred futures prices are below spot futures prices, the curve is in **backwardation** and roll returns will be positive



If deferred futures prices are higher than spot futures prices, the curve is in **contango** and roll returns will be negative

# Negative Roll Yield and Traditional Commodity Indices

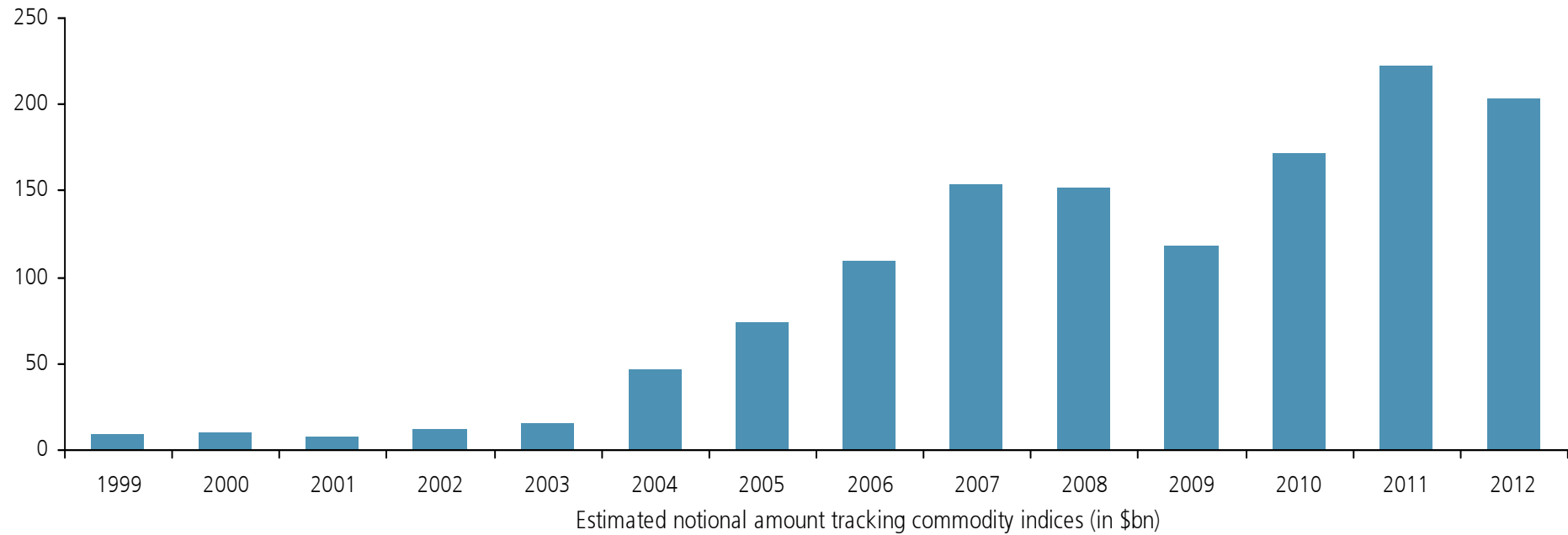
- Traditional commodity indices have been a popular vehicle for investors during the commodity markets expansion phase (2002-2005)
- However, when commodities became a recognized asset class and the market saw the AUM rise from USD15bn to more than USD150bn, the nature of commodity forward curves across the entire commodity spectrum has altered
- This has meant that traditional commodity indices have started experiencing a **significant negative roll yield**, resulting in performance that is worse than the underlying commodities prices



Futures index return has lagged price index return. This decoupling of performance has been a source of frustration for index investors

# Notional amounts tracking commodity Indices

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## Section 2

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# UBS Bloomberg CMCI

# UBS Bloomberg CMCI - Summary

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The UBS Bloomberg CMCI ("CMCI") is a unique index that has been live since January 2007 and demonstrates:

- **Constant and stable outperformance with REAL track record**

As a result of the methodology that minimises the impact of roll yield on returns, **the CMCI has outperformed S&P GSCI by more than 32% since CMCI went live in January 2007** (in a backtest, the outperformance has been more than 235% since 30 November 1997) (Source: Bloomberg, UBS IB, Total Return Indices, 31 July 2013)

- **Close tracking of commodity spot prices**

The innovative calculation methodology of the CMCI, that involves daily rolling to comply with the Constant Maturity concept, not only ensures that the tracking error of the investment vehicle vs. actual performance of commodity markets is minimised, but also avoids the problems of having to roll large notionals over the short punctual roll period.

- **Broad market coverage not only in terms of commodities but also tenors**

CMCI not only covers a broad range of commodities, but also introduces a time dimension to commodity investment. Diversification not only among commodities, but also maturities for each individual commodity ranging from 3 months to 3 years allows for a high level of flexibility in making investment allocation decisions.

- **Highly transparent and operationally stable**

To ensure the stability of the CMCI, it is overseen by a committee (the CMCI Governance Committee, composed of UBS, Bloomberg and external members) established by the two Index Sponsors, which ensures the validation, determinations, changes to the composition and communication regarding the CMCI. The feature of a co-sponsor makes the index transparent and operationally stable.

- **Highly liquid**

As a result of selecting highly liquid futures contracts diversified along the forward curve, as well as the Constant Maturity methodology that involves daily rolling, CMCI avoids the potential problem of punctual roll (when high volumes are traded in announced transactions) and trades smaller volumes on a daily basis, having less impact on the market and hence not adversely affecting the performance that the index investor receives.



# UBS Bloomberg CMCI

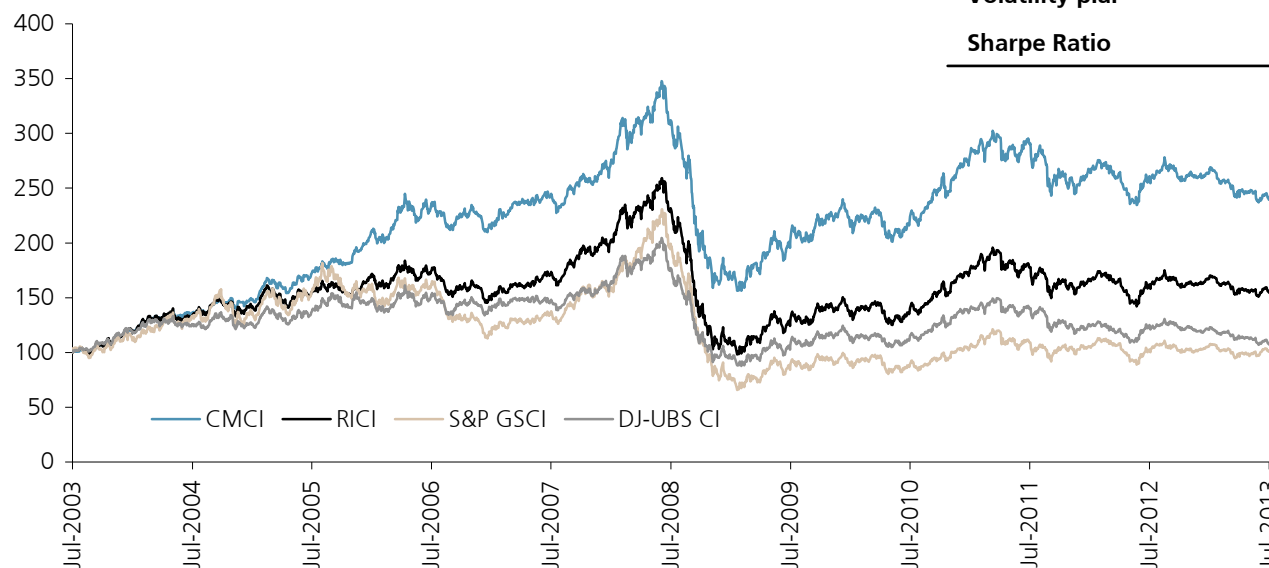
Second generation commodity indices, like the UBS Bloomberg CMCI, can show better performance at lower volatility, compared to traditional commodity indices as a result of

