Does the NCREIF Property Index reflect current market values?

With a long series of improvements to the index, the NCREIF Property Index now provides an accurate representation of current market values within the constraints of the private real estate asset class. Increased appraisal quality and timeliness for the underlying properties has come from improved reporting standards and data availability as well as more efficient appraisal processes and industry professional standards. Today, the NPI is an index well suited for use with duETS.

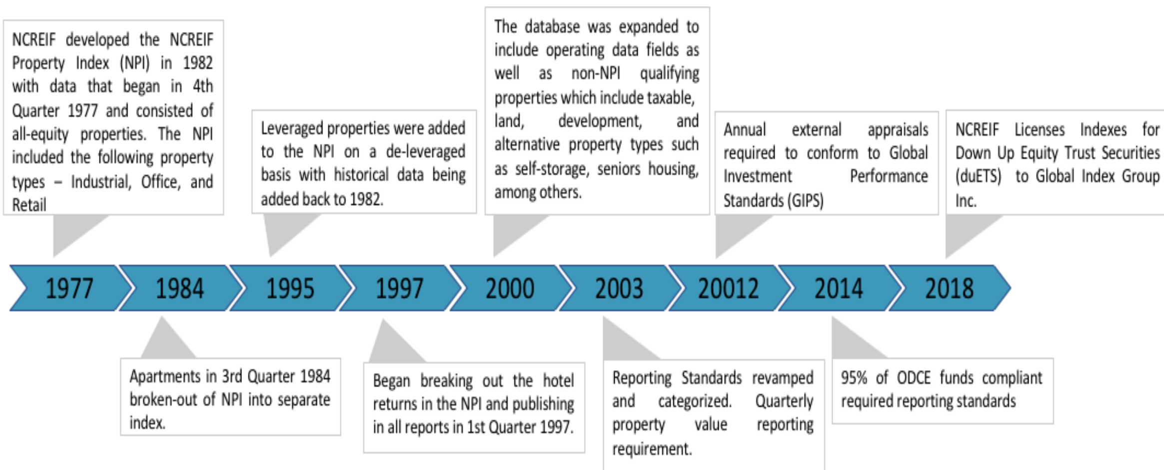
Background

The flagship property index of NCREIF is the NPI (NCREIF Property Index), which is a quarterly index tracking the performance of the core institutional property markets in the U.S.

The historical NCREIF database used to calculate the NCREIF Property Index (NPI) goes back to the 4th Quarter 1977 and as of the 1st Quarter 2018 consists of approximately 26,000 properties historically, and 7,553 current properties. NCREIF collects 67 data fields each quarter that consist of financial information such as Market Value, NOI, Debt, and Cap Ex, as well as descriptor data such as Property Type and Subtype, number of floors, Square Footage, Number of Units, and Location.

The objective of the NPI is to provide a historical measurement of the property-level returns to increase the understanding of, and lend credibility to, real estate as an institutional investment asset class. The NPI is used in a variety of ways including research on the drivers of real estate performance, calculation of risk measures, benchmarking investment managers, attribution and risk analysis.

History



Quality and Timeliness

In the distant past, the NPI suffered from smoothing and lagging due to the partial adjustment in the index caused by the stale valuations, and artificial seasonality in the index returns due to bunching of the reappraisals in the fourth calendar quarter. For this reason, the NPI was not a as reliable as a quarterly index but rather behaved something more like an annual index partially updated each quarter, being more up-to-date in the fourth quarter than other times. At the beginning of its history, the index was released 45 days after quarter end. Then in the 1990s, the index release date was moved up to 30 days after quarter end and now it is 25 days.

However, events such as the property value decline in the early 1990s and the growing professionalization of the industry through organizations such as NCREIF and PREA and the implementation of the NCREIF/PREA Real Estate Information Standards and Global Investment Performance Standards ("GIPS") have vastly improved the quality and timeliness of property valuations used within the index. Starting in 2003, there has been an ongoing NCREIF/PREA Reporting Standards process continuously looking for ways to improve the industry standards. This has led to significant improvements in the quality and timeliness of the valuation data used in the index, virtually eliminating the smoothing effect and appraisal lag.

