

# **MSCI INFRASTRUCTURE INDEXES METHODOLOGY**

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## **1 INTRODUCTION**

The MSCI Infrastructure Indexes are free float-adjusted market capitalization indexes designed to track the performance of global listed infrastructure companies, by capturing broad and diversified investment opportunities across telecommunication, utilities, energy, transportation and social infrastructure sectors. They aim to serve as a relevant benchmark and research tool for investment in the listed infrastructure asset universe.

## 2 CONSTRUCTING THE MSCI INFRASTRUCTURE INDEXES

The MSCI Infrastructure Indexes are constructed from the applicable MSCI country and composite indexes (“Parent Index”). Parent Indexes can be MSCI Global Standard Indexes or any other size segment index built under the MSCI Global Investable Market Indexes Methodology. Securities of companies that belong to a specific set of eligible sub-industries derived from the Global Industry Classification Standard (GICS®) are selected to create the MSCI Infrastructure Indexes.

### 2.1 INFRASTRUCTURE SECTORS<sup>1</sup> AND CORRESPONDING GICS® SUB-INDUSTRIES

The infrastructure indexes are divided into five infrastructure sectors namely 1) Telecommunication Infrastructure, 2) Utilities, 3) Energy Infrastructure, 4) Transportation Infrastructure and 5) Social Infrastructure.

The table below lists the corresponding sub-industries based on the GICS®:

| Infrastructure Sector            | GICS® Code | GICS® Sub-Industry                    | Description  |
|----------------------------------|------------|---------------------------------------|--|
| Telecommunication Infrastructure | 50101010   | Alternative Carriers                  | Providers of communications and high-density data transmission services primarily through a high bandwidth/fiber-optic cable network.                                    |
|                                  | 50101020   | Integrated Telecommunication Services | Operators of primarily fixed-line telecommunications networks and companies providing both wireless and fixed-line telecommunications services not classified elsewhere. |
|                                  | 50102010   | Wireless Telecommunication Services   | Providers of primarily cellular or wireless telecommunication services   |
| Utilities                        | 55101010   | Electric Utilities                    | Companies that produce or distribute electricity. Includes both nuclear and non-nuclear facilities.  |
|                                  | 55102010   | Gas Utilities                         | Companies whose main charter is to distribute and transmit natural and manufactured gas.   |
|                                  | 55103010   | Multi-Utilities                       | Utility companies with significantly diversified   |

<sup>1</sup> Infrastructure Sectors are not official GICS® sectors but aggregated subsets of GICS sub-industries based on the MSCI Infrastructure Indexes Methodology.

|                               |          |                                    |   |
|-------------------------------|----------|------------------------------------|---|
|                               |          |                                    | activities in addition to core Electric Utility, Gas Utility and/or Water Utility operations.   |
|                               | 55104010 | Water Utilities                    | Companies that purchase and redistribute water to the end-consumer. Includes large-scale water treatment systems.   |
| Energy Infrastructure         | 10102040 | Oil & Gas Storage & Transportation | Companies engaged in the storage and/or transportation of oil, gas and/or refined products. Includes diversified midstream natural gas companies facing competitive markets, oil and refined product pipelines, coal slurry pipelines and oil & gas shipping companies. |
| Transportation Infrastructure | 20305010 | Airport Services                   | Operators of airports and companies providing related services.   |
|                               | 20305020 | Highways & Railtracks              | Owners and operators of roads, tunnels and railtracks.  |
|                               | 20305030 | Marine Ports & Services            | Owners and operators of marine ports and related services.  |
| Social Infrastructure         | 25302010 | Education Services                 | Companies providing educational services, Includes, private universities, correspondence teaching, providers of educational seminars, educational materials and technical education.  |
|                               | 35102020 | Health Care Facilities             | Owners and operators of health care facilities, including hospitals, nursing homes, rehabilitation centers.   |

### **3 MAINTAINING THE MSCI INFRASTRUCTURE INDEXES**

#### **3.1 QUARTERLY AND SEMI-ANNUAL INDEX REVIEWS**

Coinciding with the quarterly and semi-annual index reviews of the Parent Index, the MSCI Infrastructure Indexes are rebalanced on the last business day of February, May, August and November.