- Balanced and diversified index composition, not only in terms of commodities represented, but also in terms of expiries
- Recognising the changing shape of commodity forward curves and the rolling mechanism aimed at avoiding roll risks
- Recognising potential problems of punctual roll

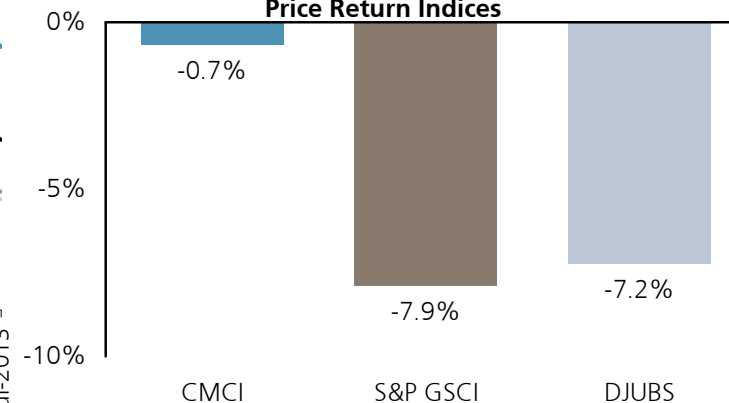
For example, as a result of the methodology that minimizes the impact of roll yield on returns, the UBS Bloomberg CMCI shows close tracking of commodity prices and has outperformed S&P GSCI by more than 32% since **CMCI went live in January 2007**, while exhibiting much lower volatility levels

	CMCI	S&P GSCI	DJ-UBS CI	RICI
Performance p.a.	9.2%	0.2%	0.8%	4.6%
Volatility p.a.	17.5%	24.8%	18.4%	20.4%
Sharpe Ratio	0.53	0.01	0.04	0.22

Based on daily returns from 31-July-03 to 31-July-13



Annualized Roll & Collateral\* Performance vs. Price Return Indices



\*Collateral refers to 91-day US Treasury Rate earned on the investment

Daily closing return data from 31 July 2003 until 31 July 2013; Source Bloomberg. Back-tested CMCI performance data to Jan 2007 and live thereafter  
Important disclaimer: Past performance is not indicative of future performance.

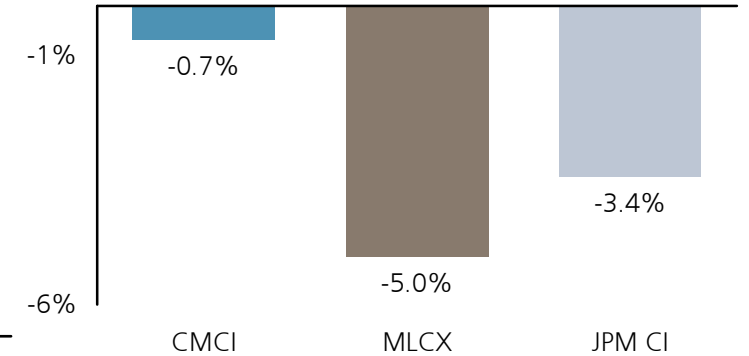
# UBS Bloomberg CMCI

Even compared to second generation commodity indices, that have exposure to longer dated commodity futures, CMCI shows stronger returns at lower volatility levels

## Performance drivers

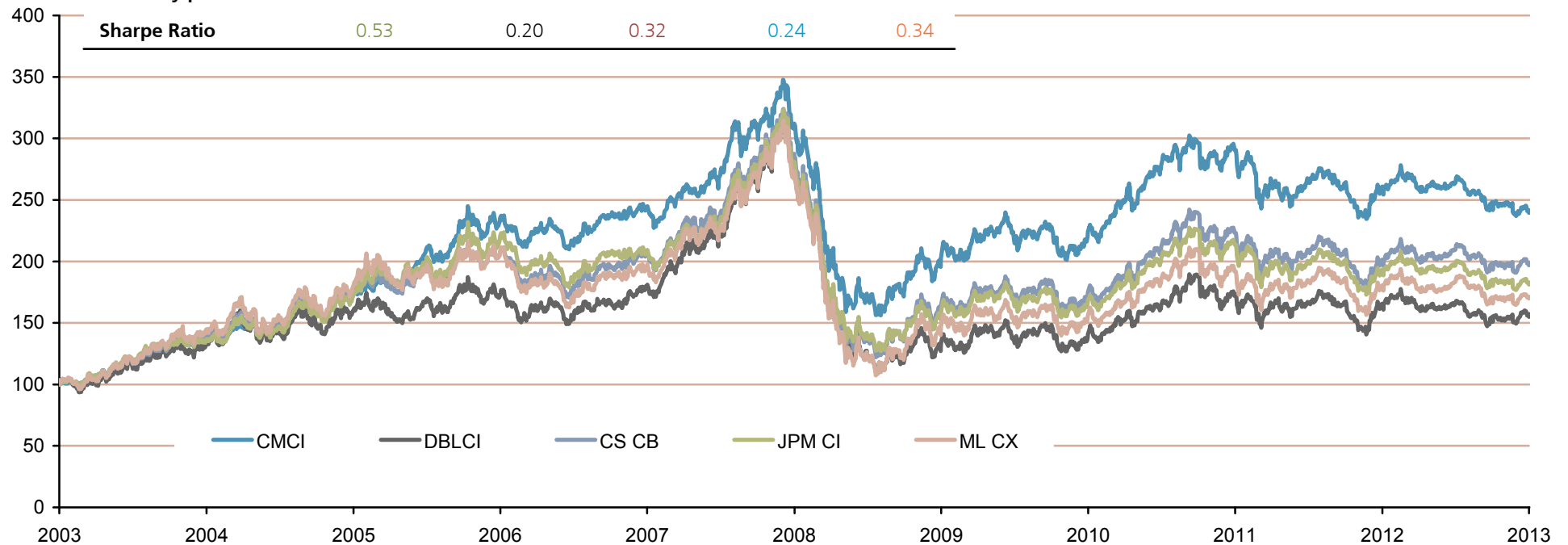
- Minimum exposure to negative effects of roll yield as a result of Constant Maturity approach
- Lower volatility by minimising exposure to the most volatile front-month futures
- Outperformance thanks to the exposure to longer dated commodity futures

