Determining an Appropriate Benchmark for Private Real Estate Investments

by Amy Bulger

Real estate and other alternative investments play an important role for institutional investors. Alternatives have the potential to enhance total returns and provide diversification benefits for an investment portfolio otherwise comprised purely of publicly-traded securities. In order to assess the benefits of adding private real estate to a broad-based equity portfolio, it is necessary to choose an appropriate benchmark to assess performance of the asset class. This white paper examines the process for selecting benchmarks broadly and the challenges of applying that process to private real estate portfolios.

Benchmarks Assess Performance and Risk

An appropriate benchmark is an important factor in assessing the return and risk of a given portfolio or fund manager strategy, as it allows investors to compare the performance of that portfolio or strategy over time against a market standard. According to Investment Property Databank, Ltd. (IPD), a subsidiary of Morgan Stanley Capital International (MSCI), investors generally look for five key characteristics in a benchmark:

1. **Transparent**—the names and weights of individual investments/securities in the benchmark are clearly known
2. **Investable**—investors have the option to forgo active management and hold the benchmark
3. **Measurable**—the performance of a benchmark can be calculated on a frequent basis
4. **Appropriate**—the benchmark should be consistent with the investment style of the portfolio being measured
5. **Specified in advance**—the benchmark should be chosen prior to the beginning of an evaluation period

Real estate investors, searching for a suitable benchmark, face the challenge of determining the transparency as well as the investable universe for the asset class. For example, a public market investor can easily purchase the individual stocks that comprise a chosen benchmark. The names and weights of each stock are readily available and can be purchased by multiple owners. Real estate poses a challenge in that every asset is unique and cannot be easily purchased by multiple owners.

Real estate performance cannot be measured on a daily basis as is possible with portfolios of publicly-traded securities. Given the uniqueness of each asset and the private nature of the ownership,
a public market with daily trading does not exist for real estate. Private real estate prices are determined periodically by third-party appraisals. These appraisals are subjective and based on the judgment of professionals in the industry. When there is a lack of comparable properties sold in the geographic submarket (or even when comparable property sales are available), appraised values may not reflect the actual price a potential buyer may be willing to pay.

Another key difference between public markets and private real estate is liquidity, the ability to quickly and easily sell an investment. Public market securities offer investors the benefit of liquidity by having organized exchanges, such as the New York Stock Exchange, as a means to buy or sell their ownership shares. The exchanges are regulated by both government agencies and the securities industry to ensure fairness and transparency of information. Private real estate transactions are conducted through negotiations between the buyer and seller where full disclosure of relevant information may not be publicly available.

Despite these challenges, benchmarks that represent a reasonable proxy for the performance of institutional real estate investments exist and can provide investors with important information about the quality of their investments. Adding further complexity to the benchmark selection process is the fact that different methodologies are used to calculate performance returns. The most popular calculation methods used by real estate investors are performed at the property level, at the overarching fund level, and by making transaction-based comparisons.

**Property Level Indices**

The most widely adopted private real estate benchmark is the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index, commonly known as the NPI, established in 1978. The NPI measures valuation changes of a pool of about 7,000 privately held, U.S.-based commercial real estate properties owned by institutional investors with a total value of approximately $340 billion.¹ NPI returns are calculated quarterly for each property and then aggregated to create a total return for the index. The properties in this index are primarily defined as “core,” meaning the buildings are high-quality, multi-tenanted and located in major metropolitan areas. Core properties derive the majority of their investment return from rental income as they are generally fully leased.

Although the NPI provides a fairly broad measure of the performance of institutional real estate, it has several shortcomings. It is not investable (i.e., an investor does not have the ability to purchase the NPI) and it assumes that all the underlying properties are unleveraged (i.e., they are unburdened by debt). Because debt is typically used in the acquisition of real estate, the NPI tends to either overstate or understate actual performance attained by investors depending on the market cycle. The difference was painfully apparent during the 2008 financial crisis when investors experienced a large negative disparity in the performance of their levered real estate assets compared to the performance of the NPI.

Institutional real estate investors commonly use the NPI plus a premium (usually 1% to 3%) to evaluate the performance of their real estate portfolios and compensate for the higher risk and expected returns of funds that use leverage.

