



# **NASDAQ Commodity Index Methodology**

January 2016

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## 1. Introduction

This document provides the methodology and construction for the **NASDAQ Commodity Index Family (the “Indexes”)**. It is aimed at users, investors and others interested in the construction and computation of such Indexes.

The NASDAQ Commodity Index Family is designed to measure the performance of a single commodity or a group of commodities through the use of futures contracts. The Indexes have been constructed with the objective to reflect the development of the global commodity markets in a methodical and neutral way and aim to include the largest and most liquid commodity futures.

The NASDAQ Commodity Index Family is focused on liquidity and uses quantitative criteria for selection of the Index population. The Index Family are calculated using a fully transparent, rules-based methodology and includes Benchmark, Tradable, Sector and Single Commodity Indexes.

### 1.1 Index Types

The Indexes are calculated in two different types:

- Excess Return (ER) – the Index is based on the futures price performance and the roll return
- Total Return (TR) – the Index is based on the Excess Return and the addition of T-bill returns to reflect a fully collateralized investment

The **Roll Return** refers to the return received when the Index rolls from the current contract to a contract with a longer maturity. The roll return can be positive (futures curve in backwardation) or negative (futures curve in contango).

### 1.2 Index History

The Indexes have history back to January 1999<sup>1</sup>.

### 1.3 Index Currency

The Indexes are calculated in US Dollars.

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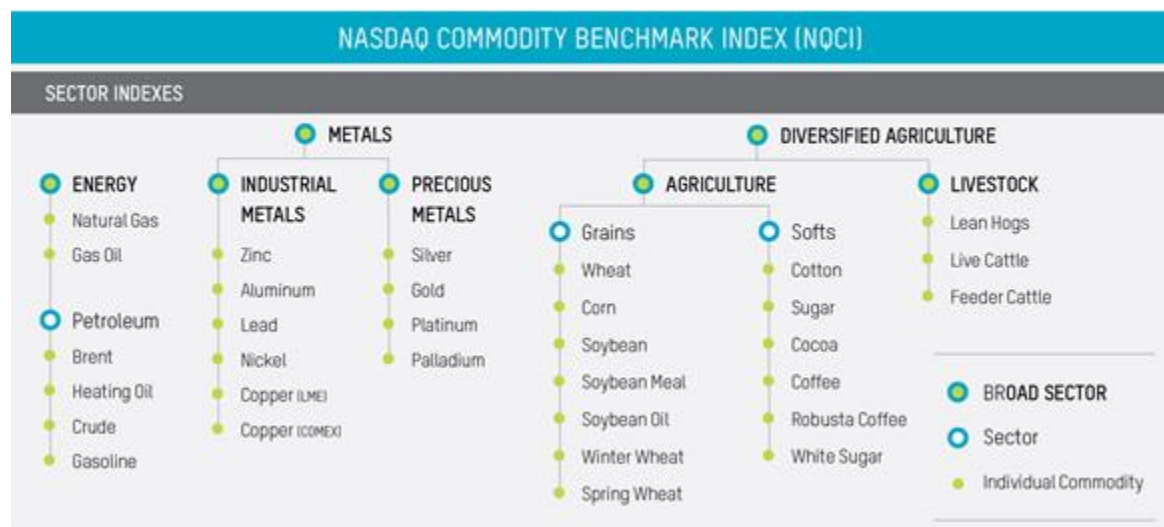
<sup>1</sup>A few commodities have a later inception date and therefore do not have history all the way back to this date

## 1.4 Index Family

- **The NASDAQ Commodity Benchmark Index (NQCI)** includes 32 commodities and provides a broad and representative exposure to the commodity market.
- **The NASDAQ Commodity Tradable Index (NQCI-T)** includes 18 commodities and contains the largest and most liquid commodities derived from the Benchmark Index.
- **The NASDAQ Commodity Sector Indexes** includes five main sectors and five additional sub and diversified sectors. The sectors are derived from the Benchmark Index.
- **The NASDAQ Commodity Single Indexes** are derived from the commodities included in the Benchmark Index. Single Commodity Indexes are available for all commodities included in the Benchmark Index.
- **The five different roll versions.** All Indexes in the family (the Benchmark, Tradable, Sector and Single Indexes) are calculated in five different versions using five different roll schedules. The five versions offer the choice of different exposure and strategies along the commodity futures curve. For more information on each roll version, see section 6.

## 1.5 NQCI Index Sectors

# COMMODITY SECTOR MAP



## 2. Definitions

### 2.1 Commodity Trading Day

A **Commodity Trading Day** means, in respect of a commodity, a day on which the relevant underlying futures market is scheduled to be open for trading. Trading calendar information with trading days and holidays for each Index Commodity is published on each included exchange's website.

### 2.2 Index Trading Day

An **Index Trading Day** means, in respect of an index, a day on which the sum of the Target Weights (as defined under Section 3) across the Index Commodities for which that day is a Commodity Trading Day is greater than 80%.

### 2.3 Index Commodity

In respect of an Index and a commodity, a commodity which is included in such Index will be called an **Index Commodity**.

### 2.4 Index Contract

Each Index Commodity, at any point in time, is represented by one or by two **Index Contracts**, which are the futures contracts that currently represent the Index Commodity in the Index. The Index Commodity is represented by one Index Contract on all Index Trading Days, except during Roll Periods (see Section 5). During a Roll Period, an Index Commodity is represented by two Index Contracts, the Index Contract rolling out of the Index and the Index Contract rolling into the Index.

### 2.5 Holiday

A **Holiday** means, in respect of a commodity, a day on which the relevant underlying futures market for the commodity is scheduled to be closed for trading. Trading calendar information with trading days and holidays for each Index Commodity is published on each included exchange's website.

### 2.6 Market Disruption

A **Market Disruption Day** means, in respect of an Index Commodity, a Commodity Trading Day, on which *at least one* of the following holds for the contracts associated with that commodity: (1) the trading of the Index Contract or the next contract scheduled to roll into the index (if it is a Roll Period), is replaced, terminated or in another way significantly disrupted, or (2) the settlement price for any of those Index Contracts is a limit price, or (3) the settlement price for any of those Index Contracts is not obtainable at Index Close due to failure by the applicable exchange or other

price source to announce or publish the settlement price. The occurrence of a Market Disruption is determined by NASDAQ OMX in its sole discretion.

## 2.7 Contract Price

The price of an Index Contract, the **Contract Price**, used in the Index Calculations is the settlement price, published by each commodity's relevant exchange, multiplied by the associated Price Unit, so that all Contract Prices are measured in USD. For the LME metals, the closing prices (evening evaluation) are used. For more information, see table 1 in section 2.1.10 below.

## 2.8 Price Unit

The Price Unit is the price per unit in which each commodity is quoted. For example Soybean Oil is quoted in cents per pound while Cotton is quoted in USD per pound. The Price Unit for Soybean Oil would then be 0.01 while it would be 1 for Cotton.

## 2.9 Contract Size

The Contract Size is the size which each commodity is traded in. For example one contract of Soybean Oil is equal to 60,000 pounds while one contract of Cotton is equal to 50,000 pounds.

## 2.10 Index Commodity Table

**Table 1: Index Commodities included in NQCI**



Index Commodity	Unit	Contract Size	Price Unit	Exchange
Brent	Barrels	1,000	USD/barrel (1)	ICE
Natural Gas	Million British thermal units (mmBtu)	10,000	USD/mmBtu (1)	NYMEX
Heating Oil	Gallons	42,000	USD/gallon (1)	NYMEX
Crude Oil	Barrels	1,000	USD/barrel (1)	NYMEX
Gasoline	Gallons	42,000	USD/gallon (1)	NYMEX
Gas Oil	Ton	100	USD/ton (1)	ICE
Zinc	Ton	25	USD/ton (1)	LME
Copper	Ton	25	USD/ton (1)	LME
Aluminum	Ton	25	USD/ton (1)	LME
Lead	Ton	25	USD/ton (1)	LME
Nickel	Ton	6	USD/ton (1)	LME
HG Copper	Pounds	25,000	Cents/pound (0.01)	COMEX
Platinum	Troy ounces	50	USD/troy ounce (1)	NYMEX
Palladium	Troy ounces	100	USD/troy ounce (1)	NYMEX
Silver	Troy ounces	5,000	Cents/ounce (0.01)	COMEX
Gold	Troy ounces	100	USD/troy ounce (1)	COMEX
Wheat	Bushels	5,000	Cents/bushel (0.01)	CBOT
Corn	Bushels	5,000	Cents/bushel (0.01)	CBOT
Cotton	Pounds	50,000	USD/pound (1)	NYBOT
Soybean	Bushels	5,000	Cents/bushel (0.01)	CBOT
Soybean Meal	Short tonnes	100	USD/short ton (1)	CBOT
Soybean Oil	Pounds	60,000	Cents/pound (0.01)	CBOT
Sugar	Pounds	112,000	Cents/pound (0.01)	NYBOT
Cocoa	Ton	10	USD/tonne (1)	NYBOT
Coffee	Pounds	37,500	Cents/pound (0.01)	NYBOT
Winter Wheat	Bushels	5,000	Cents/bushel (0.01)	KCBOT
Spring Wheat	Bushels	5,000	Cents/bushel (0.01)	MGE
Robusta Coffee	Ton	10	USD/ton (1)	ICE
White Sugar	Ton	50	USD/ton (1)	ICE
Lean Hogs	Pounds	40,000	Cents/pound (0.01)	CME
Live Cattle	Pounds	40,000	Cents/pound (0.01)	CME
Feeder Cattle	pounds	50,000	Cents/pound (0.01)	CME

## 2.11 Average Notional Market Value

The **Average Notional Market Value** for each Index Commodity is calculated as the average of the product of the open interest of each relevant Index Contract, the Contract Price and the Contract

Size calculated over each Commodity Trading Day of the twelve-month period ending as of the close of the last Index Trading Day in November (the **Cut-Off Date**)<sup>2</sup>.

## 2.12 Average Daily Dollar Trading Volume

The **Average Daily Dollar Trading Volume** for each commodity future is calculated as the average of the sum of the product of the number of traded contracts, the Contract Price and the Contract Size calculated over each Commodity Trading Day of the twelve-month period ending at the close of the Cut-Off Date<sup>2,3</sup>.

## 3. Eligibility Criteria and Selection Rules

### 3.1 Index Annual Review

The Index Eligibility and Target Weights of the NASDAQ Commodity Index Family is reviewed annually based on market data as of the last Index Trading Day in November, the **Cut-Off Date**. Additionally, the NASDAQ Commodity Index Family is reviewed annually to allow for continued and correct representation of the global commodity markets.

