Enhancements to the MSCI 10/40 Equity Indices

Consultation Document
April 2005
Introduction to the consultation

- MSCI is consulting with investors on various approaches to enhance the MSCI 10/40 Indices methodology and to understand the implications of adopting the UCITS III directive (Undertakings for Collective Investment in Transferable Securities) on investors’ needs and their investment process.

- The main proposed enhancements to the MSCI 10/40 Indices include the following:
  1. Address the revised investment constraints of the UCITS III directive by introducing the concept of group entities.
  2. Adopt a dynamic rebalancing algorithm to reduce index turnover in some configurations.
  3. Adapt the treatment of some corporate events to reduce the frequency of rebalancing and hence index turnover.
  4. Accommodate indices with insufficient number of constituents to fully achieve the 10/40 constraints in order to calculate “10/40 like” Indices by using more relaxed investment restrictions.

- This presentation provides details of the various approaches to these proposed enhancements.

- Importantly, this consultation may or may not lead to the adoption, in whole or in part, of the enhancements described herein and may not lead to any change to the current MSCI 10/40 Indices methodology.
I. UCITS III
UCITS III - Introduction

- UCITS III is the European legislation that regulates certain funds sold across the European Union (EU) member states.

- Introduced on February 13, 2002, the legislation consists of two main directives, namely the product directive and the management company directive.

- Thereafter, several EU member states implemented UCITS III in their national laws by August 13, 2003 and effectively began applying these measures by February 13, 2004.

- However, funds established under the original UCITS directive can elect either to comply with UCITS III, or to continue with the original UCITS directive for a transitional period ending February 13, 2007.
Introduction - UCITS III

- Under the UCITS III product directive, some of the changes implemented are summarized below:

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ All investment restrictions assessed at the <strong>issuer level</strong>, namely:</td>
<td>♦ Introduction of an additional group concept. All investment restrictions will be additionally assessed at the <strong>group entity level</strong>. The maximum weight of <strong>securities issued by a single group entity</strong> cannot exceed 20% of the total assets of a UCITS fund.</td>
</tr>
<tr>
<td>♦ The maximum weight of <strong>securities of any single issuer</strong> cannot exceed 5% of the total assets of a UCITS fund, except that the weighting in a single issuer can be increased to 10% provided that the sum of the weights of all <strong>issuers</strong> representing more than 5% of the assets of a UCITS fund cannot collectively exceed 40%.</td>
<td>♦ Introduction of a relaxation for UCITS whose investment policy is to replicate the composition of a stock or debt securities index which is recognised by national regulators:</td>
</tr>
<tr>
<td></td>
<td>♦ The maximum weight of securities issued by a single issuer can be raised to 20% of assets</td>
</tr>
<tr>
<td></td>
<td>♦ The 20% level can be raised to 35% if justified by exceptional market conditions.</td>
</tr>
</tbody>
</table>
Impact on 10/40 Indices - UCITS III

- Following the introduction of a group entity concept under UCITS III, investment restrictions have to be assessed at the group entity level in addition to the issuer level.

- UCITS III refers to the directive on consolidated accounts, or international accounting standards, for the definition of “group”.
  - The consolidation of accounts is done for subsidiaries, in which the parent company:
    - holds more than 50% of the voting rights;
    - has the right to appoint/remove a majority of its board of directors;
    - has the right to exercise a dominant influence over the financial and operating policies.

- In practice, the new group entity concept raises difficulties in its implementation because the information on group entities may be incomplete or often unavailable.
Proposal - Investment Restrictions

- The table below summarizes MSCI’s proposal in response to the UCITS III directive

<table>
<thead>
<tr>
<th>Current MSCI 10/40 Indices Methodology</th>
<th>Proposed MSCI 10/40 Indices Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>The weight of any <strong>single issuer</strong> cannot exceed 10% of the 10/40 Index.</td>
<td>No change.</td>
</tr>
<tr>
<td>The sum of the weights of all issuers representing more than 5% cannot exceed 40% of the 10/40 Index.</td>
<td>No change.</td>
</tr>
<tr>
<td>No investment limit at the group entity level.</td>
<td>The sum of the weights of all <strong>securities of all issuers within one single group entity</strong> cannot exceed 20% of the 10/40 Index.</td>
</tr>
<tr>
<td>No definition of group entity.</td>
<td>If a listed issuer X owns at least 50% of the shares outstanding of at least one of the share classes of another listed issuer Y, X and Y combined will be considered as a group entity.</td>
</tr>
</tbody>
</table>
MSCI proposes to use a simplified definition of “group”, which may not fully match the definition of the UCITS III directive, but will capture the most important group entities on a consistent basis.