**Fund Level Indices**

In 2005, NCREIF developed the NCREIF Open-Ended Core Diversified Equity Index (ODCE, informally called “Odyssey”), which tracks the historical and current performance of 31 commingled institutionally-held funds.² Open-end real estate funds have no defined termination date and provide liquidity to investors by offering the ability to purchase or redeem shares monthly or quarterly. The majority of assets within the ODCE also comprise a subset of the NPI. As such, ODCE and NPI are highly correlated (see chart). The key difference is that performance of the ODCE is based on net asset value at the fund level, which reflects the use of leverage and any cash held by the manager. The funds that comprise the index follow a similar strategy; each fund has a majority of its holdings

---

¹ NCREIF.org
² Ibid
invested in core properties. The ODCE benchmark is therefore well-suited for the subset of institutions whose real estate exposure is purely through core open-end funds.

Townsend Group, a large institutional real estate consultant, has partnered with NCREIF to develop an index for non-core real estate funds. The NCREIF Townsend Fund Returns index, launched in 2008, reports internal rates of return (IRR) and multiples of invested capital (MOIC) by vintage (or inception) year for closed-end, value-added and opportunistic funds. Closed-end funds have a finite life span, typically seven to 10 years, and do not offer investors any interim liquidity options. The term “value-added” describes real estate funds which acquire properties that are usually less than 80% leased and require capital investment to make the building more attractive to prospective tenants. “Opportunistic” refers to high-risk real estate strategies which typically invest in fully vacant buildings, new construction or exotic strategies that involve non-standard property types, such as single-family housing, self-storage or resort lodging.

As of March 31, 2013, the NCREIF Townsend value-added fund universe comprised 31 managers and 64 individual strategies. The opportunistic universe comprised 115 managers with 223 individual strategies. The NCREIF Townsend Fund Returns index contains wide coverage of U.S.-denominated closed-end funds, but there are some significant drawbacks. Reporting by managers is voluntary and returns are calculated based on the reported performance of the funds, rather than calculated from the actual underlying property cash flows which are considered to be a more accurate reflection of returns.

Preqin, a London-based research and consulting firm, has gained recognition in the industry over the last few years by collecting data on fund manager performance through Freedom of Information Act (FOIA) requests made to public pension funds that are investors in private real estate funds. Preqin offers indices for private equity and private real estate investments, which compare managers to their industry peers in given strategies.

Transaction-Based Indices
Transaction-based indices are based on actual property sale prices recorded in transactions, rather than a hypothetical appraised value. These types of indices are not typically used as benchmarks because they represent only a small portion of the commercial real estate universe. However, institutional investors can use these as a proxy for property prices and as a reference point for transaction activity in the market. Transaction frequency and market liquidity are directly related. As transaction activity increases, property prices are typically high or rising, and transaction activity will decline when prices are falling. Investors may use this information to determine regional and sector pricing indicators for their real estate portfolio.

The first published transaction-based index of U.S.-domiciled real estate was developed by the MIT Center for Real Estate in cooperation with NCREIF and is known as the TBI. This index is computed based on the sales price of properties that comprise the property-based NPI. The TBI tends to be a leading indicator compared to the NPI, as values determined by appraisals typically lag the market’s assessment of value based on actual transactions. The index has been updated on a quarterly basis since February 2006.
Summary of Common Real Estate Benchmarks