### 3.2 NASDAQ Commodity Index Eligibility

To be eligible for inclusion in any NASDAQ Commodity Index, a commodity future must meet the following criteria:

- Only futures contracts of physically settled commodities are considered for inclusion, and may not be on a financial commodity (e.g., equity).
- Must be traded on a regulated US or UK exchange.
- Must be USD-denominated
- Must have been traded for at least one full year before the cut-off date for the annual Index Review

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<sup>2</sup> Only contracts that expire within maximum five years, counting from year-end of the year the Index Review is conducted, are considered in the calculations of market value and average daily dollar trading volume. I.e., the Index Review for the 2012 selection, with Cut-Off Date November 30 2011, only considers traded contracts with a maximum expiry date of December - 2016.

<sup>3</sup> All references to prices throughout this document refer to the settlement prices published by each commodity futures exchange, except for the LME metals, where the closing prices (evening evaluation) are used.

### 3.3 Selection of NASDAQ Commodity Benchmark Index (NQCI)

To be eligible for inclusion in the NASDAQ Commodity Benchmark Index, a commodity must meet the criteria of section 2.1 and the additional criteria:

- The commodity future must have a total minimum Notional Market Value of \$1 billion;
- The commodity future must have a minimum notional twelve-month Average Daily Dollar Trading Volume of \$100 million.

The Sector and Single Commodity Indexes are derived from the Benchmark Index and hence based on the same selection criteria.

A commodity which is included in an Index will be called an **Index Commodity**.

### 3.4 Selection of NASDAQ Commodity Tradable Index (NQCIT)

To be eligible for inclusion in the NASDAQ Commodity Tradable Index, an Index Commodity must meet the criteria from sections 2.1 and the additional criteria:

- The commodity future must have a total minimum Notional Market Value of \$10 billion;
- The commodity future must have a minimum notional twelve-month Average Daily Dollar Trading Volume of \$250 million.

The increased minimum requirement for the NQCI Tradable Index is designed to further increase the tradability of the Index. The NQCI Tradable will only include the largest and most liquid contracts, but will still represent an accurate benchmark of the market with improved trading characteristics due to the size and liquidity constraints.

### 3.5 Index Rebalancing

The NASDAQ Commodity Index Family is rebalanced in January of each year based on Target Weights determined at the most recent Cut-Off Date and described in Section 3.

## 4. Index Weighting

Each January, each Index is rebalanced to reflect changes in the Average Notional Market Value and the Average Daily Dollar Trading Volume of each Index Commodity. The new weights to be given to the Index Commodities are determined at the most recent Cut-Off Date, are referred to as Target Weights.

### 4.1 Target Weights

The Target Weights are determined annually by the combination of 2/3 of the Market Value Weight and 1/3 of the Average Daily Dollar Trading Volume Weight of each Index Commodity (as expressed in the calculation steps below).

(1) Calculate individual **Market Value Weights (MVW)**:

$$MVW^c = \frac{MV^c}{\sum_c MV^c}$$

(2) Calculate individual **Average Daily Dollar Trading Volume Weights (ADVW)**:

$$ADVW^c = \frac{ADV^c}{\sum_c ADV^c}$$

(3) Calculate individual **Target Weights** based on individual weights from (1) and (2):

$$TW^c = \frac{2}{3} * MVW^c + \frac{1}{3} * ADVW^c$$

Where

$MV^c$  = The Average Notional Market Value for Index Commodity  $c$  at the last Cut-Off Date

$ADV^c$  = The Average Daily Dollar Trading Volume for Index Commodity  $c$  at the last Cut-Off Date

$TW^c$  = The Target Weight for Index Commodity  $c$

The sum of Target Weights equals 1:  $\sum_c TW^c = 100\%$ .

### 4.2 Target Index Holdings and Index Holdings

The **Target Index Holding** for each contract is calculated by dividing the Target Weight of each Index Commodity by its respective Index Contract's price on the Cut-Off Date and then scaling this up so that the sum of Target Index Holdings across the Index Commodities equals 1,000,000,000. Each individual Index Commodity's Target Index Holding is then rounded to zero decimal digits.

$$TIH^c = Round\left(\frac{TW^c}{P_d^c} \times Scale\ Factor\right)$$

Where

$TW^c$  = Target Weight for Index Commodity  $c$ .

$TIH^c$  = Target Index Holdings for Index Commodity  $c$ .

$d$  = the Cut-Off Date, or, in the event of a Market Disruption (see definition in section 9) for any of the Index Contracts on day  $d$ ,  $d$  will be reset to the last Index Trading day prior to the Cut-Off Date on which none of the included Index Contracts had a Market Disruption.

$P_d^c$  = Contract Price for the Index Contract representing Index Commodity  $c$  on day  $d$ .

$$Scale\ Factor = 1,000,000,000 / \sum_c \frac{TW^c}{P_d^c}$$

Target Index Holdings are rolled into the index over the January Roll Period (see below). Once the Target Index Holdings have finished rolling in, they are no longer the Target Index Holdings and are instead referred to as **Index Holdings**.

## 5. Contract Selection

### 5.1 Eligible Contracts per Commodity

Each commodity future series consists of a number of listed contracts based on specific calendar months. To be eligible to be an Index Contract in the NQCI, a contract must be considered liquid enough and tradable during the roll periods. The contract analysis on eligible Index Contracts is reviewed on a regular basis as determined by NASDAQ OMX.

The contract analysis is based upon a quantitative review of control volumes and characteristics to ensure the best roll process for each commodity and sector.

**Table 2: Eligible Index Contracts**

Commodity	Eligible Contract Months
Brent Crude	H, J, K, M, N, Q, U, V, X, Z, F, G
Natural Gas	H, J, K, M, N, Q, U, V, X, Z, F, G
Heating Oil	H, J, K, M, N, Q, U, V, X, Z, F, G
Crude Oil	H, J, K, M, N, Q, U, V, X, Z, F, G
Gasoline	H, J, K, M, N, Q, U, V, X, Z, F, G
Gas Oil	H, J, K, M, N, Q, U, V, X, Z, F, G
Zinc	G, H, J, K, M, N, Q, U, V, X, Z, F
Copper	G, H, J, K, M, N, Q, U, V, X, Z, F
Aluminum	G, H, J, K, M, N, Q, U, V, X, Z, F
Lead	G, H, J, K, M, N, Q, U, V, X, Z, F
Nickel	G, H, J, K, M, N, Q, U, V, X, Z, F
HG Copper	H, K, N, U, Z
Platinum	J, N, V, F
Palladium	H, M, U, Z
Silver	H, K, N, U, Z
Gold	J, M, Q, Z, G
Wheat	H, K, N, U, Z
Corn	H, K, N, U, Z
Cotton	H, K, N, Z
Soybean	H, K, N, Q, U, X, F
Soybean Meal	H, K, N, Q, U, Z, F
Soybean Oil	H, K, N, Q, U, Z, F
Sugar	H, K, N, V
Cocoa	H, K, N, U, Z
Coffee	H, K, N, U, Z
Winter Wheat	H, K, N, U, Z
Spring Wheat	H, K, N, U, Z
White Sugar	H, K, Q, V, Z
Robusta Coffee	H, K, N, U, X, F
Lean Hogs	J, M, N, Q, V, Z, G
Live Cattle	J, M, Q, V, Z, G
Feeder Cattle	H, J, K, Q, U, V, X, F

**Table 3: Month letter codes**

Month	Letter Code
January	F
February	G
March	H
April	J
May	K
June	M
July	N
August	Q
September	U
October	V
November	X
December	Z

## 6. Roll

Due to the regular expiration of Index Contracts, a rolling method is needed to switch from an expiring Index Contract to a futures contract with a farther expiry.

Over the months February through December, The NQCI uses a market value based roll methodology whereby the market value of the existing (soon to expire) Index Contract is rolled over to a new Index Contract (a futures contract on the same Index Commodity, which has a farther expiry than the existing Index Contract) over a period of 5 Index Trading Days. The market value based roll methodology means that, during the Roll Period (defined below), the start of day market value of the Index is unchanged from close of the previous Roll Day<sup>4</sup> (defined below). This means that the investor can follow the investment in each commodity during the roll by, each Roll Day, buying an amount of the new Index Contracts that has the same value as the Index Contracts sold that day.

In January, the NQCI annual rebalancing is done over the Roll Period and an alternative method to the market value based roll described above is used.

### 6.1 Roll Period

The **Roll Period** for each Index consists of the first 5 Index Trading Days of that month. During the Roll Period the Index Contracts are scheduled to gradually roll over to contracts with later maturity dates. A **Roll Day** is each Index Trading Day in the Roll Period. In the event an Index Commodity is affected by a Market Disruption or a Holiday on a Roll Day, Roll Days can be rescheduled and the Roll Period can be adjusted, as detailed in Section 9. This section describes the roll procedure assuming Index Commodities are not affected by a Holiday or a Market Disruption during the Roll Period.

### 6.2 Roll Methodology for February through December

Each Roll Day, the Index Holdings of the Index Contract rolling out of the Index are decreased by 20% of the initial Index Holdings of that Index Contract just prior to the Roll Period, and their market value is replaced by increasing the Index Holdings of the Index Contract rolling into the index. This is done such that, for each Roll Day and for each Index Commodity, the following Index Holdings are set for the Index Contract that is rolled out of the Index and for the Index Contract that is rolled in<sup>5</sup>:

$$\begin{aligned}IH1_n^c &= IH1_0^c * (5 - n)/5 \\IH2_n^c &= IH2_{n-1}^c + 1/5 * IH1_0^c * P1_n^c/P2_n^c\end{aligned}$$

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<sup>4</sup> Note that this is the case for all Roll Periods except the January Roll Period, which is when the Target Index Holdings determined in the preceding Annual Review are rolled in. See more details in section 5.4

<sup>5</sup> For handling of Market Disruptions or Holidays see Section 9

$c$  = The relevant Index Commodity.

$n$  = The  $n$ -th Roll Day that month.

$IH1_0^c$  = Index Holdings for the Index Contract rolling out of the index for  $c$ , immediately following the close of the last Index Trading Day before the Roll Period and effective in Index up until to the close of  $n$ .

$IH1_n^c$  = Index Holdings for Index Contract rolling out of the Index for  $c$ , immediately following the close of  $n$ .

$IH2_n^c$  = Index Holdings for Index Contract rolling into the index for  $c$ , immediately following the close of  $n$  and effective in Index up until the close of  $n$

$IH2_{n-1}^c$  = Index Holdings for Index Contract rolling into the index for  $c$ , immediately following the close of the last Index Trading Day preceding  $n$ . For  $n = 1$ ,  $IH2_{n-1}^c = 0$ .