The pro forma indexes are announced five business days before the effective date.

#### **3.2 ONGOING EVENT RELATED AND GICS® CHANGES**

In general, the MSCI Infrastructure Indexes follow the event maintenance of the corresponding Parent Indexes. Changes in the Parent Index affecting securities in the relevant sub-industries are reflected simultaneously in the MSCI Infrastructure Indexes. The only exceptions are highlighted below.

##### **3.2.1 CORPORATE EVENTS**

There will be no early inclusion of new securities to the index, except when the new security results from an event affecting an existing constituent (e.g., spin off, merger). Otherwise, a new addition to the Parent Index outside the regular index reviews will be added to the MSCI Infrastructure Indexes at the next regularly scheduled Index Review. For example, an early inclusion to the Parent Index following an IPO in September would only be considered for inclusion to the MSCI Infrastructure Indexes at the following November Semi-Annual Index Review. Likewise, if a security experiences a GICS® change into the infrastructure sectors due to a corporate event, it will only be considered for inclusion to the MSCI Infrastructure Indexes during the next regularly scheduled Index Review.

If a security is deleted from the Parent Index due to a corporate event, it will be removed from the MSCI Infrastructure Indexes at the effective date of the event. Similarly, if a security experiences a GICS® change out of the infrastructure sectors following a corporate event, it will be removed from the MSCI Infrastructure Indexes at the effective date of the event.

##### **3.2.2 GICS® CHANGES**

Regular monthly and annual GICS® reviews may result in the migration of a security's GICS® sub-industry into or out of the infrastructure sectors. Newly eligible securities after such a GICS® change will only be considered for inclusion in the MSCI Infrastructure Indexes during the following regularly scheduled Index Review. Any existing constituent moving out of the

infrastructure sector will be deleted from the MSCI Infrastructure Indexes at the effective date of the GICS® change (as of the close of the last business day of the given month).

## APPENDIX I: MSCI INFRASTRUCTURE SECTOR CAPPED INDEXES

In addition to the free float-adjusted market capitalization weighting scheme, a sector capped version is also made available for investors who desire a more balanced sector distribution.

The MSCI Infrastructure Sector Capped Indexes follow similar index construction rules to the market capitalization weighted indexes except that the weights of the Telecommunication Infrastructure and Utilities sectors are each fixed at one-third of the index, and the Energy, Transportation and Social Infrastructure sectors have a combined weight of the remaining one-third. Constituent weights within the respective sector are based on free float-adjusted market capitalization.

| Infrastructure Sector                                     | Weight |
|---|--------|
| Telecommunication Infrastructure                          | 1/3    |
| Utilities   | 1/3    |
| Energy, Transportation & Social Infrastructure (Combined) | 1/3    |

During the regularly scheduled Index Review, the individual sector weights within the sector capped indexes will be recapped to one-third. The remaining maintenance rules are similar to the market capitalization weighted indexes.

Exhibit 1 provides the sector weight of the MSCI ACWI Infrastructure Index and MSCI ACWI Infrastructure Sector Capped Index following the November 2007 Semi-Annual Index Review of the Parent Index.



**Exhibit 1: Sector Weight of MSCI ACWI Infrastructure Index and MSCI ACWI Infrastructure Sector Capped Index**

| Infrastructure Sector            | Weight in MSCI ACWI Infrastructure Index | Weight in MSCI ACWI Infrastructure Sector Capped Index |
|----------------------------------|--|--|
| Telecommunication Infrastructure | 53.94%                                   | 33.33%   |
| Utilities                        | 40.21%                                   | 33.33%   |
| Energy Infrastructure            | 2.59%                                    | 14.76%   |
| Transportation Infrastructure    | 2.62%                                    | 14.90%   |
| Social Infrastructure            | 0.64%                                    | 3.67%  |
| <b>Total</b>                     | <b>100.00%</b>                           | <b>100.00%</b>   |

*Data as of December 3, 2007*

Note that the sector weights in between two quarterly reviews may deviate from one-third due to price movement or on-going corporate events on existing constituents.