<table>
<thead>
<tr>
<th>Index</th>
<th>Strategy</th>
<th>Performance</th>
<th>History</th>
<th>Universe Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCREIF NPI</td>
<td>Core</td>
<td>Quarterly time series total rate of return on an unlevered basis</td>
<td>1978</td>
<td>Approximately 7,000 properties</td>
</tr>
<tr>
<td>NCREIF ODCE</td>
<td>Core</td>
<td>Quarterly time series rate of return based on actual fund cash flows</td>
<td>1978</td>
<td>31 funds</td>
</tr>
<tr>
<td>NCREIF/Townsend</td>
<td>Value-added</td>
<td>Based on manager reported fund level returns</td>
<td>1996</td>
<td>31 managers/64 strategies</td>
</tr>
<tr>
<td></td>
<td>Opportunistic</td>
<td></td>
<td></td>
<td>115 managers/223 strategies</td>
</tr>
<tr>
<td>Preqin</td>
<td>U.S. Value-added</td>
<td>Based on quarterly cash flow transactions</td>
<td>December 2000</td>
<td>Year 2012: 21 funds</td>
</tr>
<tr>
<td></td>
<td>U.S. Opportunistic</td>
<td></td>
<td></td>
<td>Year 2012: 6 funds</td>
</tr>
<tr>
<td>NCREIF TBI</td>
<td>Transaction-based</td>
<td>Equal weighted transaction based on a regression model</td>
<td>2006</td>
<td>Properties sold from the NPI</td>
</tr>
<tr>
<td>Moody’s REAL CPPI</td>
<td>Transaction-based</td>
<td>Transaction based calculation based on a regression model</td>
<td>2000</td>
<td>Properties sold from the RCA database</td>
</tr>
</tbody>
</table>

Moody’s REAL Commercial Property Index (CPPI) is another transaction-based index that uses the “repeated-sales pricing” method. This index is designed to track the change in price on an individual property that has been purchased and then subsequently sold. This method is property-specific and does not attempt to account for physical differences between competing properties or varying locations. The index is published monthly for national level data and quarterly for each of the four major property types: office, apartment, industrial and retail.

> Wespath engages private real estate managers that follow a value-added strategy. The managers have the ability to attain excess returns through physical property improvements and active management. Over long periods, Wespath expects our value-added real estate managers will return low double-digit net returns.

Wespath’s Real Estate Program

Wespath investors participate in private real estate investments indirectly through the U.S. Equity and the International Equity Funds. Wespath targets a 5% exposure to real estate in each fund. This modest exposure is due to the challenges of private real estate’s illiquid nature. For internal benchmarking purposes, Wespath uses the following objectives for performance of its private real estate funds:

- **Domestic Private Real Estate**
  - NPI + 300 basis points

- **International Private Real Estate**
  - FTSE NAREIT (ex-US) Index⁶ + 300 basis points

In addition to providing enhanced returns and diversification benefits to the U.S. Equity and International Equity Funds, real estate typically exhibits lower volatility than other assets classes. This is due to the long term nature of leasing at the property level. Leasing changes occur gradually as market conditions fluctuate and are reflected in valuations which are largely dependent on the periodic appraisal method discussed earlier in the paper. Wespath engages private real estate managers that follow a value-added strategy.

⁶ In the international private real estate universe there are even fewer available benchmarks for a global property portfolio. Wespath chooses to benchmark against the Financial Times London Stock Exchange National Association of Real Estate Investment Trusts (FTSE NAREIT) Index which tracks the performance of both publicly-listed real estate companies and REITs in developed and emerging markets.
strategy. The managers have the ability to attain excess returns through physical property improvements and active management. Over long periods, Wespath expects our value-added real estate managers will return low double-digit net returns.

**Conclusion**

Institutional investors have a variety of benchmark choices for their private real estate investments. Unfortunately, none of these benchmark choices meets all five key characteristics of a public market benchmark. However, the benchmark universe continues to expand as investors search for the data most relevant to their individual portfolios. Wespath believes that benchmark transparency will gradually improve as property owners are incentivized to report property level returns in order to measure their property holdings performance against similar properties in a benchmark. For most investors, the key criterion in determining a real estate benchmark is to ensure that it is an accurate reflection of long-term relative performance.

Wespath provides UMC-affiliated institutional investors with access to well-managed investment programs that historically have delivered competitive performance while honoring United Methodist Social Principles. Wespath is the investments division of the General Board of Pension and Health Benefits of The United Methodist Church, a century-old institution with a well-regarded reputation for delivering returns aligned with values. Wespath is an established investment manager with approximately $20 billion in assets under management.

Our name honors John Wesley, the founder of Methodism and a leader in establishing social principles that outline the tenets of socially responsible business practices. Wespath reflects this heritage, along with the idea of putting clients on the right path to financial growth with a commitment to values-driven investing.