$P1_n^c$  = Contract Price for Index Contract rolling out of the index for  $c$  on  $n$ .

$P2_n^c$  = Contract Price for Index Contract rolling into the index for  $c$  on  $n$ .

### 6.2.1 Schematic Overview of the Feb-Dec Roll Periods

Below is a schematic overview describing the Roll Methodology taking place during the February-December Roll Periods:

Day	Index Holdings for the Index Contract rolling out of the Index ( $IH1$ ), immediately after the close of the day	Index Holdings for Index Contract rolling in to the Index ( $IH2$ ), immediately after the close of the day
Last Index Trading Day before Roll Period	$IH1_0^c$	0
1 <sup>st</sup> Roll Day ( $n = 1$ )	$IH1_1^c = IH1_0^c * 0.8$	$IH2_1^c = 0.2 * IH1_0^c * P1_1^c / P2_1^c$
2 <sup>nd</sup> Roll Day ( $n = 2$ )	$IH1_2^c = IH1_0^c * 0.6$	$IH2_2^c = IH2_1^c + IH1_0^c * 0.2 * P1_2^c / P2_2^c$
3 <sup>rd</sup> Roll Day ( $n = 3$ )	$IH1_3^c = IH1_0^c * 0.4$	$IH2_3^c = IH2_2^c + IH1_0^c * 0.2 * P1_3^c / P2_3^c$
4 <sup>th</sup> Roll Day ( $n = 4$ )	$IH1_4^c = IH1_0^c * 0.2$	$IH2_4^c = IH2_3^c + IH1_0^c * 0.2 * P1_4^c / P2_4^c$
5 <sup>th</sup> Roll Day ( $n = 5$ )	$IH1_5^c = 0$	$IH2_5^c = IH2_4^c + IH1_0^c * 0.2 * P1_5^c / P2_5^c$
First Index Trading Day following the Roll Period	0	$IH2_5^c$



### 6.3 January Roll Period and Index Rebalancing

The NASDAQ Commodity Index Family is rebalanced annually during the January Roll Period. This means the January Roll Period combines switching to the new Target Weights with the rolling of current Index Contracts to contracts with a later maturity. Because of that, the January Roll period does not use the market value based roll methodology described in 5.2 above.

On each Roll Day in January, for each Index Commodity, the Index Holdings of the Index Contract rolling out of the Index are decreased by 20% of the initial Index Holdings of that Index Contract just prior to the Roll Period, and the Index Holdings of the Index Contract rolling in to the Index are increased by 20% of the Target Index Holdings for that Index Commodity, as determined in the latest Index Weighting, such that:

$$IH1_n^c = IH1_0^c * (5 - n)/5$$

$$IH2_n^c = TIH^c * n/5$$

$c$  = The relevant Index Commodity.

$n$  = The  $n$ -th Roll Day that month.

$IH1_0^c$  = Index Holdings for the Index Contract rolling out of the index for  $c$ , immediately following the close of the last Index Trading Day before the Roll Period.

$IH1_n^c$  = Index Holdings for Index Contract rolling out of the Index for  $c$ , immediately following the close of  $n$ .

$IH2_n^c$  = Index Holdings for Index Contract rolling into the index for Index Commodity  $c$ , immediately following the close of  $n$ .

$TIH^c$  = Target Index Holdings for  $c$ , as determined in the latest Index Weighting.

#### 6.3.1 Schematic overview of the January Roll Period

Below is a schematic overview describing the January Roll Period.

Day	Index Holdings for the Index Contract rolling out of the Index ( $IH1$ ), immediately after the close of the day	Index Holdings for Index Contract rolling in to the Index ( $IH2$ ), immediately after the close of the day
Last Index Trading Day before the Roll Period	$IH1_0^c$	0
1 <sup>st</sup> Roll Day ( $n = 1$ )	$IH1_1^c = IH1_0^c * 0.8$	$IH2_1^c = 0.2 * TIH^c$
2 <sup>nd</sup> Roll Day ( $n = 2$ )	$IH1_2^c = IH1_0^c * 0.6$	$IH2_2^c = 0.4 * TIH^c$
3 <sup>rd</sup> Roll Day ( $n = 3$ )	$IH1_3^c = IH1_0^c * 0.4$	$IH2_3^c = 0.6 * TIH^c$
4 <sup>th</sup> Roll Day ( $n = 4$ )	$IH1_4^c = IH1_0^c * 0.2$	$IH2_4^c = 0.8 * TIH^c$
5 <sup>th</sup> Roll Day ( $n = 5$ )	$IH1_5^c = 0$	$IH2_5^c = TIH^c$
Index Trading Day immediately following the Roll Period	0	$TIH^c$

## 7. Index Roll Versions

The NQCI is calculated using five different roll versions. All five versions originate off the base roll schedule, which is the Front Index Roll Schedule.

### 7.1 Front Index

Rolls the front contract to next front contract on a *monthly*<sup>3</sup> basis

The first Index roll version is a front-month, monthly rolled Index. This Index is designed to reflect investment in the front-month contract. The Index invests in the front contract of each commodity and will follow the specific roll schedule established for each commodity.

### 7.2 2<sup>nd</sup> Front Index

Rolls the 2<sup>nd</sup> front contract to next 2<sup>nd</sup> front contract on a *monthly*<sup>3</sup> basis

As 7.1 but each month rolls into the 2<sup>nd</sup> front contract instead of the front contract. This Index is designed to reflect an investment further out on the curve.

### 7.3 3<sup>rd</sup> Front Index

Rolls the 3<sup>rd</sup> front contract to next 3<sup>rd</sup> front contract on a *monthly*<sup>3</sup> basis

As 7.1 but each month rolls into the 3<sup>rd</sup> front contract instead of the front contract. This Index is designed to reflect investment even further out on the curve than the 2<sup>nd</sup> Front Index.

### 7.4 2<sup>nd</sup> Front Hold Index

Rolls the 2<sup>nd</sup> front contract to next 2<sup>nd</sup> front contract and holds to expiration

This Index is designed to reflect 'buy and hold' of a contract. The Index rolls into the 2<sup>nd</sup> front contract and holds it to before expiration and then rolls into the next 2<sup>nd</sup> front contract. The Index rolls before expiration of the included contract according to the Front Index roll schedule, hence the Index does not roll each month.

### 7.5 3<sup>rd</sup> Front Hold Index

Rolls 3<sup>rd</sup> front to next 3<sup>rd</sup> front contract and holds to expiration

As 7.4, but rolls into the 3<sup>rd</sup> front contract and holds it to before expiration and then rolls into the next 3<sup>rd</sup> to front contract. The Index rolls before the expiration of the included contract according to the Front Index roll schedule, hence the Index does not roll each month.

## 7.6 Roll Schedules

Table 4: Front Index Roll Schedule

Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Brent Crude	J	K	M	N	Q	U	V	X	Z	F	G	H
Natural Gas	H	J	K	M	N	Q	U	V	X	Z	F	G
Heating Oil	H	J	K	M	N	Q	U	V	X	Z	F	G
Crude Oil	H	J	K	M	N	Q	U	V	X	Z	F	G
Gasoline	H	J	K	M	N	Q	U	V	X	Z	F	G
Gas Oil	H	J	K	M	N	Q	U	V	X	Z	F	G
Zinc	G	H	J	K	M	N	Q	U	V	X	Z	F
Copper	G	H	J	K	M	N	Q	U	V	X	Z	F
Aluminum	G	H	J	K	M	N	Q	U	V	X	Z	F
Lead	G	H	J	K	M	N	Q	U	V	X	Z	F
Nickel	G	H	J	K	M	N	Q	U	V	X	Z	F
HG Copper	H	K	K	N	N	U	U	Z	Z	Z	H	H
Platinum	J	J	N	N	N	V	V	V	F	F	F	J
Palladium	H	M	M	M	U	U	U	Z	Z	Z	H	H
Silver	H	K	K	N	N	U	U	Z	Z	Z	H	H
Gold	J	J	M	M	Q	Q	Z	Z	Z	Z	G	G
Wheat	H	K	K	N	N	U	U	Z	Z	Z	H	H
Corn	H	K	K	N	N	U	U	Z	Z	Z	H	H
Cotton	H	K	K	N	N	Z	Z	Z	Z	Z	H	H
Soybean	H	K	K	N	N	Q	U	X	X	F	F	H
Soybean Meal	H	K	K	N	N	Q	U	Z	Z	Z	F	H
Soybean Oil	H	K	K	N	N	Q	U	Z	Z	Z	F	H
Sugar	H	K	K	N	N	V	V	V	H	H	H	H
Cocoa	H	K	K	N	N	U	U	Z	Z	Z	H	H
Coffee	H	K	K	N	N	U	U	Z	Z	Z	H	H
Winter Wheat	H	K	K	N	N	U	U	Z	Z	Z	H	H
Spring Wheat	H	K	K	N	N	U	U	Z	Z	Z	H	H
White Sugar	H	K	K	Q	Q	Q	V	V	Z	Z	H	H
Robusta Coffee	H	K	K	N	N	U	U	X	X	F	F	H
Lean Hogs	J	J	M	M	N	Q	V	V	Z	Z	G	G
Live Cattle	J	J	M	M	Q	Q	V	V	Z	Z	G	G
Feeder Cattle	H	J	K	Q	Q	Q	U	V	X	F	F	H

The contracts in the Roll Schedule refer to the Index Contract that is being rolled into each month. If the Index Contract in a month is the same as previous month, this means that no roll will occur that month.

Table 5: Roll Schedules for all roll versions, examples for Crude Oil and Corn from launch in 2012:

Example Crude Oil (twelve eligible Index Contracts per year):

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Front	H	J	K	M	N	Q	U	V	X	Z	F	G
2nd Front	J	K	M	N	Q	U	V	X	Z	F	G	H
3rd Front	K	M	N	Q	U	V	X	Z	F	G	H	J
2nd Hold	J	J	M	M	Q	Q	V	V	Z	Z	G	G
3rd Hold	K	K	K	Q	Q	Q	X	X	X	G	G	G

Example Corn (five eligible Index Contracts per year):

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Front	H	K	K	N	N	U	U	Z	Z	Z	H	H
2nd Front	K	N	N	U	U	Z	Z	H	H	H	K	K
3rd Front	N	U	U	Z	Z	H	H	K	K	K	N	N
2nd Hold	H	N	N	N	N	Z	Z	Z	Z	Z	K	K
3rd Hold	N	N	N	N	N	H	H	H	H	H	H	H

For a complete overview of all Roll Schedules, see [Indexes.nasdaqomx.com/Commodities/roll\\_schedules](http://Indexes.nasdaqomx.com/Commodities/roll_schedules).

