

INDEX METHODOLOGY

INTRODUCTION

Northern Trust

50 South La Salle Street
Chicago, Illinois 60603
Nt_index_services@ntrs.com
northerntrust.com

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

The Index is currently calculated and disseminated by Thomson Reuters.

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.

ELIGIBLE SECURITIES

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 Thomson Reuters Business Classification^{iv} scheme, are excluded from the index:

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

Other Real Estate Services^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 “Eligible Securities” section). Eligible constituent weights are then optimized to maximize exposure to the following factors:

- 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%)
- Industry group (+/- 4%), country (+/- 4%), region (+/- 4%), and style factors (+/-25%)
- Turnover constraint (to limit the maximum turnover to approximately 12% on any rebalance date)

All of the systematic risk constraints are placed in the constraint hierarchy so when a solution is infeasible due to hard constraints, a relaxed solution can be found.

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

REBALANCING AND RECONSTITUTION

The Northern Trust Global Quality Real Estate Index is reconstituted quarterly 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 indexes are reconstituted in February, May, August, and November on the last business day of the month in which the U.S. equity markets are open for trading, and becomes effective immediately after the close. The Northern Trust Global Quality Index reserves the right to postpone each reconstitution date for up to one week with prior public notice of such a postponement.

All changes to constituents and weightings will be announced to the public 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 Thomson Reuters. A complete list of Thomson Reuters' methodology is available [online](#), and also on 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. Score components include: Management rankings (eg. corporate finance activities), Profitability rankings (e.g. assess the reliability and the sustainability of financial performance), and Cash Factors (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} Thomson Reuters 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 Thomson Reuters 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.