The global listed infrastructure universe is vast, accounting for assets worth more than US$1.7 trillion. The sector allows investors to diversify across various infrastructure sectors and geographies, and provides ample scope for different approaches to be taken by fund managers. There are several infrastructure indices which listed infrastructure funds can be benchmarked against.

It is worth noting that there are no guidelines for defining the listed infrastructure universe, and the asset class is still developing. Some stocks have only been listed in the last decade, reflecting privatisations or corporate restructuring. As well as this, business models are still evolving post privatisation. Some airports, for example, are shifting from aeronautical to retailing and property development, while energy storage companies are moving their businesses away from volatile refineries to contracted import terminals.

As a result, investors’ understanding of the assets and their management, along with their expectations of the asset class, are still evolving. This can make choosing the most appropriate benchmark index a challenging prospect.

This paper provides an overview of the various listed infrastructure benchmarks and a rationale for the preferred benchmark used by us, the UBS Global Infrastructure & Utilities 50-50 Index.
Overview of various benchmarks

There are three key benchmarks used by global listed infrastructure funds today.

- UBS Global Infrastructure & Utilities 50-50 Index
- S&P Global Infrastructure Index
- Dow Jones Brookfield Global Infrastructure Index

**UBS Global Infrastructure & Utilities 50-50 Index**

The UBS Global Infrastructure & Utilities 50-50 Index is a derivative of the UBS Developed Infrastructure & Utilities Index. The infrastructure sector and the utilities sector each have a 50% weighting in terms of free-float market capitalisation, which removes the skew towards utilities found in the UBS Developed Infrastructure & Utilities Index. Constituents of the index are all listed in developed markets.

**S&P Global Infrastructure Index**

The S&P Global Infrastructure Index provides exposure to 75 companies from around the world that represent the listed infrastructure universe. To create diversified exposure across the global listed infrastructure market, the index consists of three distinct infrastructure segments — Transportation, Utilities and Energy. There is no quality screen, with the 20 largest infrastructure companies by market capitalisation from each segment included in the index. An additional 15 emerging market companies are also included, giving it the highest emerging market exposure of the three indices.

**Dow Jones Brookfield Global Infrastructure Index**

The index aims to measure the stock performance of companies worldwide that are owners and operators of infrastructure assets. To be included in the index, a company must derive over 70% of its estimated cash flows from the following infrastructure sectors: Airports; Toll Roads; Ports; Communications; Electricity Transmission & Distribution; Oil & Gas Storage & Transportation; Water; and Diversified (multiple sectors).

The table below summarises the characteristics of these indices in more detail:

<table>
<thead>
<tr>
<th></th>
<th>UBS Global Infrastructure &amp; Utilities 50-50 Index</th>
<th>S&amp;P Global Infrastructure Index</th>
<th>Dow Jones Brookfield Global Listed Infrastructure Index</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Release date</strong></td>
<td>2007</td>
<td>2005</td>
<td>2008</td>
</tr>
<tr>
<td><strong>Number of companies</strong></td>
<td>100</td>
<td>74</td>
<td>93</td>
</tr>
<tr>
<td><strong>Market capitalisation of index</strong></td>
<td>US$1,650 billion</td>
<td>US$1,100 billion</td>
<td>USD $860 billion</td>
</tr>
<tr>
<td><strong>Sector splits</strong></td>
<td>45% Utilities, 18% Communications, 13% Railroads, 12% Toll Roads, 6% Energy, 6% Airports / Ports</td>
<td>40% Utilities, 24% Airports / Ports, 21% Energy, 12% Toll Roads, 3% Railroads, 0% Communications</td>
<td>47% Energy, 30% Utilities, 13% Communications, 5% Toll Roads, 5% Airports / Ports, 0% Railroads 0%</td>
</tr>
<tr>
<td><strong>Geographic splits</strong></td>
<td>41% North America, 31% Europe, 13% Japan, 6% UK, 9% ROW</td>
<td>41% North America, 28% Europe, 8% UK, 3% Japan, 20% ROW</td>
<td>60% North America, 15% Europe 11% UK, 2% Japan, 12% ROW</td>
</tr>
<tr>
<td><strong>Index weight of largest company</strong></td>
<td>Capped at 5%</td>
<td>Capped at 5%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Index weight of 10 largest companies</strong></td>
<td>37%</td>
<td>34%</td>
<td>42%</td>
</tr>
<tr>
<td><strong>% emerging markets</strong></td>
<td>2%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Perceived strengths</strong></td>
<td>Sensible spread of sectors &amp; geographies</td>
<td>Sensible spread of sectors</td>
<td>Sensible spread of sectors</td>
</tr>
<tr>
<td></td>
<td>Large market capitalisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Notable characteristics</strong></td>
<td>Includes passenger rail &amp; mobile towers</td>
<td>Large non-infrastructure exposure</td>
<td>Closer to bonds than equities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Highly correlated to equities</td>
<td></td>
</tr>
<tr>
<td><strong>Observed weaknesses</strong></td>
<td>Higher Japanese weighting</td>
<td>Most volatile index</td>
<td>Highly concentrated index</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smallest number of companies in index</td>
<td>Not representative of global opportunity set (eg 15% Canada but only 3% Japan)</td>
</tr>
</tbody>
</table>