## 8. Index Calculations

The calculation of the value of the Index is based on the change of the Contract Daily Return on any particular Index Trading Day.

### 8.1 Contract Daily Return (CDR)

The **Contract Daily Return** is calculated as follows:

$$CDR_d = \sum_c w_{d-1}^c \frac{P_d^c}{P_{d-1}^c} - 1$$
$$w_{d-1}^c = \frac{IH_{d-1}^c * P_{d-1}^c}{\sum_k IH_{d-1}^k * P_{d-1}^k}$$

Where:

$c$  = Any Index Contract

$w_{d-1}^c$  = The weight of Index Contract  $c$  in the Index immediately following the close of the last Index Trading Day,  $d-1$

$d$  = Any Index Trading Day.

$d - 1$  = The Index Trading Day strictly preceding  $d$

$P_d$  = Contract Price on  $d$ .

$P_{d-1}$  = Contract Price on  $d-1$

$IH_{d-1}$  = Index Holdings for Index Contract representing Index Commodity  $c$  at  $d-1$ <sup>6</sup>

### 8.2 Excess Return Index

Excess Return Index (ER) calculation:

$$ER\ Index\ Value_d = ER\ Index\ Value_{d-1} * (1 + CDR_d)$$

$d$  = Any Index Trading Day

$d - 1$  = The Index Trading Day strictly preceding  $d$

$CDR_d$  = Contract Daily Return on  $d$

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<sup>6</sup> During a Roll Period there are two Index Contracts held for every Index Commodity and therefore,  $IH1_{d-1}^c$  and  $IH2_{d-1}^c$  would be used in the calculation

### 8.3 Total Return Index

Total Return Index (TR) calculation:

$$TR\ Index\ Value_d = TR\ Index\ Value_{d-1} * (1 + CDR_d + TBR_d) * (1 + TBR_d)^{days}$$

Where:

$d$  =Any Index Trading Day.

$d - 1$  = The Index Trading Day strictly preceding  $d$

$CDR_d$  =Contract Daily Return on  $d$ .

$TBR_d$  =Treasury Bill Return on  $d$ .

$days$  = The number of days which are not Index Trading Days from (but excluding) the last Index Trading Day before  $d$  to (but excluding)  $d$

#### 8.3.1. Treasury Bill Return (TBR)

The Treasury Bill Return is used to calculate the Total Return version on the NQCI. The calculations are representing a fully collateralized investment in the risk-free rate of return. The Treasury bill return used in the calculations is the 91-day auction high rate for US Treasury bills on the most recent weekly auction date available on the preceding calculation day. The rate is generally published once a week on Mondays by the Bureau of Public Debt, and is effective in the calculations the next Index Trading Day. The last available rate is always used in the Index until the next becomes effective. Note that the preceding day's rate is used in calculations:

$$TBR_d = \left( \frac{1}{1 - \left(\frac{91}{360}\right) * TBrate_{d-1}} \right)^{1/91} - 1$$

Where:

$d$  =Any Index Trading Day

$d - 1$  = The Index Trading Day strictly preceding  $d$

$TBrate$  = The weekly 91-day auction high rate for US Treasury bills

### 8.4 Base Value

The base value for the NQCI Family is 1000.

## 8.5 Base Date

The base date for the NQCI Family is the close of business on January 3, 2012.

## 9. Index Calculation Times

### 9.1 Index Close

The NASDAQ Commodity Indexes are calculated at 23:00 CET.

### 9.2 Index Dissemination

NASDAQ Commodity Excess and Total Return Indexes are disseminated each day at 23:00 CET.

## 10. Market Disruptions and Holidays

If a Market Disruption or a Holiday occurs on an Index Trading Day which is not a Roll Day, the last available Contract Price will be used for the affected Index Contract in the Index Calculations<sup>7</sup>.

If a Market Disruption or a Holiday occurs on a Roll Day in February through December, the roll of the affected Index Commodity scheduled to take place that day is postponed to the next Index Trading Day. This is done such that the new roll scheduled to take place over the next Index Trading Day includes the roll that was already scheduled to take place that day in addition to the roll that is postponed from the Holiday or Market Disruption Day. If the next Index Trading Day also happens to be a Holiday or a Market Disruption Day, then the same procedure is applied again. If a Market Disruption or a Holiday occurs on the fifth Roll Day, then whatever roll was scheduled for that day is postponed to the next Index Trading Day on which neither a Market Disruption nor a Holiday occurs, extending the Roll Period as it relates to the affected Index Commodity.

If a Holiday or a Market Disruption occurs during a Roll Day in January, then that day and all of the remaining Roll Days that month for that Index Commodity will be rescheduled such that they occur one Index Trading Day later than they were previously scheduled. Thus, the remainder of the Roll Period as it pertains to the affected Index Commodity is postponed by one Index Trading Day. In this way, the Roll for every Index Commodity is always conducted over 5 Index Trading Days on which neither a Market Disruption nor a Holiday occurs for that commodity.

Note that for all Roll Periods, the Index Contracts not affected by a Holiday or a Market Disruption will roll as normal.

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<sup>7</sup>. If the Settlement Price is a limit price, the limit price will be used in the calculation of the relevant Index.

### Example: Market Disruptions and Holiday during Roll Periods

The following examples use two Index Contracts “A” and “B” to show how a Holiday and a Market Disruption affect the Roll procedure in February – December and, separately, in January.

The first Thursday shown is a Holiday for enough Index Commodities such that their Target Weights in the Index exceed 20%. Therefore that day is not an Index Trading Day and hence also not a Roll Day (for any Index Commodity in that Index).

The Friday in the example is an Index Trading Day on which only commodity B is affected by a Market Disruption. Only commodity B is thus affected by that disruption.

The figures represent the Index Holdings for “A” and “B” on each day as a percentage of the respective Index Holdings on the last Index Trading Day prior to the Roll Period.

#### 1) Change in Index Holdings on the Close of Each Roll Day for Index Contract Rolling Out of Index

Day		Feb. – Dec. Roll Period		Jan. Roll Period	
		A	B	A	B
<b>Fri</b>					
<b>Mon</b>	1	-20%	-20%	-20%	-20%
<b>Tue</b>	2	-20%	-20%	-20%	-20%
<b>Wed</b>	3	-20%	-20%	-20%	-20%
<b>Thu</b> (Holiday for A and B)	-				
<b>Fri</b> (Market Disruption in B)	4	-20%		-20%	
<b>Mon</b>	5	-20%	-40%	-20%	-20%
<b>Tue</b>	6				-20%
<b>Wed</b>					



**2) Index Holdings immediately up until the Close of Each Day for the Index Contract Rolling Out of Index**

Day		Feb. – Dec. Roll Period		Jan. Roll Period	
		A	B	A	B
<b>Fri</b>		100%	100%	100%	100%
<b>Mon</b>	1	100%	100%	100%	100%
<b>Tue</b>	2	80%	80%	80%	80%
<b>Wed</b>	3	60%	60%	60%	60%
<b>Thu</b> (Holiday for A and B)	-	40%	40%	40%	40%
<b>Fri</b> (Market Disruption in B)	4	40%	40%	40%	40%
<b>Mon</b>	5	20%	40%	20%	40%
<b>Tue</b>	6	0%	0%	0%	20%
<b>Wed</b>		0%	0%	0%	0%

There can be no assurance, however, that a Market Disruption or any other force majeure event will not have an adverse or distortive effect on the value of the Index or the manner in which it is calculated

## 11. Leverage and inverse index

The NQCI leverage and inverse indexes have been constructed with the objective to reflect a strategy that aims to produce leveraged and inverse exposure to an underlying NQCI index with the financing costs and the monetary gain embedded in the performance of the index.

The leveraged versions are made up of the combination of an investment aiming to replicate a long position with an increased exposure and borrowing at a given interest rate.

The inversed versions are made up of the combination of an investment aiming to replicate an increased short exposure with an additional monetary gain.

## 11.1 The leverage and inverse index formula

The formula for calculating the leverage and inverse indexes is

$$I_t = (I_{t-1}) * (1.0 + U + R)$$

Where

$I_t$  = Current value of the leveraged or inversed index

$I_{t-1}$  = Last closing value of the leveraged or inversed index

and

$U = (C - 1.0) * \text{Exposure Factor}$

$$C = \frac{X_t}{X_{t-1}}$$

$X_t$  = Current value of underlying index

$X_{t-1}$  = Last closing of the underlying index

and

$R = S * \text{Interest Factor} - D$

$S = Y * d$

$Y = r_{(t-\text{Interest Day})} + \text{Interest Rate Spread}$

$r_t$  = Interest rate of Interest Rate ID on day  $t$

$d = \text{delta}_{t, t-1} / \text{Day count convention}$

$\text{Interest Factor} = \text{Lending or deposit rate factor}$

$D = 2 * \text{Security Interest} * d$

## 11.2 Leverage and inverse index parameters

The leverage index is calculated and disseminated on the same day as the underlying index. The calculation frequency for leverage index is equal to frequency of the underlying index. If the underlying index is suspended or not available for a period of time, the leverage index will be suspended until underlying index is available.

The interest rate spread is adjustable. As of launch date, December 31, 2015, the spread is set to 0 bps for the leveraged versions and to 0 bps for the inverse versions. Changes in the spread will be notified one month before effective in calculation.

The security interest is only applicable for the short version. It will be activated if the leverage short index suffers from extensive borrowing costs when maintaining a short position in shares of the underlying index. As of launch date, December 31, 2015, the security interest is set to zero (0). Changes in the security interest will be notified one week before effective in calculation.

**Table 6: Example of Parameters valid for NQCIL3GCER and NQCIS3GCER**

	<b>Leverage</b>	<b>Inverse</b>
<b>Underlying Index</b>	NQCIL3GCER	NQCIS3GCER
<b>Leverage Factor</b>	3	-3
<b>Interest Rate</b>	US Fed Funds Effective rate	US Fed Funds Effective rate
<b>Interest Rate Spread</b>	0	0
<b>Interest Day</b>	1	1
<b>Interest Factor</b>	-2	4
<b>Security Interest</b>	NA	0
<b>Day Count Convention</b>	Actual 360	Actual 360

A full table with the leveraged and inverse indexes in the NQCI family is found in Appendix B – Leveraged NASDAQ Commodity indexes.

## 11.3 Base Value

The base value for the leveraged and inverse NQCI indexes is 500.

## 11.4 Base Date

The base date for the leveraged and inverse NQCI indexes is the close of business on December 31, 2015.

### 11.5 Suspension of calculation and dissemination of leverage index

In order to handle extreme market movements, the leveraged indexes have been equipped with protection towards very large differences in the current index value in comparison to the previous trading day's closing index value.

