

Nasdaq OMXS30 DUO Index Methodology

Index Description

The Nasdaq OMXS30 DUO Index aims to improve the risk profile of OMX Stockholm 30 Index (OMXS30) by allocating between the OMXS30 and the exchange rate of Gold to Swedish Krona (XAUSEK) and relying upon the historical correlation between equity and gold based on realized volatility of the OMXS30 and XAUSEK.

Index Calculation

The Nasdaq OMXS30 DUO Index is a modified market capitalization weighted index. The value of the Index equals the aggregate value of the Index share weights, also known as the Index Shares, of each of the Index Securities multiplied by each such security's Last Sale Price¹, and divided by the divisor of the Index. The divisor serves the purpose of scaling such aggregate value to a lower order of magnitude which is more desirable for reporting purposes. If trading in an Index Security is halted on its primary listing market, the most recent Last Sale Price for that security is used for all index computations until trading on such market resumes. Likewise, the most recent Last Sale Price is used if trading in a security is halted on its primary listing market before the market is open. The Index began on May 14, 2018 at a base value of 1,000.00.

The formula for index value is as follows:

Aggregate Adjusted Market Value/Divisor

The formula for the divisor is as follows:

Market Value after Adjustments/Market Value before Adjustments) X Divisor before Adjustments

Three versions of the Index are calculated in SEK.

- The price return index (OMXDUO) is ordinarily calculated without regard to cash dividends on Index Securities.
- The total return index (OMXDUOT) reinvests cash dividends on the ex-date.
- The net total return index (OMXDUON) reinvests cash dividends on the ex-date based on the securities incorporation withholding rate.

The Indexes are calculated during the trading day and are disseminated every 15 second seconds. The Indexes are calculated five (5) days a week, Monday through Friday, provided that neither OMXS30 nor XAUSEK have a trading holiday, during European hours.

¹ For purposes of this document, Last Sale Price refers to the last regular way trade reported on such security's Index Market. The Index Market is the listing market for which prices are received and used by Nasdaq in the Index calculation and generally will represent the most liquid trading market of the Index Security. If a security does not trade on its Index Market on a given day or the Index Market has not opened for trading, the most recent last sale price from the Index Market (adjusted for corporate actions, if any) is used. For securities where Nasdaq is the Index Market, the Last Sale Price may be the Nasdaq Official Closing Price (NOCP) when Nasdaq is closed.

Eligibility Criteria

The Index holds one or both of the following Indexes based on the Index Evaluation Criteria:

- OMX Stockholm 30 Index (OMXS30);
- Gold/Sweden Krona 1630GMT Spot Rate Index (SEK) (XAUSEK1630GMTSEK).

Index Evaluation

The Index is evaluated daily for determination of net allocation to eligible assets. The above Eligibility Criteria are applied using available data with one day lag.

On a daily basis, the Index allocates between an Equity Component - Nasdaq OMXS30 referred to as "Equity" (the "Dynamic Asset") and a Gold Component - XAUSEK referred to as "Gold" (the "Defensive Asset").

Index levels are calculated as weighted returns of the Net Allocation of the Nasdaq OMXS30 (Net_Exposure_Equity) and XAUSEK (Net_Exposure_Gold) as follows:

$$Index(t) = Index(t-1) \times \{ Net_Exposure_Equity(i-1) \times Equity(i)/Equity/(i-1) + Net_Exposure_Gold(i-1) \times Gold(i)/Gold/(i1) \}$$

where Equity(i) = Nasdaq OMXS30 levels on calculation date and
Gold(i) = XAUSEK levels on calculation date

Net_Exposure_Equity and Net_Exposure_Gold are calculated as defined in the Index Rebalancing section.

Index Rebalancing

The Index is rebalanced daily. The Index allocates between an Equity Component – OMXS30 is referred to as "Equity" (the "Dynamic Asset") and a Gold Component – XAUSEK - referred to as "Gold" (the "Defensive Asset").

Step 1: Determine Gross Allocations

- Gross exposure to the equity component starts at 100%.
- The Index will add exposure to the Gold Component when its realised correlation versus the equity component is negative. The objective is to determine the optimal allocation where the risk of the resulting Index is in line with the Equity Component.
- Under that constraint the resulting allocation to the Gold Component is equal to:

$$Min(100\%, Max(0\%, (-2 \times Correlation \times Equity Realized Volatility / Gold Realised Volatility)))$$

- In other words, the lower the correlation and the lower gold's volatility is compared to equity's volatility, the higher the allocation to gold.
- All correlation and volatility metrics are observed over a rolling window of 10 business days of weekly returns with a one day lag.

Step 2: Determine Net Allocations

- Weights are normalised between the Equity Component and the Gold Component to sum to 100%.
- The allocation to the Equity Component is floored at 50% and the allocation to Gold is capped at 50%.

Volatility and Correlation Calculations

- Correlations are calculated as:

*(Sum product of weekly rolling log returns of gold and equity) / square root of (sum squared of weekly rolling log equity returns * sum squared of weekly rolling log gold returns)*

- Volatilities are calculated as:

*square root of ((52/10) * sum squared of weekly rolling log returns)*

All calculations are done with a one day trading lag.

Nasdaq may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure Index integrity.

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