In parallel, the Appraisal Institute and the Appraisal Foundation have ongoing processes to improve that portion of the industry. And the Accounting Standards (USGAAP) have substantially changed their rules for accounting for real estate assets. In total, the real estate industry has made significant progress, and this has led to better indexes and data.

The NPI publishing schedule is the 25th day after the end of the quarter based on data collected from NCREIF members. Unlike stock indexes commonly used in the equity markets, real estate indexes are unlikely to be calculated at the same frequency as stock indexes due to timely availability of the required underlying data. Improvements in the index methodology, appraisal methods, and data collection make the published index value more suitable and a good representation of the underlying assets' value at the end of each quarter.

NPI Returns in Early 1990s and During the Financial Crisis

During the early 1990s, the real estate market had a significant downturn as shown in the chart (1) below. The fund managers contributing to the NCREIF database were slow to update the property values of their portfolios to reflect the changing market conditions; this resulted in the NPI showing significant lag in the real market to market values. The NPI in the early 1990s should have been more volatile than it exhibited in the chart.

In contrast, and due to the improvements in more timely, higher quality data as a result of the implementation of the NCREIF/PREA Reporting standards and the GIPS standards, the chart correctly reflects the volatility of the 2007-2009 financial crisis.

During this time the NPI was more sensitive to changing market conditions and confirms higher data quality.

