

INDEX METHODOLOGY

INTRODUCTION

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This document sets forth the methodology for the Northern Trust Global Quality Real Estate Index.

The Index is calculated and disseminated by Refinitiv, and had an inception date of October 15, 2013 at a base index value of 1000.

OVERVIEW

Northern Trust Global Quality Real Estate Index

The Northern Trust Global Quality Real Estate Index is designed to maximize exposure to qualityⁱ, valueⁱⁱ and momentumⁱⁱⁱ factors, within a universe of companies operating in the real estate sector. The proprietary Northern Trust quality factor (henceforth referenced as the Northern Trust Quality Score or NTQS) is used to identify companies that exhibit strength in profitability, management expertise and cash flow, while value and momentum factors are included to help provide long term capital appreciation and also mitigate risk.

INDEX ELIGIBILITY

In order to be eligible for inclusion in the Northern Trust Global Quality Real Estate Index, a security must be a constituent of the Northern Trust Global Real Estate Index.

Companies classified as engaging in the following activities, as defined by the Refinitiv Business Classification^{iv} scheme, are excluded from the index:

Mortgage REITs: Companies engaged in investment and ownership of property mortgages.

Real Estate Services (NEC)^v: Companies engaged in providing real estate brokerage and agency services, real estate appraisal services, consulting services and management services.

DETAILED METHODOLOGY

The construction of the Index begins with a universe of eligible securities (defined in “Index Eligibility” section). Eligible constituent weights are then optimized to maximize exposure to the following factors:



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- Quality, as defined by our proprietary scoring model (NTQS)
- Value
- Momentum

The main objective of the optimization is to maximize exposure to the composite factor (Northern Trust Quality Score+ value +momentum) while minimizing the overall risk of the index relative to the Northern Trust Global Real Estate Index, adjusted for eligibility above^{vi}, as measured by standard risk models^{vii}. In addition to that main objective, systematic risk is managed during the optimization utilizing several constraints. These constraints are found below (bounds shown as relative weightings to the Northern Trust Global Real Estate Index, adjusted for security eligibility, unless noted otherwise):

- Security level constraint (+/- 5%)
- Liquidity^{viii} constraint: to limit a constituent's maximum weight in the index to its weight in the eligible universe, when the constituent's liquidity score in the eligible universe falls in the bottom decile
- Industry group (+/- 4%), country (+/- 4%), region (+/- 4%), and style factors (+/-25%)
- Turnover constraint (to limit the maximum turnover to approximately 12% on any reconstitution date)

All of the systematic risk constraints are placed in the constraint hierarchy so when a solution is not feasible due to hard constraints, a relaxed solution can be found.

Any changes to this methodology will be announced to clients at least sixty (60) days in advance prior to becoming effective.

RECONSTITUTION & REBALANCING

The Northern Trust Global Quality Real Estate Index is reconstituted quarterly (i.e. February, May, August, and November) and adjusted intra-period only in connection with errors, securities' eligibility, exchange connectivity, float changes and corporate actions, including, but not limited to, initial public offerings and spin-offs.

The index's quarterly reconstitution occurs on the last business day of the month in which the U.S. equity markets are open for a full day of trading^{ix}, and becomes effective immediately after the close. The Northern Trust Global Quality Real Estate Index reserves the right to postpone each reconstitution date for up to one week with prior client notification of such a postponement.

All changes to constituents and weightings will be announced to clients at least two (2) days prior to reconstitution or rebalancing and with definitive weights after the close of the reconstitution or rebalancing date before the following day's market opening.



INDEX MAINTENANCE / CORPORATE ACTION-DRIVEN CHANGES

The Indexes will adopt all corporate action related policies and procedures used by Refinitiv. A complete list of Refinitiv's methodology is available by request at NT_Index_Services@ntrs.com

Disclaimer: Returns of the indexes do not typically reflect the deduction of investment management fees, trading costs or other expenses. It is not possible to invest directly in an index. Indexes are the property of their respective owners, all rights reserved.

ⁱ The core components of the proprietary NTQS are based on quantitative ranking of various metrics obtained from company filings. These scores have three components: Management Efficiency (eg. corporate finance activities), Profitability (e.g. assess the reliability and the sustainability of financial performance), and Cash Flow (e.g. cash flow generation)

ⁱⁱ Value is defined as the current worth of a company relative to its own historical value, book value, or valuation versus peers. Commonly used valuation metrics include: book-to-market value, price-to-earnings ratios, and enterprise value to earnings before, interest taxes, depreciation and amortization. Our optimization sequence seeks to maximize exposure to securities trading at lower valuations.

ⁱⁱⁱ Momentum is defined as the slope of a stock's price measured over a given period of time. Our optimization sequence seeks to maximize exposure to securities with positive price momentum.

^{iv} The Refinitiv Business Classifications (TRBC) core classification process defers to the dominant business segment's revenue contribution in order to drive scheme categorization – followed by assets and then operating profit if inconclusive - but it may also consider profitability, asset utilization, and market perception when appropriate. For more information on Refinitiv Business Classifications, please visit <http://thomsonreuters.com/business-classification/>

^v Companies that have registered as real estate investment trusts (REITs or international equivalent) under local tax code, and are not engaged in mortgage related activities, will be eligible for inclusion in the index.

^{vi} After removing ineligible securities, The Northern Trust Global Real Estate Index is then re-weighted based on the float adjusted market capitalization.

^{vii} Risk models are a statistical application which helps provide predictive risk estimates, by quantitatively de-constructing individual equity price movements and attributing those movements to common factors (e.g. Sector, industry, style, etc). The use of standard risk models in our process provides an additional layer of constraints on our optimization outcome, and assists in reducing the index's overall active risk exposure to any one single factor.

^{viii} Liquidity of an asset measures the extent to which that asset can be bought or sold in the market without impacting the price of the asset. Examples of some commonly used liquidity measures include but are not limited to: Share Turnover (number of shares traded divided by the total number of shares outstanding), Average Daily Volume (number of shares traded divided by a period of time), and Bid-Ask Spread (the difference or spread between the price a buyer is willing to pay for an asset, and the price a seller is willing to accept for an asset).



^{ix} Per the holiday calendar located at nyse.com

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