The total daily loss in leverage index is limited to 50% and the test of this is made intra-day. In this case the leverage index will be suspended and the value to be considered as the index closing value for that calculation day.

## 12. Index Information

Additional information concerning the NQCI is provided via Global Index Watch through <https://Indexes.nasdaqomx.com>.

## 13. Disclaimer

NASDAQ OMX may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure Index integrity including but not limited to adjusting the weights of the sectors, the calculation formula to create sector weights, and quantitative inclusion criteria. NASDAQ OMX may also, due to special circumstances, if deemed essential, apply discretionary adjustments to ensure and maintain the high quality of the Index construction and calculation.

CME, LME, MGE, ICE Futures, and KCBOT (collectively the “Exchanges”) provide data on commodity futures which, in part, are used to compile and calculate the NQCI. However, the Exchanges provide such data “as is” and without representation or warranty on their part. The exchanges have no involvement with and accept no responsibility for the Indexes or any part of the Indexes, their suitability as an investment or their future performance.

## 14. Limits of Liability

The NASDAQ OMX Group, Inc. and its affiliates (“NASDAQ OMX”) assume(s) no liability of any nature (including, but not limited to negligence) for any loss, damages, costs, claims and expenses related to or arising out of the use of the Indexes. NASDAQ OMX expressly disclaims all warranties, expressed or implied, as to the availability, accuracy, completeness, merchantability or fitness for a particular purpose with respect to the Indexes. Neither NASDAQ OMX nor any third party make any express or implied warranties or representations in respect of the Indexes, the results to be obtained by the use hereof or the value of the Indexes at any given time.

## 15. APPENDICES

### APPENDIX A - NASDAQ Commodity Index Family

<b>Name</b>	<b>Code</b>
<b>BENCHMARK INDEXES</b>	
NASDAQ Commodity Benchmark Index ER	NQCIER
NASDAQ Commodity Benchmark Index TR	NQCITR
NASDAQ Commodity 2nd Front Benchmark Index ER	NQCI2ER
NASDAQ Commodity 2nd Front Benchmark Index TR	NQCI2TR
NASDAQ Commodity 3rd Front Benchmark Index ER	NQCI3ER
NASDAQ Commodity 3rd Front Benchmark Index TR	NQCI3TR
NASDAQ Commodity 2nd Hold Benchmark Index ER	NQCI2HER
NASDAQ Commodity 2nd Hold Benchmark Index TR	NQCI2HTR
NASDAQ Commodity 3rd Hold Benchmark Index ER	NQCI3HER
NASDAQ Commodity 3rd Hold Benchmark Index TR	NQCI3HTR
<b>TRADABLE INDEXES</b>	
NASDAQ Commodity Tradable Index ER	NQCITER
NASDAQ Commodity Tradable Index TR	NQCITTR
NASDAQ Commodity 2nd Front Tradable Index ER	NQCI2TER
NASDAQ Commodity 2nd Front Tradable Index TR	NQCI2TTR
NASDAQ Commodity 3rd Front Tradable Index ER	NQCI3TER
NASDAQ Commodity 3rd Front Tradable Index TR	NQCI3TTR
NASDAQ Commodity 2nd Hold Tradable Index ER	NQCI2HTER
NASDAQ Commodity 2nd Hold Tradable Index TR	NQCI2HTTR
NASDAQ Commodity 3rd Hold Tradable Index ER	NQCI3HTER
NASDAQ Commodity 3rd Hold Tradable Index TR	NQCI3HTTR

## SECTOR INDEXES

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NASDAQ Commodity Agriculture Index ER	NQCIACER
NASDAQ Commodity Agriculture Index TR	NQCIACTR
NASDAQ Commodity 2nd Front Agriculture Index ER	NQCI2ACER
NASDAQ Commodity 2nd Front Agriculture Index TR	NQCI2ACTR
NASDAQ Commodity 3rd Front Agriculture Index ER	NQCI3ACER
NASDAQ Commodity 3rd Front Agriculture Index TR	NQCI3ACTR
NASDAQ Commodity 2nd Hold Agriculture Index ER	NQCI2HACER
NASDAQ Commodity 2nd Hold Agriculture Index TR	NQCI2HACTR
NASDAQ Commodity 3rd Hold Agriculture Index ER	NQCI3HACER
NASDAQ Commodity 3rd Hold Agriculture Index TR	NQCI3HACTR
NASDAQ Commodity Div Agriculture ER	NQCIDAER
NASDAQ Commodity Div Agriculture TR	NQCIDATR
NASDAQ Commodity 2nd Front Div Agriculture ER	NQCI2DAER
NASDAQ Commodity 2nd Front Div Agriculture TR	NQCI2DATR
NASDAQ Commodity 3rd Front Div Agriculture ER	NQCI3DAER
NASDAQ Commodity 3rd Front Div Agriculture TR	NQCI3DATR
NASDAQ Commodity 2nd Hold Div Agriculture ER	NQCI2HDAER
NASDAQ Commodity 2nd Hold Div Agriculture TR	NQCI2HDATR
NASDAQ Commodity 3rd Hold Div Agriculture ER	NQCI3HDAER
NASDAQ Commodity 3rd Hold Div Agriculture TR	NQCI3HDATR
NASDAQ Commodity Energy Index ER	NQCIENER
NASDAQ Commodity Energy Index TR	NQCIENTR
NASDAQ Commodity 2nd Front Energy Index ER	NQCI2ENER
NASDAQ Commodity 2nd Front Energy Index TR	NQCI2ENTR
NASDAQ Commodity 3rd Front Energy Index ER	NQCI3ENER
NASDAQ Commodity 3rd Front Energy Index TR	NQCI3ENTR
NASDAQ Commodity 2nd Hold Energy Index ER	NQCI2HENER
NASDAQ Commodity 2nd Hold Energy Index TR	NQCI2HENTR
NASDAQ Commodity 3rd Hold Energy Index ER	NQCI3HENER
NASDAQ Commodity 3rd Hold Energy Index TR	NQCI3HENTR
NASDAQ Commodity Grains Index ER	NQCIGRER
NASDAQ Commodity Grains Index TR	NQCIGRTR
NASDAQ Commodity 2nd Front Grains Index ER	NQCI2GRER
NASDAQ Commodity 2nd Front Grains Index TR	NQCI2GRTR
NASDAQ Commodity 3rd Front Grains Index ER	NQCI3GRER
NASDAQ Commodity 3rd Front Grains Index TR	NQCI3GRTR
NASDAQ Commodity 2nd Hold Grains Index ER	NQCI2HGRER
NASDAQ Commodity 2nd Hold Grains Index TR	NQCI2HGRTR
NASDAQ Commodity 3rd Hold Grains Index ER	NQCI3HGRER
NASDAQ Commodity 3rd Hold Grains Index TR	NQCI3HGRTR
NASDAQ Commodity Industrial Metals ER	NQCIIMER
NASDAQ Commodity Industrial Metals TR	NQCIIMTR
NASDAQ Commodity 2nd Front Industrial Metals ER	NQCI2IMER
NASDAQ Commodity 2nd Front Industrial Metals TR	NQCI2IMTR
NASDAQ Commodity 3rd Front Industrial Metals ER	NQCI3IMER
NASDAQ Commodity 3rd Front Industrial Metals TR	NQCI3IMTR
NASDAQ Commodity 2nd Hold Industrial Metals ER	NQCI2HIMER



NASDAQ Commodity 2nd Hold Industrial Metals TR  
NASDAQ Commodity 3rd Hold Industrial Metals ER  
NASDAQ Commodity 3rd Hold Industrial Metals TR  
NASDAQ Commodity Live Stock Index ER  
NASDAQ Commodity Live Stock Index TR  
NASDAQ Commodity 2nd Front Live Stock Index ER  
NASDAQ Commodity 2nd Front Live Stock Index TR  
NASDAQ Commodity 3rd Front Live Stock Index ER  
NASDAQ Commodity 3rd Front Live Stock Index TR  
NASDAQ Commodity 2nd Hold Live Stock Index ER  
NASDAQ Commodity 2nd Hold Live Stock Index TR  
NASDAQ Commodity 3rd Hold Live Stock Index ER  
NASDAQ Commodity 3rd Hold Live Stock Index TR  
NASDAQ Commodity Metals Index ER  
NASDAQ Commodity Metals Index TR  
NASDAQ Commodity 2nd Front Metals Index ER  
NASDAQ Commodity 2nd Front Metals Index TR  
NASDAQ Commodity 3rd Front Metals Index ER  
NASDAQ Commodity 3rd Front Metals Index TR  
NASDAQ Commodity 2nd Hold Metals Index ER  
NASDAQ Commodity 2nd Hold Metals Index TR  
NASDAQ Commodity 3rd Hold Metals Index ER  
NASDAQ Commodity 3rd Hold Metals Index TR  
NASDAQ Commodity Petroleum Index ER  
NASDAQ Commodity Petroleum Index TR  
NASDAQ Commodity 2nd Front Petroleum Index ER  
NASDAQ Commodity 2nd Front Petroleum Index TR  
NASDAQ Commodity 3rd Front Petroleum Index ER  
NASDAQ Commodity 3rd Front Petroleum Index TR  
NASDAQ Commodity 2nd Hold Petroleum Index ER  
NASDAQ Commodity 2nd Hold Petroleum Index TR  
NASDAQ Commodity 3rd Hold Petroleum Index ER  
NASDAQ Commodity 3rd Hold Petroleum Index TR  
NASDAQ Commodity Precious Metals ER  
NASDAQ Commodity Precious Metals TR  
NASDAQ Commodity 2nd Front Precious Metals ER  
NASDAQ Commodity 2nd Front Precious Metals TR  
NASDAQ Commodity 3rd Front Precious Metals ER  
NASDAQ Commodity 3rd Front Precious Metals TR  
NASDAQ Commodity 2nd Hold Precious Metals ER  
NASDAQ Commodity 2nd Hold Precious Metals TR  
NASDAQ Commodity 3rd Hold Precious Metals ER  
NASDAQ Commodity 3rd Hold Precious Metals TR  
NASDAQ Commodity Softs Index ER  
NASDAQ Commodity Softs Index TR  
NASDAQ Commodity 2nd Front Softs Index ER  
NASDAQ Commodity 2nd Front Softs Index TR  
NASDAQ Commodity 3rd Front Softs Index ER  
NASDAQ Commodity 3rd Front Softs Index TR