## APPENDIX II: INDEX PERFORMANCE

Exhibit 2 provides a performance comparison of the MSCI ACWI Infrastructure Index and MSCI ACWI Infrastructure Sector Capped Index with the MSCI ACWI Index.

**Exhibit 2: Performance of MSCI Infrastructure Indexes and MSCI ACWI Index (December 2002 to December 2007)**

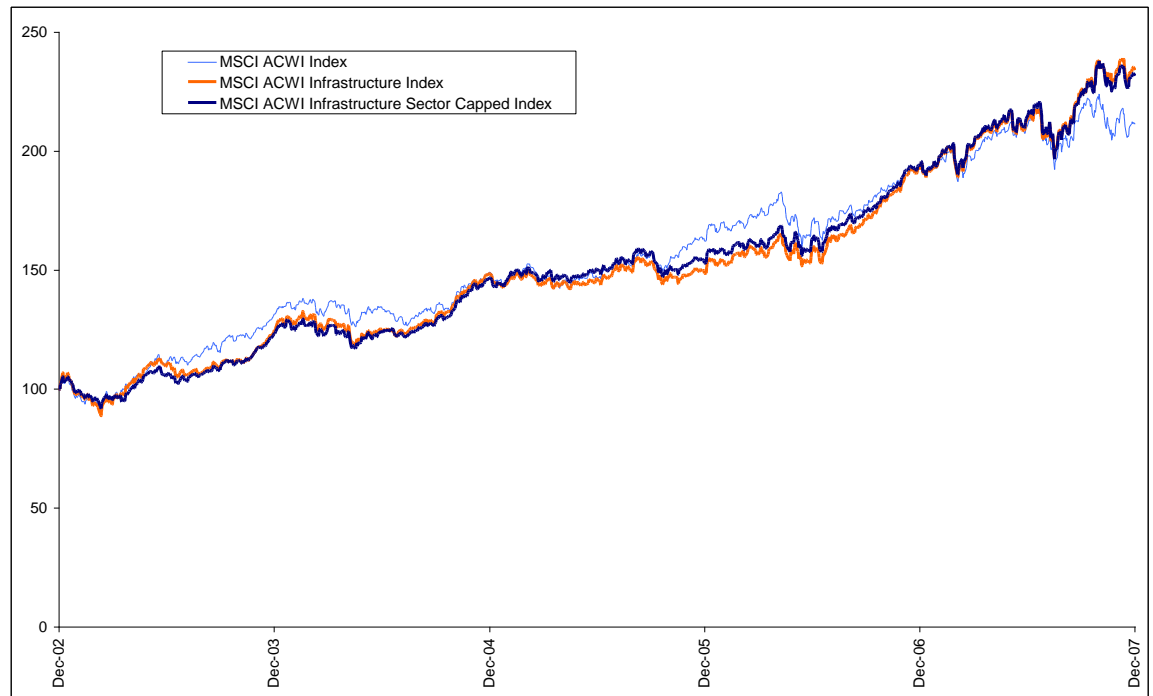


Exhibit 3 provides the annualized index risk and return for the three indexes.

**Exhibit 3: Annualized Risk and Return: December 2002 to December 2007**

|  | Return | Risk <sup>1</sup> |
|--|--------|-------------------|
| MSCI ACWI Index                              | 16.1%  | 9.5%              |
| MSCI ACWI Infrastructure Index               | 18.5%  | 10.0%             |
| MSCI ACWI Infrastructure Sector Capped Index | 18.3%  | 8.8%              |

*Note: <sup>1</sup> Risk is measured as annualized standard deviation of monthly returns*

**The following sections have been modified since January 2008:**

- 2.1. Infrastructure Sectors<sup>1</sup> and Corresponding GICS® Sub-industries
- 3.2. Ongoing Event Related and GICS® Changes

**The following sections have been modified since April 2008:**

Section 3: Maintaining the MSCI Infrastructure Indexes

- Updated section 3.1 to include the announcement date of the pro forma indexes.

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