Annualized Roll & Collateral\* Performance vs. Price Return Indices



\*Collateral refers to 91-day US Treasury Rate earned on the investment

	CMCI	DBLCI	JPMCI	MLCX	CS CI
<b>Performance p.a.</b>	9.2%	4.6%	6.2%	5.5%	7.1%
<b>Volatility p.a.</b>	17.5%	22.6%	19.4%	22.9%	20.7%
<b>Sharpe Ratio</b>	0.53	0.20	0.32	0.24	0.34



Daily closing return data from 31 July 2003 until 31 July 2013; Source Bloomberg. Back-tested CMCI performance data to Jan 2007 and live thereafter

Important disclaimer: Past performance is not indicative of future performance



## Section 3

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### CMCI Methodology

# CMCI Investment Universe

Each of the below bullets can be treated as a separate investable index. As such, investor has the ability to invest not only into a **composite index**, but also **commodity sectors** (i.e. agriculture) and **individual commodities** (i.e. crude oil)

Sector	Weight	Avg Tenor	Commodity	Overall Weight	Weight in Sector	Average Tenor (M)	Weights of Constant Maturities per Commodity				
							3M	6M	1Y	2Y	3Y
Energy	37.2%	7.72	WTI Crude Oil (Nymex)	8.13%	21.88%	10.16	42.82%	19.67%	18.14%	12.08%	7.29%
			WTI Crude Oil (ICE)	2.88%	7.75%	10.12	41.79%	21.94%	16.99%	11.94%	7.34%
			Brent Crude Oil	8.99%	24.20%	9.39	46.03%	21.05%	16.36%	9.82%	6.74%
			Heating oil	3.92%	10.56%	3.38	57.47%	27.64%	14.89%	-	-
			Gasoil	4.64%	12.49%	5.44	55.34%	26.30%	18.37%	-	-
			RBOB Gasoline	4.67%	12.58%	3.93	69.07%	30.93%	-	-	-
			Natural Gas	3.92%	10.55%	8.58	47.53%	23.50%	15.64%	7.78%	5.55%
Industrial Metals	24.3%	9.65	LME Copper	8.83%	36.39%	11.61	33.85%	21.77%	20.50%	14.75%	9.14%
			High Grade Copper	3.34%	13.77%	3.83	72.42%	27.58%	-	-	0.00%
			LME Zinc	2.16%	8.91%	5.68	51.37%	28.20%	20.43%	-	-
			LME Aluminium	6.42%	26.45%	13.53	34.51%	22.85%	20.85%	13.64%	8.14%
			LME Nickel	2.17%	8.92%	5.69	51.78%	27.46%	20.76%	-	-
			LME Lead	1.35%	5.55%	5.53	54.27%	26.43%	19.30%	-	-
Precious Metals	6.0%	6.46	Gold	4.82%	80.58%	6.38	61.58%	18.64%	11.09%	8.69%	0.00%
			Silver	1.16%	19.42%	6.81	60.33%	16.76%	12.56%	10.35%	0.00%
			Platinum								
Agriculture	28.4%	5.27	SRW Wheat	2.26%	7.95%	5.54	50.99%	31.25%	17.76%	-	-
			KCBOT HRW Wheat	1.06%	3.73%	4.16	61.41%	38.59%	-	-	-
			Corn	5.93%	20.85%	5.71	47.48%	33.67%	18.85%	-	-
			Soybeans	6.20%	21.81%	5.57	50.51%	31.47%	18.03%	-	-
			Soybean Meal	1.50%	5.27%	4.11	63.03%	36.97%	-	-	-
			Soybean Oil	1.64%	5.77%	4.10	63.17%	36.83%	-	-	-
			Sugar #11	4.55%	15.99%	6.16	41.55%	34.98%	23.47%	-	-
			Sugar #5	2.17%	7.64%	4.21	59.56%	40.44%	-	-	-
			Cocoa	0.59%	2.07%	4.31	56.44%	43.56%	-	-	-
			Coffee "C" Arabica	1.17%	4.11%	5.16	56.31%	29.46%	14.23%	-	-
			Cotton	1.37%	4.80%	4.32	55.98%	44.02%	-	-	-
Livestock	4.2%	4.15	Live Cattle	2.37%	56.97%	4.14	62.05%	37.95%	-	-	-
			Lean Hogs	1.79%	43.03%	4.15	61.51%	38.49%	-	-	-

Source: UBS AG; Target Weights H2 2013

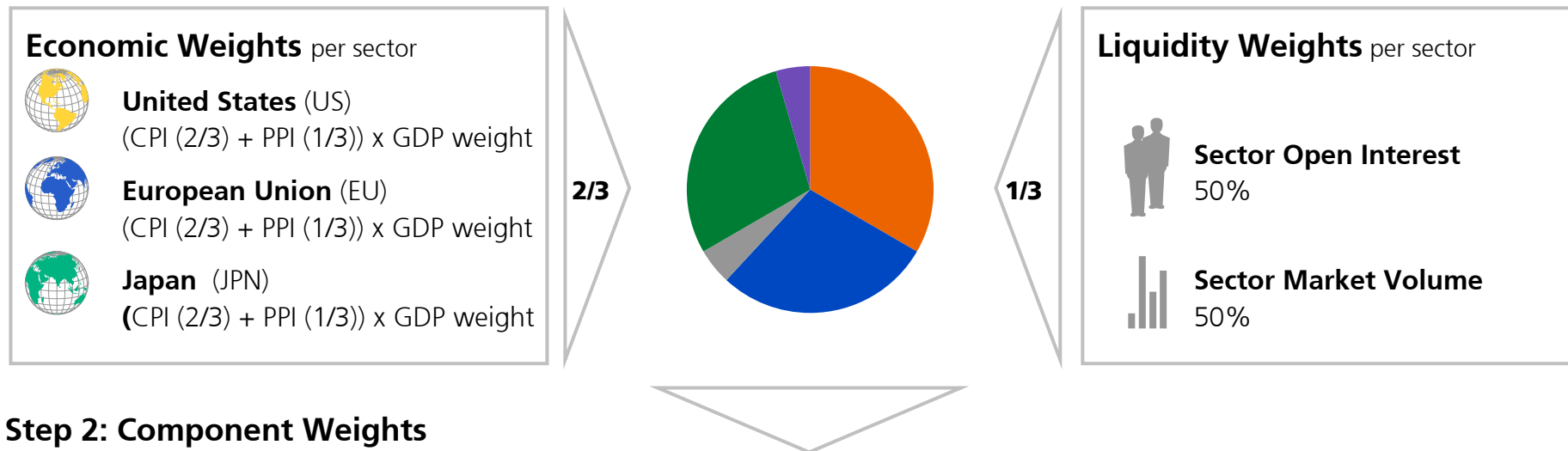
Average Tenor in the chart is reflected in months and refers to the average maturity of the CMCI Benchmark Index that includes all the available maturities from 3 months to 3 years