How does their performance compare?

The chart below shows the performance of the three leading benchmarks over time. Whilst past performance is not necessarily indicative of future results, this chart highlights the strong absolute performance of the asset class over the past 10 years.

It also illustrates how differently these benchmarks can perform. As bond yields fell between 2011 and mid-2013, the Dow Jones Brookfield index, which is made up primarily of bond yield sensitive stocks (i.e., regulated utilities and energy pipelines), outperformed relative to both the UBS and S&P benchmarks. We would expect the Dow Jones Brookfield index to underperform relative to the three other benchmarks were bond yields to continue to rise.

We believe bond yield-sensitive sectors are fully valued, as indicated by a projected P/E ratio for the Dow Jones Brookfield index of 20.6x, compared to 17.5x for the S&P index and 16.8x for the UBS index.

Global Listed Infrastructure benchmark comparison

Note: Total returns from 1 May 2003 to 31 January 2014.
Source: Bloomberg, as at 28 February 2014.

Which is the most widely used benchmark?

The two most widely used infrastructure benchmarks are the UBS Global Infrastructure & Utilities 50-50 Index and the S&P Global Infrastructure Index.

Each index imposes a cap on individual infrastructure sectors, in order to reduce the influence of the utilities sector. Each index also puts a 5% cap on the weighting of any single stock within the index.

The S&P index has a higher weighting in oil and gas pipeline companies and a lower weighting in Japanese infrastructure companies than the UBS index. The UBS index constituents include rail companies and mobile tower companies, which the S&P index does not.

The UBS index also has a lower exposure to emerging markets than the S&P index. Infrastructure companies in emerging regions tend to be more exposed to the risk of cyclical slowdown, as well as to country, political and currency risks. There is therefore a broader spectrum of potential returns for an infrastructure portfolio containing emerging market assets than one that invests solely in developed markets.

What is First State Investments’ preferred benchmark?

Fund managers can take different views in relation to the role of their chosen benchmark. Some align their funds quite closely to the benchmark. Others take a broader view towards risk and, whilst being aware of the benchmark, tend to take active positions. These positions are typically based more on the intrinsic value of the stocks involved rather than on their prominence within the index.

At First State Investment, we do not allow a benchmark to dictate our universe. Consideration is given to diversification by sector and country and the size and liquidity of the company. While we are aware of company weightings within the benchmark, we do not use this...
as a measure of investment holding. Instead we focus on companies with high barriers to entry, pricing power, sustainable growth and predictable cash flows.

There is no perfect benchmark but we believe the UBS Global Infrastructure & Utilities 50-50 Index is the most appropriate benchmark for this asset class. The index has been screened by UBS for infrastructure characteristics and is balanced between infrastructure growth and utilities income, which is important for performance throughout a full economic cycle.

**Why invest in Global Listed Infrastructure?**

An investment in global listed infrastructure may be suitable for investors who are looking for a relatively defensive investment during times of market volatility. It has delivered higher returns with lower volatility than general equities. In fact, over the last 10 years global listed infrastructure securities have delivered an annual compound return of 10%, compared to 7% for global equities.

Listed infrastructure funds invest in the shares of publicly listed companies that own and operate infrastructure assets. The main global listed infrastructure asset types are toll roads, ports and airports, rail companies, oil and gas storage and transportation companies, communication towers and satellites, and water, gas and electricity utilities.

Traditionally, institutional investors’ exposure to infrastructure assets was achieved by investing in unlisted funds, which own or invest directly in infrastructure assets. Listed infrastructure funds provide an alternative way for investors to access the investment opportunities within the asset class. Listed infrastructure funds have better liquidity and are able to achieve greater levels of diversification than an unlisted infrastructure fund.

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