NQCI2HIMTR  
NQCI3HIMER  
NQCI3HIMTR  
NQCILSER  
NQCILSTR  
NQCI2LSER  
NQCI2LSTR  
NQCI3LSER  
NQCI3LSTR  
NQCI2HLSER  
NQCI2HLSTR  
NQCI3HLSER  
NQCI3HLSTR  
NQCIMEER  
NQCIMETR  
NQCI2MEER  
NQCI2METR  
NQCI3MEER  
NQCI3METR  
NQCI2HMEER  
NQCI2HMETR  
NQCI3HMEER  
NQCI3HMETR  
NQCIPEER  
NQCIPETR  
NQCI2PEER  
NQCI2PETR  
NQCI3PEER  
NQCI3PETR  
NQCI2HPEER  
NQCI2HPETR  
NQCI3HPEER  
NQCI3HPETR  
NQCIPMER  
NQCIPMTR  
NQCI2PMER  
NQCI2PMTR  
NQCI3PMER  
NQCI3PMTR  
NQCI2HPMER  
NQCI2HPMTR  
NQCI3HPMER  
NQCI3HPMTR  
NQCISOER  
NQCISOTR  
NQCI2SOER  
NQCI2SOTR  
NQCI3SOER  
NQCI3SOTR

NASDAQ Commodity 2nd Hold Softs Index ER  
NASDAQ Commodity 2nd Hold Softs Index TR  
NASDAQ Commodity 3rd Hold Softs Index ER  
NASDAQ Commodity 3rd Hold Softs Index TR

NQCI2HSOER  
NQCI2HSOTR  
NQCI3HSOER  
NQCI3HSOTR

## SINGLE COMMODITY INDEXES

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NASDAQ Commodity Aluminum Index ER	NQCIALER
NASDAQ Commodity Aluminum Index TR	NQCIALTR
NASDAQ Commodity 2nd Front Aluminum Index ER	NQCI2ALER
NASDAQ Commodity 2nd Front Aluminum Index TR	NQCI2ALTR
NASDAQ Commodity 3rd Front Aluminum Index ER	NQCI3ALER
NASDAQ Commodity 3rd Front Aluminum Index TR	NQCI3ALTR
NASDAQ Commodity 2nd Hold Aluminum Index ER	NQCI2HALER
NASDAQ Commodity 2nd Hold Aluminum Index TR	NQCI2HALTR
NASDAQ Commodity 3rd Hold Aluminum Index ER	NQCI3HALER
NASDAQ Commodity 3rd Hold Aluminum Index TR	NQCI3HALTR
NASDAQ Commodity Brent Crude Index ER	NQCICBER
NASDAQ Commodity Brent Crude Index TR	NQCICBTR
NASDAQ Commodity 2nd Front Brent Crude Index ER	NQCI2CBER
NASDAQ Commodity 2nd Front Brent Crude Index TR	NQCI2CBTR
NASDAQ Commodity 3rd Front Brent Crude Index ER	NQCI3CBER
NASDAQ Commodity 3rd Front Brent Crude Index TR	NQCI3CBTR
NASDAQ Commodity 2nd Hold Brent Crude Index ER	NQCI2HCBER
NASDAQ Commodity 2nd Hold Brent Crude Index TR	NQCI2HCBTR
NASDAQ Commodity 3rd Hold Brent Crude Index ER	NQCI3HCBER
NASDAQ Commodity 3rd Hold Brent Crude Index TR	NQCI3HCBTR
NASDAQ Commodity Cocoa Index ER	NQCICCER
NASDAQ Commodity Cocoa Index TR	NQCICCTR
NASDAQ Commodity 2nd Front Cocoa Index ER	NQCI2CCER
NASDAQ Commodity 2nd Front Cocoa Index TR	NQCI2CCTR
NASDAQ Commodity 3rd Front Cocoa Index ER	NQCI3CCER
NASDAQ Commodity 3rd Front Cocoa Index TR	NQCI3CCTR
NASDAQ Commodity 2nd Hold Cocoa Index ER	NQCI2HCCER
NASDAQ Commodity 2nd Hold Cocoa Index TR	NQCI2HCCTR
NASDAQ Commodity 3rd Hold Cocoa Index ER	NQCI3HCCER
NASDAQ Commodity 3rd Hold Cocoa Index TR	NQCI3HCCTR
NASDAQ Commodity Coffee Index ER	NQCIKCER
NASDAQ Commodity Coffee Index TR	NQCIKCTR
NASDAQ Commodity 2nd Front Coffee Index ER	NQCI2KCER
NASDAQ Commodity 2nd Front Coffee Index TR	NQCI2KCTR
NASDAQ Commodity 3rd Front Coffee Index ER	NQCI3KCER
NASDAQ Commodity 3rd Front Coffee Index TR	NQCI3KCTR
NASDAQ Commodity 2nd Hold Coffee Index ER	NQCI2HKCER
NASDAQ Commodity 2nd Hold Coffee Index TR	NQCI2HKCTR

NASDAQ Commodity 3rd Hold Coffee Index ER	NQCI3HKCER
NASDAQ Commodity 3rd Hold Coffee Index TR	NQCI3HKCTR
NASDAQ Commodity Copper Index ER	NQCICUER
NASDAQ Commodity Copper Index TR	NQCICUTR
NASDAQ Commodity 2nd Front Copper Index ER	NQCI2CUER
NASDAQ Commodity 2nd Front Copper Index TR	NQCI2CUTR
NASDAQ Commodity 3rd Front Copper Index ER	NQCI3CUER
NASDAQ Commodity 3rd Front Copper Index TR	NQCI3CUTR
NASDAQ Commodity 2nd Hold Copper Index ER	NQCI2HCUER
NASDAQ Commodity 2nd Hold Copper Index TR	NQCI2HCUTR
NASDAQ Commodity 3rd Hold Copper Index ER	NQCI3HCUER
NASDAQ Commodity 3rd Hold Copper Index TR	NQCI3HCUTR
NASDAQ Commodity Corn Index ER	NQCICER
NASDAQ Commodity Corn Index TR	NQCICTR
NASDAQ Commodity 2nd Front Corn Index ER	NQCI2CER
NASDAQ Commodity 2nd Front Corn Index TR	NQCI2CTR
NASDAQ Commodity 3rd Front Corn Index ER	NQCI3CER
NASDAQ Commodity 3rd Front Corn Index TR	NQCI3CTR
NASDAQ Commodity 2nd Hold Corn Index ER	NQCI2HCER
NASDAQ Commodity 2nd Hold Corn Index TR	NQCI2HCTR
NASDAQ Commodity 3rd Hold Corn Index ER	NQCI3HCER
NASDAQ Commodity 3rd Hold Corn Index TR	NQCI3HCTR
NASDAQ Commodity Cotton Index ER	NQCICTER
NASDAQ Commodity Cotton Index TR	NQCICTTR
NASDAQ Commodity 2nd Front Cotton Index ER	NQCI2CTER
NASDAQ Commodity 2nd Front Cotton Index TR	NQCI2CTTR
NASDAQ Commodity 3rd Front Cotton Index ER	NQCI3CTER
NASDAQ Commodity 3rd Front Cotton Index TR	NQCI3CTTR
NASDAQ Commodity 2nd Hold Cotton Index ER	NQCI2HCTER
NASDAQ Commodity 2nd Hold Cotton Index TR	NQCI2HCTTR
NASDAQ Commodity 3rd Hold Cotton Index ER	NQCI3HCTER
NASDAQ Commodity 3rd Hold Cotton Index TR	NQCI3HCTTR
NASDAQ Commodity Crude Oil Index ER	NQCICLER
NASDAQ Commodity Crude Oil Index TR	NQCICLTR
NASDAQ Commodity 2nd Front Crude Oil Index ER	NQCI2CLER
NASDAQ Commodity 2nd Front Crude Oil Index TR	NQCI2CLTR
NASDAQ Commodity 3rd Front Crude Oil Index ER	NQCI3CLER
NASDAQ Commodity 3rd Front Crude Oil Index TR	NQCI3CLTR
NASDAQ Commodity 2nd Hold Crude Oil Index ER	NQCI2HCLER

NASDAQ Commodity 2nd Hold Crude Oil Index TR	NQCI2HCLTR
NASDAQ Commodity 3rd Hold Crude Oil Index ER	NQCI3HCLER
NASDAQ Commodity 3rd Hold Crude Oil Index TR	NQCI3HCLTR
NASDAQ Commodity Feeder Cattle Index ER	NQCIFCER
NASDAQ Commodity Feeder Cattle Index TR	NQCIFCTR
NASDAQ Commodity 2nd Front Feeder Cattle Index ER	NQCI2FCER
NASDAQ Commodity 2nd Front Feeder Cattle Index TR	NQCI2FCTR
NASDAQ Commodity 3rd Front Feeder Cattle Index ER	NQCI3FCER
NASDAQ Commodity 3rd Front Feeder Cattle Index TR	NQCI3FCTR
NASDAQ Commodity 2nd Hold Feeder Cattle Index ER	NQCI2HFCER
NASDAQ Commodity 2nd Hold Feeder Cattle Index TR	NQCI2HFCTR
NASDAQ Commodity 3rd Hold Feeder Cattle Index ER	NQCI3HFCER
NASDAQ Commodity 3rd Hold Feeder Cattle Index TR	NQCI3HFCTR
NASDAQ Commodity Gasoil Index ER	NQCIGOER
NASDAQ Commodity Gasoil Index TR	NQCIGOTR
NASDAQ Commodity 2nd Front Gasoil Index ER	NQCI2GOER
NASDAQ Commodity 2nd Front Gasoil Index TR	NQCI2GOTR
NASDAQ Commodity 3rd Front Gasoil Index ER	NQCI3GOER
NASDAQ Commodity 3rd Front Gasoil Index TR	NQCI3GOTR
NASDAQ Commodity 2nd Hold Gasoil Index ER	NQCI2HGOER
NASDAQ Commodity 2nd Hold Gasoil Index TR	NQCI2HGOTR
NASDAQ Commodity 3rd Hold Gasoil Index ER	NQCI3HGOER
NASDAQ Commodity 3rd Hold Gasoil Index TR	NQCI3HGOTR
NASDAQ Commodity Gasoline Index ER	NQCIRBER
NASDAQ Commodity Gasoline Index TR	NQCIRBTR
NASDAQ Commodity 2nd Front Gasoline Index ER	NQCI2RBER
NASDAQ Commodity 2nd Front Gasoline Index TR	NQCI2RBTR
NASDAQ Commodity 3rd Front Gasoline Index ER	NQCI3RBER
NASDAQ Commodity 3rd Front Gasoline Index TR	NQCI3RBTR
NASDAQ Commodity 2nd Hold Gasoline Index ER	NQCI2HRBER
NASDAQ Commodity 2nd Hold Gasoline Index TR	NQCI2HRBTR
NASDAQ Commodity 3rd Hold Gasoline Index ER	NQCI3HRBER
NASDAQ Commodity 3rd Hold Gasoline Index TR	NQCI3HRBTR
NASDAQ Commodity Gold Index ER	NQCIGCER
NASDAQ Commodity Gold Index TR	NQCIGCTR
NASDAQ Commodity 2nd Front Gold Index ER	NQCI2GCER
NASDAQ Commodity 2nd Front Gold Index TR	NQCI2GCTR
NASDAQ Commodity 3rd Front Gold Index ER	NQCI3GCER
NASDAQ Commodity 3rd Front Gold Index TR	NQCI3GCTR