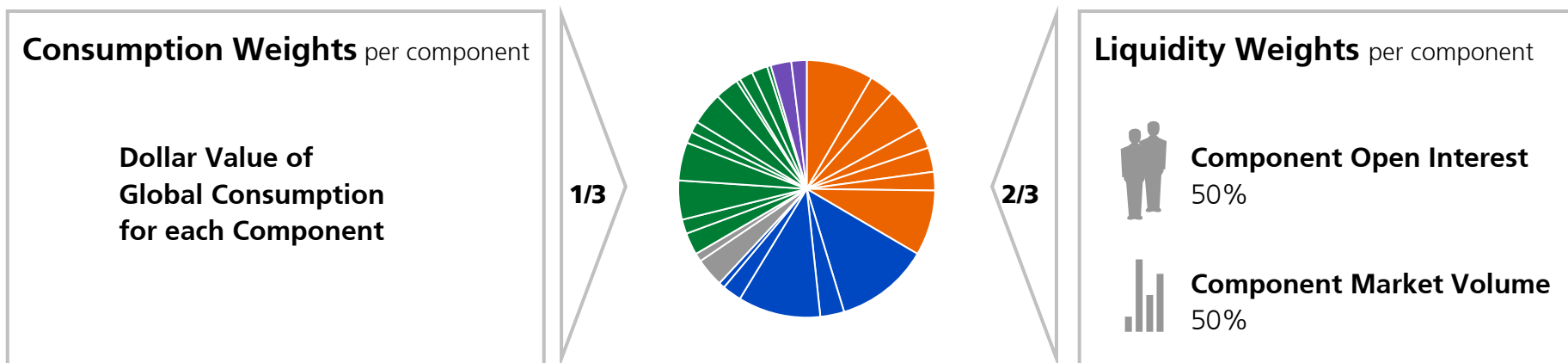
# CMCI Weighting Engine

CMCI engine designed to reflect the economic significance and market liquidity for each commodity

## Step 1: Sector Weights



## Step 2: Component Weights



- Individual component weight cap (20%) and floor (0.60%) ensure diversification
- Weightings are revisited twice a year in October and April and the index re-balances on a monthly basis

# CMCI Methodology

UBS Bloomberg CMCI has been developed in order to deal with this problem of negative roll yield:

- **Exposure to the whole commodity curve**, which not only provides diversification, but also access to a less volatile part of the forward curve
- **Index Rolling Mechanism** that is based on the Constant Maturity approach, which involves daily rolling of a small proportion of underlying futures, **avoids the problem of punctual roll and minimises the impact of roll yield on Index performance**

## Traditional Indices

- **Front month futures only**  
*Problem:* congestion, risk to be positioned on the most volatile part of the curve, which historically exhibits more contango and less backwardation
- **Punctual roll**  
*Problem:* high volumes, "announced" transactions

## UBS Bloomberg CMCI

- **Diversified along entire curve**  
*Advantage:* diversified exposure, no congestion
  - **Continuous roll**  
*Advantage:* lower volumes, less influence, no "announced" transactions
  - **5 constant maturities:** 3 months, 6 months, 1 year, 2 years and 3 years
- AND: Longer dated futures are generally less volatile!**

	Avg Monthly Roll Yield in %			
	S&P GSCI	CMCI 3 Month	CMCI 6 Month	CMCI 1 Year
<b>Energy</b>				
Crude Oil	-0.5%	0.1%	0.3%	0.3%
Heating Oil	-0.3%	0.0%	0.2%	0.2%
Natural Gas	-3.0%	-1.7%	-0.8%	-0.1%
Gas Oil	-0.1%	0.1%	0.1%	0.2%
Brent Oil	0.0%	0.1%	0.3%	
<b>Agriculture</b>				
Corn	-1.1%	-1.2%	-0.9%	-0.5%
Wheat	-1.4%	-1.0%	-0.6%	-0.4%
Soybean	0.1%	0.2%	0.2%	
Cotton	-1.1%	-0.7%	-0.5%	-0.4%
Sugar	-0.3%	0.0%	0.2%	0.1%
Coffee	-1.3%	-1.2%	-1.0%	-0.7%
Cocoa	-0.4%	-0.4%	-0.3%	-0.3%
<b>Metals</b>				
Aluminum	-0.4%	-0.2%	-0.1%	0.0%
Copper	0.1%	0.1%	0.2%	0.2%
Lead	-0.1%	0.1%	0.1%	0.1%
Nickel	0.2%	0.3%	0.5%	0.5%
Zinc	-0.4%	-0.3%	-0.1%	0.1%
<b>Precious Metals</b>				
Gold	-0.2%	-0.2%	-0.2%	-0.2%
Silver	-0.2%	-0.2%	-0.2%	-0.1%
<b>Livestock</b>				
Live Cattle	-0.6%	-0.4%	-0.2%	
Lean Hogs	-1.4%	-0.7%	0.1%	

Monthly Tracking error

# The Constant Maturity Approach

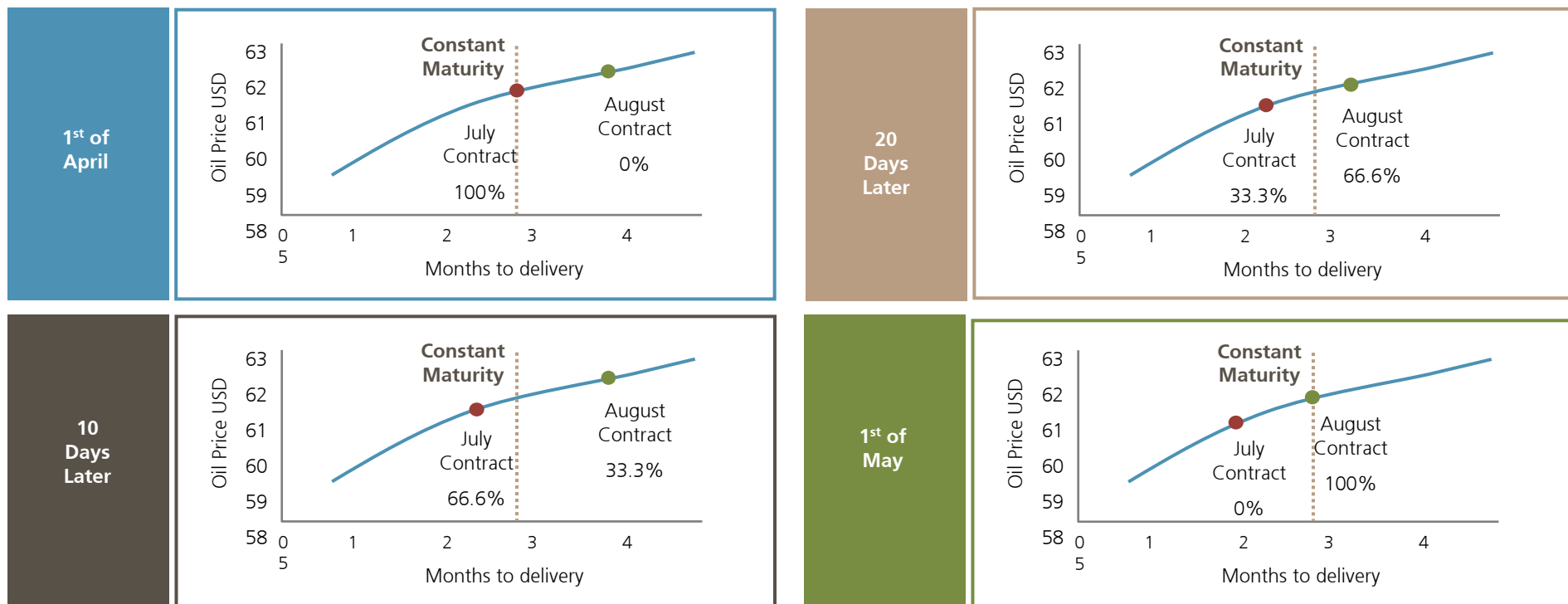
The “constant maturity” concept is achieved by a continuous rolling process, where a weighted percentage of contracts are swapped for longer dated contracts on a daily basis. This not only gives more continuous exposure to the asset class, but also can minimise exposure to the negative effects of roll yield, making the index more representative of the underlying market price movements