- For example, MSCI will not consider voting rights or dominant influence – rather than share ownership – to consolidate group companies because such information can be difficult to track or quantify and often involves subjective judgment rather than objective and obtainable data.

- MSCI’s more narrow definition results in a straightforward and measurable method to identify and maintain group entities.
Proposal – Investment Restrictions Maintenance

The table below summarizes MSCI’s proposed maintenance procedure enhancement to the 10/40 Indices in response to the UCITS III directive.

<table>
<thead>
<tr>
<th>Current MSCI 10/40 Indices Methodology</th>
<th>Proposed MSCI 10/40 Indices Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebalancing takes place as of the close of the day when the index weights break the 10/40 restrictions.</td>
<td>No change.</td>
</tr>
<tr>
<td>Companies forming group entities are not monitored.</td>
<td>Group companies as per MSCI’s definition are monitored and changes to group companies are reflected in the indices as part of the regularly scheduled quarterly/annual index reviews at the end of February, May, August and November.</td>
</tr>
</tbody>
</table>
II. Dynamic rebalancing
Introduction - Dynamic Rebalancing

- Under the current MSCI 10/40 Indices methodology, the indices are rebalanced following a sequential 3 step process as follows:

1) The weight of any issuer which has a weight above 9% in the parent index is capped at 9%.

2) If the combined weight of all issuers having a weight above 4.5% represents more than 36%, then the weight of any issuer with a weight between 4.5% and 9% is reduced in the same proportion until the 36% limit is reached.

3) If the combined weight of all issuers having a weight above 4.5% represents less than 36%, then the weight of any issuer with a weight between 4.5% and 9% is increased to reach the 36% limit, if possible.

- The above steps are effective for indices that have a relatively steep distribution of security market capitalization.

- However, they are relatively less effective for indices with a flat distribution of security market capitalization, where there may be numerous securities with weight above 4.5%.

- In such circumstances, the current methodology systematically forces the weight of securities between 4.5% and 9% down when, in fact, increasing some of their weight could produce a more adequate result in terms of index turnover.
Proposal - Dynamic Rebalancing

Under the proposed methodology, the 3 sequential steps will be replaced by a dynamic step which tests all combinations of A, B, C and D, where the weight of issuers in B and D are decreased or increased by a proportional factor.

Looking for a solution with the:
• lowest weight differential / turnover
• lowest maximum relative weight increase

A: issuers capped at 9%
B: issuers > 4.5% (A+B=Large Cap)
C: issuers capped at 4.5% (Mid Cap)
D: issuers < 4.5% (Small Cap)
Increased Concentration in Largest Securities under new proposal...

... but lower overall difference to parent

Overall Difference to Parent = 5.72% for Current
Overall Difference to Parent = 3.56% for Proposed

Potential liquidity concerns exacerbated by current method
Rationale – Dynamic Rebalancing

- MSCI’s proposal for dynamic rebalancing will provide the following benefits:
  - A more uniform methodology (one algorithm regardless of distribution)
  - Increased similarity to parent index (smaller sum of differences): more representative
  - Lower turnover: more replicable
  - Fewer liquidity concerns for smaller issuers
  - More transparent in objective

- MSCI’s proposal for dynamic rebalancing may pose the following drawbacks:
  - Potentially greater concentration in largest securities in extreme cases
  - Potentially more complex to implement
III. Treatment of Corporate Events
Introduction – Treatment of Corporate Events

- Under the current methodology, the 10/40 Indices are immediately rebalanced to the parent index whenever a constituent is added to the parent index.

- Additions can result from IPOs and other early inclusions such as mergers or spin-offs.

- Whenever there is new market capitalization entering the parent index (for example in the case of IPOs or mergers between index and non-index constituents), it is difficult to determine at which weight this new market capitalization should be added to the 10/40 indices without rebalancing to the parent index.