NASDAQ Commodity 2nd Hold Gold Index ER	NQCI2HGCER
NASDAQ Commodity 2nd Hold Gold Index TR	NQCI2HGCTR
NASDAQ Commodity 3rd Hold Gold Index ER	NQCI3HGCER
NASDAQ Commodity 3rd Hold Gold Index TR	NQCI3HGCTR
NASDAQ Commodity Heating Oil Index ER	NQCIHOER
NASDAQ Commodity Heating Oil Index TR	NQCIHOTR
NASDAQ Commodity 2nd Front Heating Oil Index ER	NQCI2HOER
NASDAQ Commodity 2nd Front Heating Oil Index TR	NQCI2HOTR
NASDAQ Commodity 3rd Front Heating Oil Index ER	NQCI3HOER
NASDAQ Commodity 3rd Front Heating Oil Index TR	NQCI3HOTR
NASDAQ Commodity 2nd Hold Heating Oil Index ER	NQCI2HHOER
NASDAQ Commodity 2nd Hold Heating Oil Index TR	NQCI2HHOTR
NASDAQ Commodity 3rd Hold Heating Oil Index ER	NQCI3HHOER
NASDAQ Commodity 3rd Hold Heating Oil Index TR	NQCI3HHOTR
NASDAQ Commodity HG Copper Index ER	NQCIHGER
NASDAQ Commodity HG Copper Index TR	NQCIHGTR
NASDAQ Commodity 2nd Front HG Copper Index ER	NQCI2HGER
NASDAQ Commodity 2nd Front HG Copper Index TR	NQCI2HGTR
NASDAQ Commodity 3rd Front HG Copper Index ER	NQCI3HGER
NASDAQ Commodity 3rd Front HG Copper Index TR	NQCI3HGTR
NASDAQ Commodity 2nd Hold HG Copper Index ER	NQCI2HHGER
NASDAQ Commodity 2nd Hold HG Copper Index TR	NQCI2HHGTR
NASDAQ Commodity 3rd Hold HG Copper Index ER	NQCI3HHGER
NASDAQ Commodity 3rd Hold HG Copper Index TR	NQCI3HHGTR
NASDAQ Commodity Kansas Wheat Index ER	NQCIKWER
NASDAQ Commodity Kansas Wheat Index TR	NQCIKWTR
NASDAQ Commodity 2nd Front Kansas Wheat Index ER	NQCI2KWER
NASDAQ Commodity 2nd Front Kansas Wheat Index TR	NQCI2KWTR
NASDAQ Commodity 3rd Front Kansas Wheat Index ER	NQCI3KWER
NASDAQ Commodity 3rd Front Kansas Wheat Index TR	NQCI3KWTR
NASDAQ Commodity 2nd Hold Kansas Wheat Index ER	NQCI2HKWER
NASDAQ Commodity 2nd Hold Kansas Wheat Index TR	NQCI2HKWTR
NASDAQ Commodity 3rd Hold Kansas Wheat Index ER	NQCI3HKWER
NASDAQ Commodity 3rd Hold Kansas Wheat Index TR	NQCI3HKWTR
NASDAQ Commodity Lead Index ER	NQCIPBER
NASDAQ Commodity Lead Index TR	NQCIPBTR
NASDAQ Commodity 2nd Front Lead Index ER	NQCI2PBER
NASDAQ Commodity 2nd Front Lead Index TR	NQCI2PBTR
NASDAQ Commodity 3rd Front Lead Index ER	NQCI3PBER

NASDAQ Commodity 3rd Front Lead Index TR	NQCI3PBTR
NASDAQ Commodity 2nd Hold Lead Index ER	NQCI2HPBER
NASDAQ Commodity 2nd Hold Lead Index TR	NQCI2HPBTR
NASDAQ Commodity 3rd Hold Lead Index ER	NQCI3HPBER
NASDAQ Commodity 3rd Hold Lead Index TR	NQCI3HPBTR
NASDAQ Commodity Lean Hogs Index ER	NQCILHER
NASDAQ Commodity Lean Hogs Index TR	NQCILHTR
NASDAQ Commodity 2nd Front Lean Hogs Index ER	NQCI2LHER
NASDAQ Commodity 2nd Front Lean Hogs Index TR	NQCI2LHTR
NASDAQ Commodity 3rd Front Lean Hogs Index ER	NQCI3LHER
NASDAQ Commodity 3rd Front Lean Hogs Index TR	NQCI3LHTR
NASDAQ Commodity 2nd Hold Lean Hogs Index ER	NQCI2HLHER
NASDAQ Commodity 2nd Hold Lean Hogs Index TR	NQCI2HLHTR
NASDAQ Commodity 3rd Hold Lean Hogs Index ER	NQCI3HLHER
NASDAQ Commodity 3rd Hold Lean Hogs Index TR	NQCI3HLHTR
NASDAQ Commodity Live Cattle Index ER	NQCILCER
NASDAQ Commodity Live Cattle Index TR	NQCILCTR
NASDAQ Commodity 2nd Front Live Cattle Index ER	NQCI2LCER
NASDAQ Commodity 2nd Front Live Cattle Index TR	NQCI2LCTR
NASDAQ Commodity 3rd Front Live Cattle Index ER	NQCI3LCER
NASDAQ Commodity 3rd Front Live Cattle Index TR	NQCI3LCTR
NASDAQ Commodity 2nd Hold Live Cattle Index ER	NQCI2HLCER
NASDAQ Commodity 2nd Hold Live Cattle Index TR	NQCI2HLCTR
NASDAQ Commodity 3rd Hold Live Cattle Index ER	NQCI3HLCER
NASDAQ Commodity 3rd Hold Live Cattle Index TR	NQCI3HLCTR
NASDAQ Commodity Natural Gas Index ER	NQCINGER
NASDAQ Commodity Natural Gas Index TR	NQCINGTR
NASDAQ Commodity 2nd Front Natural Gas Index ER	NQCI2NGER
NASDAQ Commodity 2nd Front Natural Gas Index TR	NQCI2NGTR
NASDAQ Commodity 3rd Front Natural Gas Index ER	NQCI3NGER
NASDAQ Commodity 3rd Front Natural Gas Index TR	NQCI3NGTR
NASDAQ Commodity 2nd Hold Natural Gas Index ER	NQCI2HNGER
NASDAQ Commodity 2nd Hold Natural Gas Index TR	NQCI2HNGTR
NASDAQ Commodity 3rd Hold Natural Gas Index ER	NQCI3HNGER
NASDAQ Commodity 3rd Hold Natural Gas Index TR	NQCI3HNGTR
NASDAQ Commodity Nickel Index ER	NQCINIER
NASDAQ Commodity Nickel Index TR	NQCINITR
NASDAQ Commodity 2nd Front Nickel Index ER	NQCI2NIER
NASDAQ Commodity 2nd Front Nickel Index TR	NQCI2NITR

NASDAQ Commodity 3rd Front Nickel Index ER	NQCI3NIER
NASDAQ Commodity 3rd Front Nickel Index TR	NQCI3NITR
NASDAQ Commodity 2nd Hold Nickel Index ER	NQCI2HNIER
NASDAQ Commodity 2nd Hold Nickel Index TR	NQCI2HNITR
NASDAQ Commodity 3rd Hold Nickel Index ER	NQCI3HNIER
NASDAQ Commodity 3rd Hold Nickel Index TR	NQCI3HNITR
NASDAQ Commodity Palladium Index ER	NQCIPAER
NASDAQ Commodity Palladium Index TR	NQCIPATR
NASDAQ Commodity 2nd Front Palladium Index ER	NQCI2PAER
NASDAQ Commodity 2nd Front Palladium Index TR	NQCI2PATR
NASDAQ Commodity 3rd Front Palladium Index ER	NQCI3PAER
NASDAQ Commodity 3rd Front Palladium Index TR	NQCI3PATR
NASDAQ Commodity 2nd Hold Palladium Index ER	NQCI2HPAER
NASDAQ Commodity 2nd Hold Palladium Index TR	NQCI2HPATR
NASDAQ Commodity 3rd Hold Palladium Index ER	NQCI3HPAER
NASDAQ Commodity 3rd Hold Palladium Index TR	NQCI3HPATR
NASDAQ Commodity Platinum Index ER	NQCIPLER
NASDAQ Commodity Platinum Index TR	NQCIPLTR
NASDAQ Commodity 2nd Front Platinum Index ER	NQCI2PLER
NASDAQ Commodity 2nd Front Platinum Index TR	NQCI2PLTR
NASDAQ Commodity 3rd Front Platinum Index ER	NQCI3PLER
NASDAQ Commodity 3rd Front Platinum Index TR	NQCI3PLTR
NASDAQ Commodity 2nd Hold Platinum Index ER	NQCI2HPLER
NASDAQ Commodity 2nd Hold Platinum Index TR	NQCI2HPLTR
NASDAQ Commodity 3rd Hold Platinum Index ER	NQCI3HPLER
NASDAQ Commodity 3rd Hold Platinum Index TR	NQCI3HPLTR
NASDAQ Commodity Robusta Coffee Index ER	NQCIRMER
NASDAQ Commodity Robusta Coffee Index TR	NQCIRMTR
NASDAQ Commodity 2nd Front Robusta Coffee Index ER	NQCI2RMER
NASDAQ Commodity 2nd Front Robusta Coffee Index TR	NQCI2RMTR
NASDAQ Commodity 3rd Front Robusta Coffee Index ER	NQCI3RMER
NASDAQ Commodity 3rd Front Robusta Coffee Index TR	NQCI3RMTR
NASDAQ Commodity 2nd Hold Robusta Coffee Index ER	NQCI2HRMER
NASDAQ Commodity 2nd Hold Robusta Coffee Index TR	NQCI2HRMTR
NASDAQ Commodity 3rd Hold Robusta Coffee Index ER	NQCI3HRMER
NASDAQ Commodity 3rd Hold Robusta Coffee Index TR	NQCI3HRMTR
NASDAQ Commodity Silver Index ER	NQCISIER
NASDAQ Commodity Silver Index TR	NQCISITR
NASDAQ Commodity 2nd Front Silver Index ER	NQCI2SIER