## Objective

- Hold a constant maturity (time to physical delivery) through time such that the index rolls smoothly through markets

## Mechanics

- Hold two contracts surrounding the time of delivery in changing proportions such that average equals the desired constant maturity
- As time (a day) passes, the weights for the surrounding contracts shift in order to keep the average time constant



## Section 4

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### CMCI Energy Index

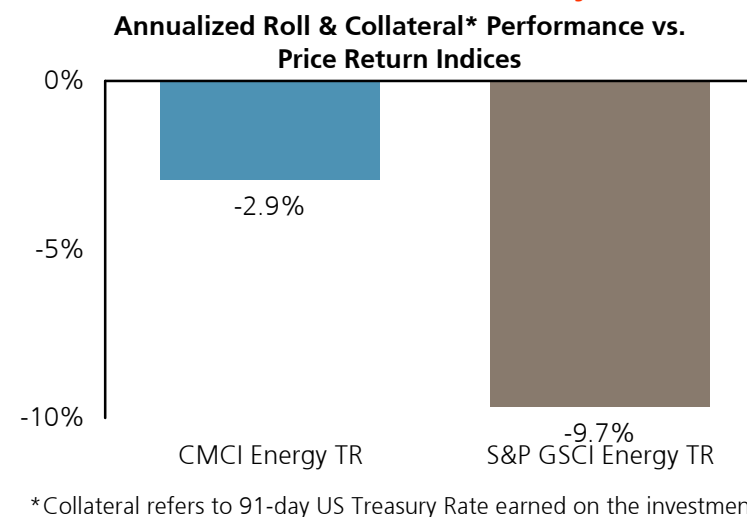
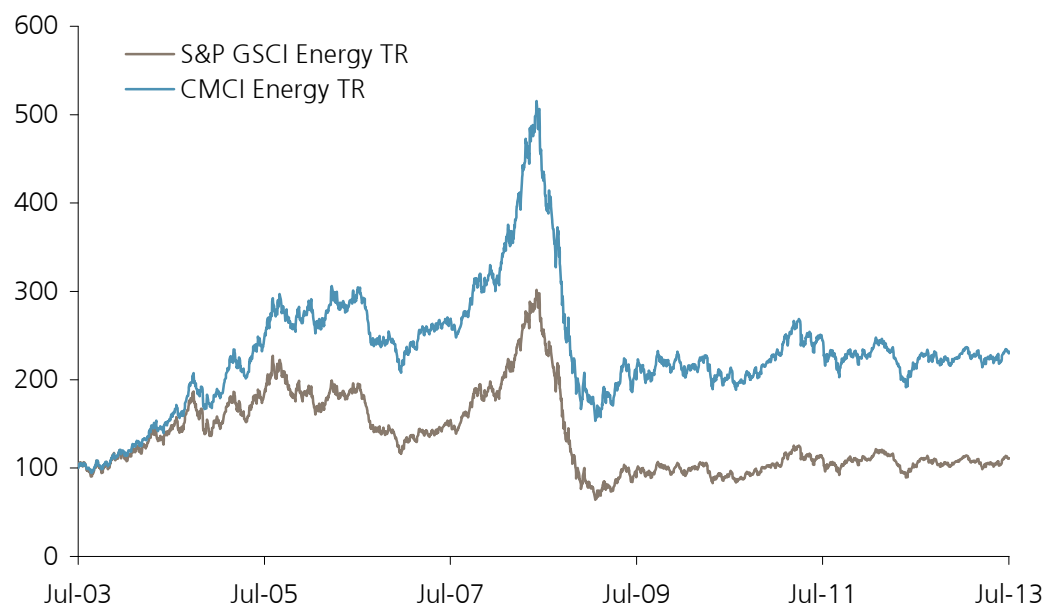


# CMCI Energy

**UBS Bloomberg CMCI Energy shows lower tracking error of realized returns when compared with movements in the underlying commodity spot prices market as a result of**

- Balanced and diversified index composition, not only in terms of commodities represented, but also in terms of expiries
- Recognising the changing shape of commodity forward curves and the rolling mechanism aimed at avoiding roll risks
- Recognising potential problems of punctual roll

**As a result of the methodology that minimizes the impact of roll yield on returns, the CMCI Energy shows close tracking of commodity prices and has **outperformed S&P GSCI Energy by more than 19% since CMCI went live in January 2007, while exhibiting much lower volatility levels.****



	CMCI Energy TR	S&P GSCI Energy TR
<b>Performance p.a.</b>	8.8%	1.1%
<b>Volatility p.a.</b>	25.2%	31.2%
<b>Sharpe Ratio</b>	0.35	0.03

Daily closing return data from 31 July 2003 until 31 July 2013; Source Bloomberg. Back-tested CMCI performance data to Jan 2007 and live thereafter  
Important disclaimer: Past performance is not indicative of future performance

# CMCI Energy - Index Composition

Sector	Weight	Avg Tenor	Commodity	Overall Weight	Weight in Sector	Average Tenor (M)	Weights of Constant Maturities per Commodity				
							3M	6M	1Y	2Y	3Y
Energy	37.2%	7.72	WTI Crude Oil (Nymex)	8.13%	21.88%	10.16	42.82%	19.67%	18.14%	12.08%	7.29%
			WTI Crude Oil (ICE)	2.88%	7.75%	10.12	41.79%	21.94%	16.99%	11.94%	7.34%
			Brent Crude Oil	8.99%	24.20%	9.39	46.03%	21.05%	16.36%	9.82%	6.74%
			Heating oil	3.92%	10.56%	3.38	57.47%	27.64%	14.89%	-	-
			Gasoil	4.64%	12.49%	5.44	55.34%	26.30%	18.37%	-	-
			RBOB Gasoline	4.67%	12.58%	3.93	69.07%	30.93%	-	-	-
			Natural Gas	3.92%	10.55%	8.58	47.53%	23.50%	15.64%	7.78%	5.55%