- However, in cases of spin-offs or mergers between constituents of the same parent index, there is no new market capitalization entering the parent index and the post-event market capitalization reflects a continuation of existing constituents’ market capitalization.
Proposal - Enhanced Treatment of Corporate Events

- A distinction will be made between additions that cause new market capitalization to enter the indices versus those where no new market capitalization enter the indices.

- If a constituent spins-off a part of its business and if this spun-off entity will be added to the parent index within the same country and industry, it will also be added to the 10/40 indices at a fraction of the spinning off entity’s weight in the 10/40 indices.

- Similarly, if two constituents within the same country or industry merge, the newly merged entity will be added to the 10/40 indices at the cumulative weight of the 2 former constituents in the 10/40 indices adjusted for any cash that might exit the indices.

- Thereafter, the 10/40 indices are only rebalanced to the current index if the 10/40 constraints are broken.
Proposal - Enhanced Treatment of Corporate Events

- The 10/40 indices will continue to be immediately rebalanced to the parent index when there is new market capitalization added to the parent index. Such new market capitalization will be added in the following cases:

  - IPO or other early inclusion of non-index constituents resulting in new market capitalizations being added to the index
  - Acquisition of a constituent company by a non-constituent company
  - Merger between a constituent company and a non-constituent company
  - Changes in GICS classification (in the case of sector indices)
Rationale - Enhanced Treatment of Corporate Events

- The proposed enhanced treatment of corporate events recognizes the difference between additions that change the underlying weights of the parent indices versus those that are a continuation of the existing underlying weights.

- As a result, this enhanced treatment helps to reduce index turnover by reducing the number of rebalancings to the parent index.

- Following this, enhanced rebalancings to the parent index would be restricted only to quarterly index reviews and additions resulting in new market capitalization entering the parent indices.
IV. Accommodating Indices with Insufficient Constituents
Introduction – Indices with Insufficient Constituents

- Under the current methodology, there must be at least 19 issuers in the parent index, as a 10/40 index using a 10% buffer (9/36/4.5) cannot comply with these limits if it has less than 19 issuers.

- This poses a problem as 10/40 indices are discontinued as soon as the number of constituents in the parent index falls below 19.

<table>
<thead>
<tr>
<th>No. of constituents</th>
<th>Weight in 10/40 Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9%</td>
</tr>
<tr>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>4</td>
<td>9%</td>
</tr>
<tr>
<td>5</td>
<td>4.3%</td>
</tr>
<tr>
<td>6</td>
<td>4.3%</td>
</tr>
<tr>
<td>7</td>
<td>4.3%</td>
</tr>
<tr>
<td>8</td>
<td>4.3%</td>
</tr>
<tr>
<td>9</td>
<td>.</td>
</tr>
<tr>
<td>10</td>
<td>.</td>
</tr>
<tr>
<td>11</td>
<td>.</td>
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<td>12</td>
<td>.</td>
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<td>17</td>
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<td>18</td>
<td>.</td>
</tr>
<tr>
<td>19</td>
<td>.</td>
</tr>
</tbody>
</table>

\[ \{36\% \} \]

\[ \{64\% \} \]
Proposal & Rationale – Indices with Insufficient Number of Constituents

- Under the proposed methodology, the minimum number of constituents required to calculate “10/40 like” indices decreases from 19 to 15 with more relaxed constraints such as 13/4.5/52.

- Customized branding will apply to these indices as they are not subject to the 10/40 constraints.
Proposal & Rationale – Indices with Insufficient Number of Constituents

<table>
<thead>
<tr>
<th>Cap 1</th>
<th>Cap 2</th>
<th>Minimum constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>40</td>
<td>19</td>
</tr>
<tr>
<td>10</td>
<td>50</td>
<td>18</td>
</tr>
<tr>
<td>10</td>
<td>60</td>
<td>17</td>
</tr>
<tr>
<td>10</td>
<td>70</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>80</td>
<td>15</td>
</tr>
</tbody>
</table>

With 10% Buffer

<table>
<thead>
<tr>
<th>Cap 1</th>
<th>Cap 2</th>
<th>Minimum constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>11</td>
<td>44</td>
<td>17</td>
</tr>
<tr>
<td>12</td>
<td>48</td>
<td>16</td>
</tr>
<tr>
<td>13</td>
<td>52</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>56</td>
<td>15</td>
</tr>
</tbody>
</table>

Proposed: With 8% Buffer
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