NASDAQ Commodity 2nd Front Silver Index TR	NQCI2SITR
NASDAQ Commodity 3rd Front Silver Index ER	NQCI3SIER
NASDAQ Commodity 3rd Front Silver Index TR	NQCI3SITR
NASDAQ Commodity 2nd Hold Silver Index ER	NQCI2HSIER
NASDAQ Commodity 2nd Hold Silver Index TR	NQCI2HSITR
NASDAQ Commodity 3rd Hold Silver Index ER	NQCI3HSIER
NASDAQ Commodity 3rd Hold Silver Index TR	NQCI3HSITR
NASDAQ Commodity Soybean Index ER	NQCISER
NASDAQ Commodity Soybean Index TR	NQCISTR
NASDAQ Commodity Soybean Meal Index ER	NQCISMER
NASDAQ Commodity Soybean Meal Index TR	NQCISMTR
NASDAQ Commodity Soybean Oil Index ER	NQCIBOER
NASDAQ Commodity Soybean Oil Index TR	NQCIBOTR
NASDAQ Commodity 2nd Front Soybean Index ER	NQCI2SER
NASDAQ Commodity 2nd Front Soybean Index TR	NQCI2STR
NASDAQ Commodity 2nd Front Soybean Meal Index ER	NQCI2SMER
NASDAQ Commodity 2nd Front Soybean Meal Index TR	NQCI2SMTR
NASDAQ Commodity 2nd Front Soybean Oil Index ER	NQCI2BOER
NASDAQ Commodity 2nd Front Soybean Oil Index TR	NQCI2BOTR
NASDAQ Commodity 3rd Front Soybean Index ER	NQCI3SER
NASDAQ Commodity 3rd Front Soybean Index TR	NQCI3STR
NASDAQ Commodity 3rd Front Soybean Meal Index ER	NQCI3SMER
NASDAQ Commodity 3rd Front Soybean Meal Index TR	NQCI3SMTR
NASDAQ Commodity 3rd Front Soybean Oil Index ER	NQCI3BOER
NASDAQ Commodity 3rd Front Soybean Oil Index TR	NQCI3BOTR
NASDAQ Commodity 2nd Hold Soybean Index ER	NQCI2HSER
NASDAQ Commodity 2nd Hold Soybean Index TR	NQCI2HSTR
NASDAQ Commodity 2nd Hold Soybean Meal Index ER	NQCI2HSMER
NASDAQ Commodity 2nd Hold Soybean Meal Index TR	NQCI2HSMTR
NASDAQ Commodity 2nd Hold Soybean Oil Index ER	NQCI2HBOER
NASDAQ Commodity 2nd Hold Soybean Oil Index TR	NQCI2HBOTR
NASDAQ Commodity 3rd Hold Soybean Index ER	NQCI3HSER
NASDAQ Commodity 3rd Hold Soybean Index TR	NQCI3HSTR
NASDAQ Commodity 3rd Hold Soybean Meal Index ER	NQCI3HSMER
NASDAQ Commodity 3rd Hold Soybean Meal Index TR	NQCI3HSMTR
NASDAQ Commodity 3rd Hold Soybean Oil Index ER	NQCI3HBOER
NASDAQ Commodity 3rd Hold Soybean Oil Index TR	NQCI3HBOTR
NASDAQ Commodity Spring Wheat Index ER	NQCIMWER
NASDAQ Commodity Spring Wheat Index TR	NQCIMWTR

NASDAQ Commodity 2nd Front Spring Wheat Index ER	NQCI2MWER
NASDAQ Commodity 2nd Front Spring Wheat Index TR	NQCI2MWTR
NASDAQ Commodity 3rd Front Spring Wheat Index ER	NQCI3MWER
NASDAQ Commodity 3rd Front Spring Wheat Index TR	NQCI3MWTR
NASDAQ Commodity 2nd Hold Spring Wheat Index ER	NQCI2HMWER
NASDAQ Commodity 2nd Hold Spring Wheat Index TR	NQCI2HMWTR
NASDAQ Commodity 3rd Hold Spring Wheat Index ER	NQCI3HMWER
NASDAQ Commodity 3rd Hold Spring Wheat Index TR	NQCI3HMWTR
NASDAQ Commodity Sugar Index ER	NQCISBER
NASDAQ Commodity Sugar Index TR	NQCISBTR
NASDAQ Commodity 2nd Front Sugar Index ER	NQCI2SBER
NASDAQ Commodity 2nd Front Sugar Index TR	NQCI2SBTR
NASDAQ Commodity 3rd Front Sugar Index ER	NQCI3SBER
NASDAQ Commodity 3rd Front Sugar Index TR	NQCI3SBTR
NASDAQ Commodity 2nd Hold Sugar Index ER	NQCI2HSBER
NASDAQ Commodity 2nd Hold Sugar Index TR	NQCI2HSBTR
NASDAQ Commodity 3rd Hold Sugar Index ER	NQCI3HSBER
NASDAQ Commodity 3rd Hold Sugar Index TR	NQCI3HSBTR
NASDAQ Commodity Wheat Index ER	NQCIWER
NASDAQ Commodity Wheat Index TR	NQCIWTR
NASDAQ Commodity 2nd Front Wheat Index ER	NQCI2WER
NASDAQ Commodity 2nd Front Wheat Index TR	NQCI2WTR
NASDAQ Commodity 3rd Front Wheat Index ER	NQCI3WER
NASDAQ Commodity 3rd Front Wheat Index TR	NQCI3WTR
NASDAQ Commodity 2nd Hold Wheat Index ER	NQCI2HWER
NASDAQ Commodity 2nd Hold Wheat Index TR	NQCI2HWTR
NASDAQ Commodity 3rd Hold Wheat Index ER	NQCI3HWER
NASDAQ Commodity 3rd Hold Wheat Index TR	NQCI3HWTR
NASDAQ Commodity White Sugar Index ER	NQCISWER
NASDAQ Commodity White Sugar Index TR	NQCISWTR
NASDAQ Commodity 2nd Front White Sugar Index ER	NQCI2SWER
NASDAQ Commodity 2nd Front White Sugar Index TR	NQCI2SWTR
NASDAQ Commodity 3rd Front White Sugar Index ER	NQCI3SWER
NASDAQ Commodity 3rd Front White Sugar Index TR	NQCI3SWTR
NASDAQ Commodity 2nd Hold White Sugar Index ER	NQCI2HSWER
NASDAQ Commodity 2nd Hold White Sugar Index TR	NQCI2HSWTR
NASDAQ Commodity 3rd Hold White Sugar Index ER	NQCI3HSWER
NASDAQ Commodity 3rd Hold White Sugar Index TR	NQCI3HSWTR
NASDAQ Commodity Zinc Index ER	NQCIZNER

NASDAQ Commodity Zinc Index TR	NQCIZNTR
NASDAQ Commodity 2nd Front Zinc Index ER	NQCI2ZNER
NASDAQ Commodity 2nd Front Zinc Index TR	NQCI2ZNTR
NASDAQ Commodity 3rd Front Zinc Index ER	NQCI3ZNER
NASDAQ Commodity 3rd Front Zinc Index TR	NQCI3ZNTR
NASDAQ Commodity 2nd Hold Zinc Index ER	NQCI2HZNER
NASDAQ Commodity 2nd Hold Zinc Index TR	NQCI2HZNTR
NASDAQ Commodity 3rd Hold Zinc Index ER	NQCI3HZNER
NASDAQ Commodity 3rd Hold Zinc Index TR	NQCI3HZNTR
NASDAQ Commodity Tin Index ER	NQCISNER
NASDAQ Commodity Tin Index TR	NQCISNTR
NASDAQ Commodity 2nd Front Tin Index ER	NQCI2SNER
NASDAQ Commodity 2nd Front Tin Index TR	NQCI2SNTR
NASDAQ Commodity 3rd Front Tin Index ER	NQCI3SNER
NASDAQ Commodity 3rd Front Tin Index TR	NQCI3SNTR
NASDAQ Commodity 2nd Hold Tin Index ER	NQCI2HSNER
NASDAQ Commodity 2nd Hold Tin Index TR	NQCI2HSNTR
NASDAQ Commodity 3rd Hold Tin Index ER	NQCI3HSNER
NASDAQ Commodity 3rd Hold Tin Index TR	NQCI3HSNTR

## APPENDIX B – Leveraged NASDAQ Commodity Indexes

Name	Index Factor	Code
<b>LEVERAGED SINGLE COMMODITY INDEXES</b>		
NASDAQ Commodity 3x Inverse Brent Crude Index ER	-3	NQCIS3CBER
NASDAQ Commodity 3x Leverage Brent Crude Index ER	3	NQCIL3CBER
NASDAQ Commodity Inverse Crude Oil Index ER	-1	NQCISCLER
NASDAQ Commodity 2x Inverse Crude Oil Index ER	-2	NQCIS2CLER
NASDAQ Commodity 2x Leverage Crude Oil Index ER	2	NQCIL2CLER
NASDAQ Commodity 3x Inverse Crude Oil Index ER	-3	NQCIS3CLER
NASDAQ Commodity 3x Leverage Crude Oil Index ER	3	NQCIL3CLER
NASDAQ Commodity Inverse Gold Index ER	-1	NQCISGCER
NASDAQ Commodity 2x Inverse Gold Index ER	-2	NQCIS2GCER
NASDAQ Commodity 2x Leverage Gold Index ER	2	NQCIL2GCER
NASDAQ Commodity 3x Inverse Gold Index ER	-3	NQCIS3GCER
NASDAQ Commodity 3x Leverage Gold Index ER	3	NQCIL3GCER
NASDAQ Commodity 3x Inverse Silver Index ER	-3	NQCIS3SIER
NASDAQ Commodity 3x Leverage Silver Index ER	3	NQCIL3SIER
NASDAQ Commodity 2x Inverse Natural Gas Index ER	-2	NQCIS2NGER
NASDAQ Commodity 2x Leverage Natural Gas Index ER	2	NQCIL2NGER
NASDAQ Commodity 3x Inverse Natural Gas Index ER	-3	NQCIS3NGER
NASDAQ Commodity 3x Leverage Natural Gas Index ER	3	NQCIL3NGER
NASDAQ Commodity Inverse Palladium Index ER	-1	NQCISPAER
NASDAQ Commodity 2x Leverage Palladium Index ER	2	NQCIL2PAER
NASDAQ Commodity 2x Inverse Silver Index ER	-2	NQCIS2SIER
NASDAQ Commodity 2x Leverage Silver Index ER	2	NQCIL2SIER
NASDAQ Commodity 3x Inverse HG Copper Index ER	-3	NQCIS3HGER
NASDAQ Commodity 3x Leverage HG Copper Index ER	3	NQCIL3HGER