Diversification among commodities

Diversification along the forward curve

Source: UBS AG; Correct as of 31 July 2013  
Average Tenor refers to the average maturity of the CMCI Benchmark Index that includes all the available maturities from 3 months to 3 years

# CMCI Energy – Top Performing Index

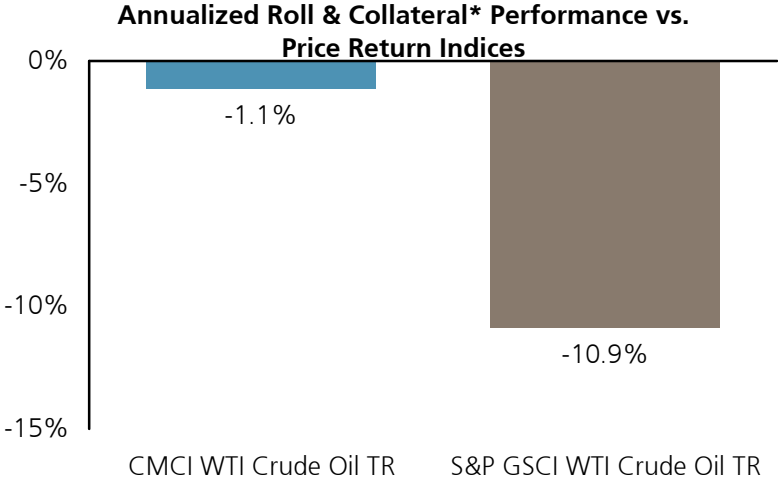
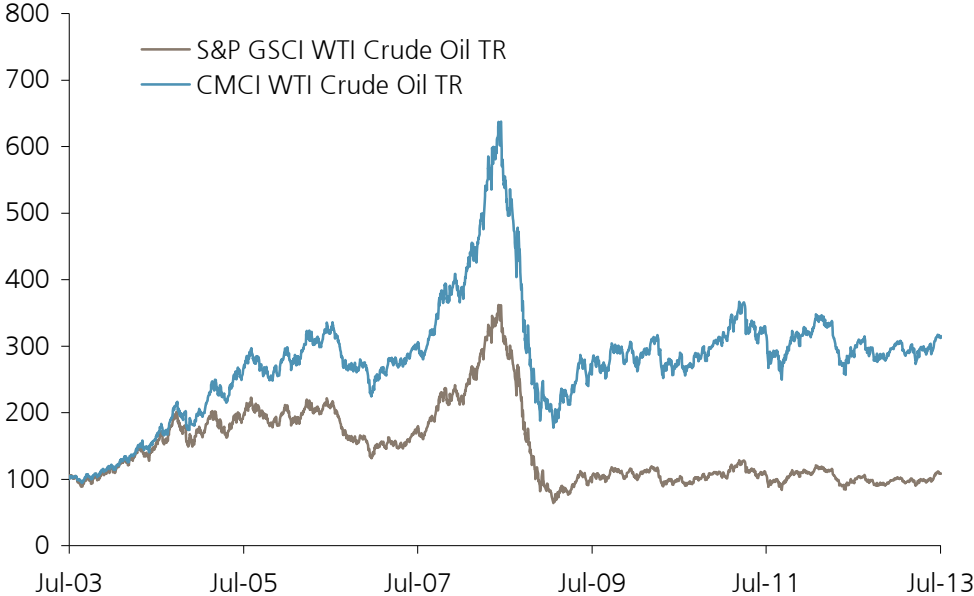
CMCI Energy index shows strong returns compared to other indices giving exposure to energy sector, delivering strongest performances among all the commodity beta offerings over the past five years.

1) Settings		2) Feedback		Commodity Ranked Returns			
Commodity/Index		Index Comparison	Energy	Beta	Excess R	FX Default	
		Custom date range		07/31/08	- 07/31/13		
3) Overview		4) 2D Ranking		Range		Show: <input type="radio"/> Best/Worst <input checked="" type="radio"/> All	
Filter by keyword		Max. Draw	Volatility	Ann Rtn(%)	Returns(%)		
11)	UBS Bloomberg CMCI Index	-64.70	27.93	-9.27	-46.37		
12)	CSCB Prompt Index	-70.43	32.24	-9.46	-47.31		
13)	Merrill Lynch Comdty eXtra Index	-70.25	32.35	-9.64	-48.25		
14)	JPMorgan Commodity Curve Index	-67.07	28.63	-10.05	-50.25		
15)	Rogers Int'l Comdty Index	-73.46	34.92	-10.27	-51.37		
16)	Diapason Comdty Index	-69.41	28.60	-10.64	-53.24		
17)	S&P GSCI Comdty Index	-74.71	33.90	-11.21	-56.08		
18)	Barclays Capital Comdty Index	-73.68	38.35	-12.44	-62.25		
19)	Dow Jones-UBS Comdty Index	-76.82	30.50	-14.46	-72.36		

Source: UBS IB, Bloomberg, 31 July 2013  
 Important disclaimer: Past performance is not indicative of future performance

# CMCI Crude Oil

The innovative CMCI methodology, when applied to WTI crude oil investment, delivers close tracking of underlying commodity prices and has, as a result, **outperformed S&P GSCI Crude Oil by more than 50% since CMCI went live in January 2007**, while exhibiting much lower volatility levels



\*Collateral refers to 91-day US Treasury Rate earned on the investment

	CMCI WTI Crude Oil TR	S&P GSCI WTI Crude Oil TR
<b>Performance p.a.</b>	12.1%	0.8%
<b>Volatility p.a.</b>	29.3%	34.8%
<b>Sharpe Ratio</b>	0.41	0.02

Daily closing return data from 31 July 2003 until 31 July 2013; Source Bloomberg. Back-tested CMCI performance data to Jan 2007 and live thereafter  
 Important disclaimer: Past performance is not indicative of future performance



## Section 5

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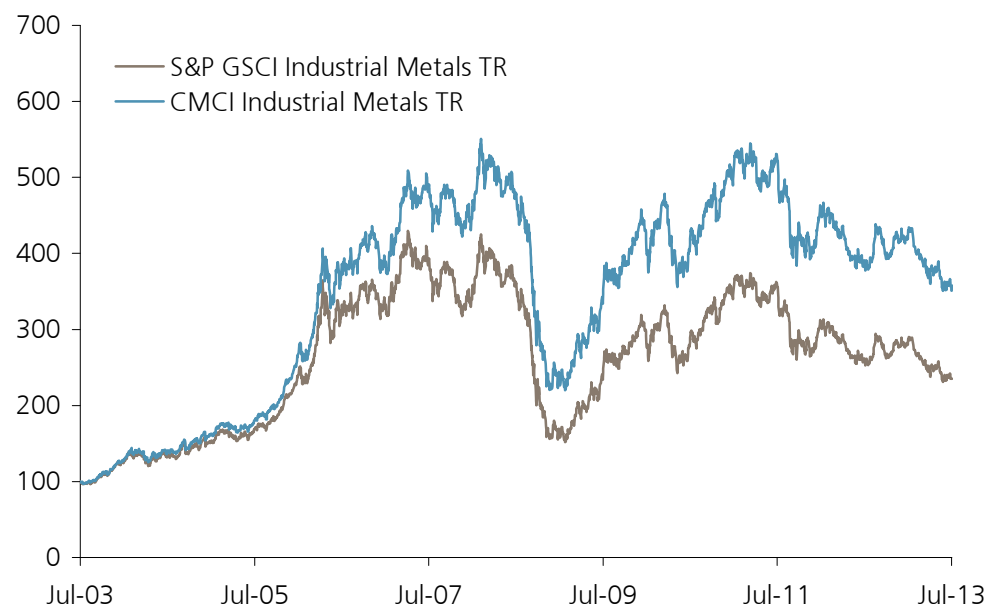
### CMCI Industrial Metals Index

# CMCI Industrial Metals

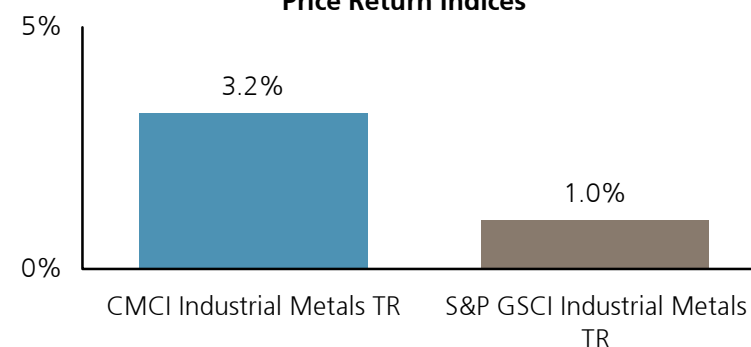
**UBS Bloomberg CMCI Industrial Metals shows lower tracking error of realized returns when compared with movements in the underlying commodity spot prices market as a result of**

- Balanced and diversified index composition, not only in terms of commodities represented, but also in terms of expiries
- Recognising the changing shape of commodity forward curves and the rolling mechanism aimed at avoiding roll risks
- Recognising potential problems of punctual roll

**As a result of the methodology that minimizes the impact of roll yield on returns, the CMCI Industrial Metals shows close tracking of commodity prices and has **outperformed S&P GSCI Industrial Metals by more than 20% since CMCI went live in January 2007**, while exhibiting much lower volatility levels.**



**Annualized Roll & Collateral Performance vs. Price Return Indices**



\*Collateral refers to 91-day US Treasury Rate earned on the investment

	CMCI Industrial Metals TR	S&P GSCI Industrial Metals TR
<b>Performance p.a.</b>	13.6%	9.0%
<b>Volatility p.a.</b>	25.2%	26.7%
<b>Sharpe Ratio</b>	0.54	0.33

Daily closing return data from 31 July 2003 until 31 July 2013; Source Bloomberg. Back-tested CMCI performance data to Jan 2007 and live thereafter  
Important disclaimer: Past performance is not indicative of future performance

# CMCI Industrial Metals (IM) - Index Composition

Sector	Weight	Avg Tenor	Commodity	Overall Weight	Weight in Sector	Average Tenor (M)	Weights of Constant Maturities per Commodity				
							3M	6M	1Y	2Y	3Y
Industrial Metals	24.3%	9.65	LME Copper	8.83%	36.39%	11.61	33.85%	21.77%	20.50%	14.75%	9.14%
			High Grade Copper	3.34%	13.77%	3.83	72.42%	27.58%	-	-	0.00%
			LME Zinc	2.16%	8.91%	5.68	51.37%	28.20%	20.43%	-	-
			LME Aluminium	6.42%	26.45%	13.53	34.51%	22.85%	20.85%	13.64%	8.14%
			LME Nickel	2.17%	8.92%	5.69	51.78%	27.46%	20.76%	-	-
			LME Lead	1.35%	5.55%	5.53	54.27%	26.43%	19.30%	-	-



**Diversification among commodities**



**Diversification along the forward curve**

Source: UBS AG; Correct as of 31 July 2013  
 Average Tenor refers to the average maturity of the CMCI Benchmark Index that includes all the available maturities from 3 months to 3 years

# CMCI IM – Strong Performing Index

CMCI Industrial Metals index shows strong returns compared to other industrial metals indices, delivering one of the strongest performances among all the commodity beta offerings over the past 5 years.

1) Settings		2) Feedback		Commodity Ranked Returns			
Commodity/Index	Index Comparison	Indus Met	Beta	Excess R	FX Default	Custom date range 07/31/08 - 07/31/13	
3) Overview		4) 2D Ranking		Show: <input type="radio"/> Best/Worst <input checked="" type="radio"/> All			
Range	Custom	Filter by keyword	Max. Draw	Volatility	Ann Rtn(%)	Returns(%)	
11)	Barclays Capital Comdty Index		-58.20	33.44	-3.69		-18.44
12)	UBS Bloomberg CMCI Index		-54.20	28.70	-5.18		-25.89
13)	Rogers Int'l Comdty Index		-55.03	29.70	-5.61		-28.06
14)	CSCB Prompt Index		-54.06	29.96	-5.79		-28.94
15)	Merrill Lynch Comdty eXtra Index		-56.84	29.64	-6.04		-30.21
16)	JPMorgan Commodity Curve Index		-55.98	28.03	-6.31		-31.56
17)	S&P GSCI Comdty Index		-58.24	29.54	-7.05		-35.27
18)	Dow Jones-UBS Comdty Index		-57.12	29.16	-7.37		-36.87

Source: UBS IB, Bloomberg, 31 July 2013

Important disclaimer: Past performance is not indicative of future performance



## Section 6

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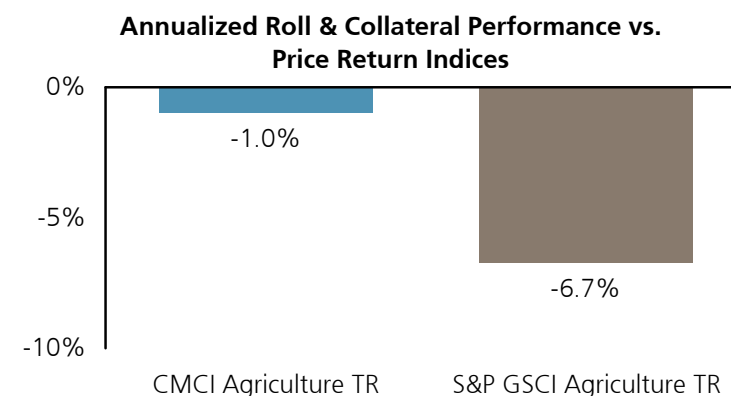
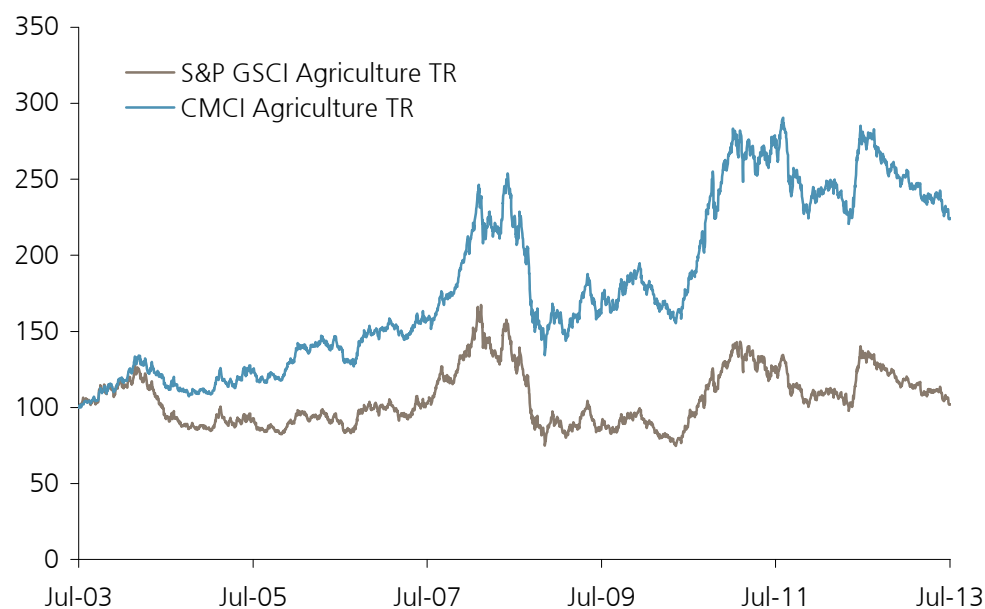
# CMCI Agriculture Index

# CMCI Agriculture

**UBS Bloomberg CMCI Agriculture shows lower tracking error of realized returns when compared with movements in the underlying commodity spot prices market as a result of**

- Balanced and diversified index composition, not only in terms of commodities represented, but also in terms of expiries
- Recognising the changing shape of commodity forward curves and the rolling mechanism aimed at avoiding roll risks
- Recognising potential problems of punctual roll

**As a result of the methodology that minimizes the impact of roll yield on returns, the CMCI Agriculture shows close tracking of commodity prices and has **outperformed S&P GSCI Agriculture by more than 50% since CMCI went live in January 2007**, while exhibiting much lower volatility levels.**



\*Collateral refers to 91-day US Treasury Rate earned on the investment

	CMCI Agriculture TR	S&P GSCI Agriculture TR
<b>Performance p.a.</b>	8.4%	0.3%
<b>Volatility p.a.</b>	19.0%	22.8%
<b>Sharpe Ratio</b>	0.44	0.01

Daily closing return data from 31 July 2003 until 31 July 2013; Source Bloomberg. Back-tested CMCI performance data to Jan 2007 and live thereafter  
Important disclaimer: Past performance is not indicative of future performance

# CMCI Agriculture - Index Composition

Sector	Weight	Avg Tenor	Commodity	Overall Weight	Weight in Sector	Average Tenor (M)	Weights of Constant Maturities per Commodity				
							3M	6M	1Y	2Y	3Y
Agriculture	28.4%	5.27	SRW Wheat	2.26%	7.95%	5.54	50.99%	31.25%	17.76%	-	-
			KCBOT HRW Wheat	1.06%	3.73%	4.16	61.41%	38.59%	-	-	-
			Corn	5.93%	20.85%	5.71	47.48%	33.67%	18.85%	-	-
			Soybeans	6.20%	21.81%	5.57	50.51%	31.47%	18.03%	-	-
			Soybean Meal	1.50%	5.27%	4.11	63.03%	36.97%	-	-	-
			Soybean Oil	1.64%	5.77%	4.10	63.17%	36.83%	-	-	-
			Sugar #11	4.55%	15.99%	6.16	41.55%	34.98%	23.47%	-	-
			Sugar #5	2.17%	7.64%	4.21	59.56%	40.44%	-	-	-
			Cocoa	0.59%	2.07%	4.31	56.44%	43.56%	-	-	-
			Coffee "C" Arabica	1.17%	4.11%	5.16	56.31%	29.46%	14.23%	-	-
			Cotton	1.37%	4.80%	4.32	55.98%	44.02%	-	-	-

Diversification among commodities

Diversification along the forward curve

Source: UBS AG; Correct as of 31 July 2013  
Average Tenor refers to the average maturity of the CMCI Benchmark Index that includes all the available maturities from 3 months to 3 years

# CMCI Agriculture – Best Performing Index

CMCI Agriculture index shows strong returns compared to other agriculture indices, delivering the strongest performances among all the commodity beta offerings over the past five years.

Range	Custom	Max. Draw	Volatility	Ann Rtn(%)	Returns(%)
11)	UBS Bloomberg CMCI Index	-41.52	22.36	-0.30	-1.51
12)	CSCB Prompt Index	-43.38	22.83	-2.19	-10.97
13)	Barclays Capital Comdty Index	-43.45	26.67	-2.22	-11.12
14)	JPMorgan Commodity Curve Index	-43.77	22.96	-2.25	-11.28
15)	Dow Jones-UBS Comdty Index	-44.44	24.09	-3.08	-15.39
16)	Diapason Comdty Index	-40.35	18.95	-3.61	-18.06
17)	Rogers Int'l Comdty Index	-43.60	20.53	-4.61	-23.06
18)	S&P GSCI Comdty Index	-46.68	26.12	-4.75	-23.75
19)	Merrill Lynch Comdty eXtra Index	-43.26	23.20	-4.78	-23.93

Source: UBS IB, Bloomberg, 31 July 2013  
 Important disclaimer: Past performance is not indicative of future performance

Appendix

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## Other Information

# CMCI Website: [www.ubs.com/cmci](http://www.ubs.com/cmci)

UBS Bloomberg CMCI

UBS Bloomberg CMCI Home

UBS Bloomberg CMCI

- Evolution of Commodity Investment
- CMCI Methodology
- CMCI Universe
- Investment Products

ETCs on CMCI

- Switzerland
- UK

ETFs on CMCI

- NEW** Switzerland

Private Investors

UBS Homepage > UBS Bloomberg CMCI

## UBS Bloomberg CMCI Constant Maturity Commodity Index

Together with Bloomberg, UBS has created a highly innovative concept for commodity investors: the UBS Bloomberg CMCI (Constant Maturity Commodity Index). This global index not only covers a broad range of commodities, but also introduces a time dimension to commodity investment. With a series of investment maturities for each individual commodity and a revolutionary new calculation methodology, the CMCI opens up a new era for commodity investors.

**Contact**

- Your contact

**Product info**

- Investment Manual
- Special Announcement
- Presentation of index
- Factsheet
- Technical documentation
- Chartbook
- Trading Hours Guide
- Superior Benchmark

**Quick Link**

- UBS Keyinvest
- UBS-ETTs
- UBS-ETFs

**Performance info**

- CMCI Indices performance data

### Educational materials on:

- History of Commodity Indices
- CMCI Methodology
- Marketing Materials
- Products

### Wide range of CMCI documents available for download:

- CMCI Manual
- Presentation
- Factsheets
- Index comparison
- Performance Date
- etc.

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