Annual NPI Return History

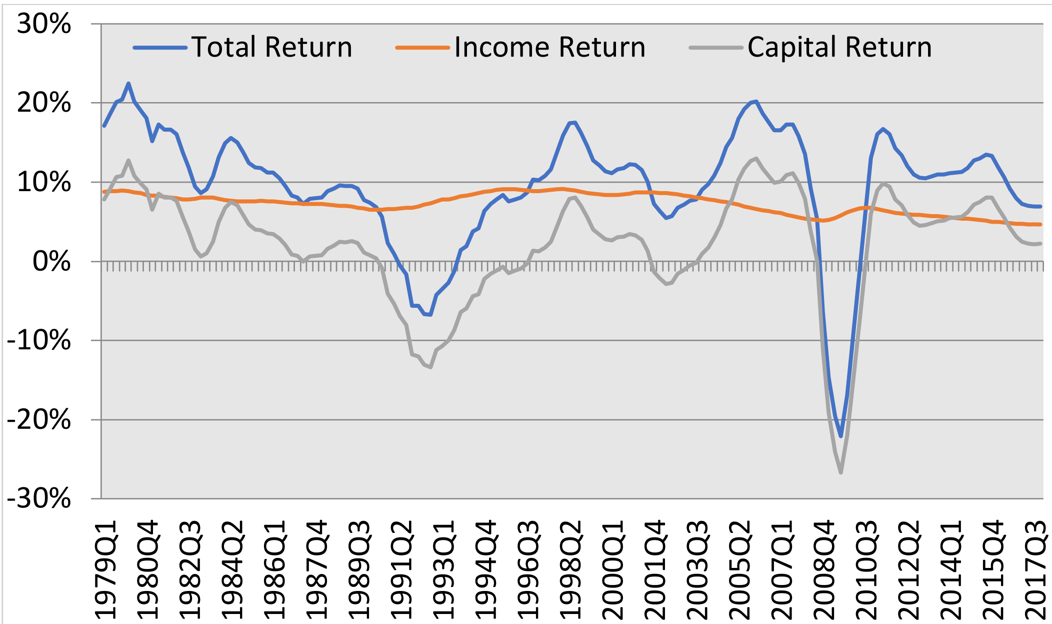


Chart 1 Source NCREIF

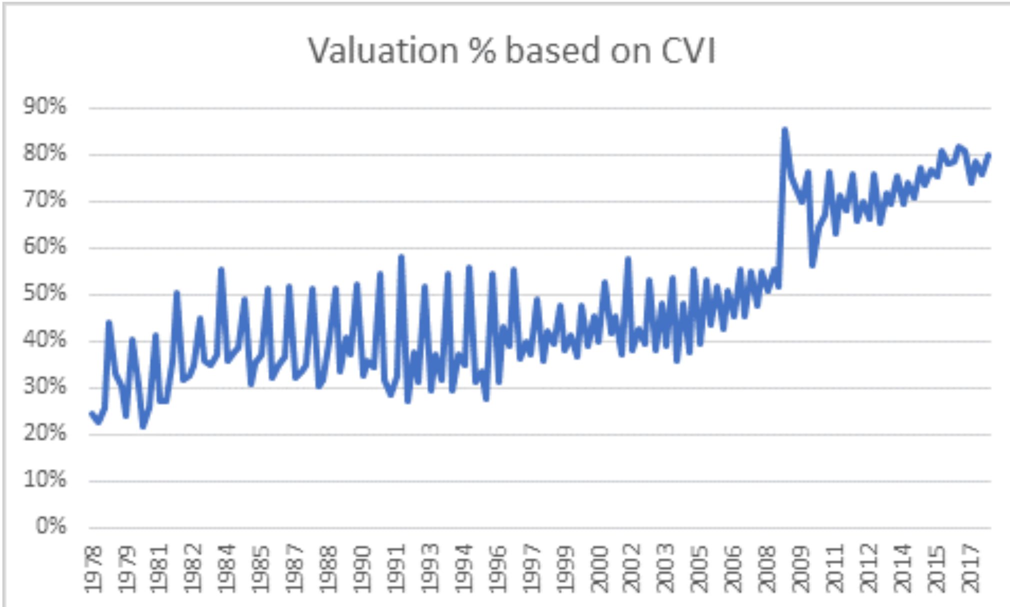
Trends in Current Value Indicator level of the NPI

NCREIF measures the timeliness of appraisals with the Current Value Indicator (CVI).
The CVI is TRUE if:

1) the appraisal was done externally during the quarter OR

2) the appraisal was done internally, and the value changed by more than just adding Capital Expenditures to the previous quarter value.

During the lifetime of the NPI the CVI has gone from about 25% of the index to about 80%, as shown in Chart 2 below.



Source: NCREIF

Until the 1990s it is difficult to see much of a trend in the CVI. Most of the variation was associated with the seasonality of the appraisals. During the 1990s property crunch, however, NCREIF/PREA Reporting Standards moved at the pension funds' urging to establish industry standards for the quality and frequency of property valuations within investment funds. One of the drivers of this movement was the number of NCREIF funds that were closed for withdrawals ("gated") for significant periods of time during the early 1990s while valuations were slowly dropped to reflect the market. Much of the skepticism about the timeliness of NCREIF valuations stems from this time and isn't an accurate reflection of current methodology.

Over time, data companies such as CoStar and Real Capital Analytics ("RCA") have provided ever increasing depth and quality data on real estate market conditions. Appraisers are using this data to continually provide better quality property valuations. Many investment managers also have companies like Altus or Real Estate Research Corporation (RERC) do their appraisal management which has improved the quality and consistency of the appraisals.

In 2005 NCREIF launched its Open End Diversified Core Equity ("ODCE") fund index. A revision to the NCREIF/PREA Reporting Standards for valuation of property became effective in 2008—in the middle of the financial crisis. 95% of the ODCE funds became NCREIF/PREA Reporting Standards compliant. At that point you can see a distinct jump in the CVI. Now the CVI seems to be settled between 75-80% of the index. This means that in any given quarter 75-80% of properties have received an external appraisal or a robust internal appraisal.

Summary

The timeliness and quality of the property valuations in the NPI have improved dramatically over time. The NCREIF Property Index value published 25 days after the end of each quarter now closely reflects the market value of the underlying properties at the end of the quarter.

Given the constraints of the private real estate, and due to the time between the end of the quarter and the publication date, the index will never be as timely as a stock or bond indexes. However, the issues of smoothing and lagging in the index have been significantly reduced to the 25 days collating, calculating and publishing the index.

Acknowledgments

Jeff Fisher, Joe D'Alessandro and Marybeth Kronenwetter of NCREIF all provided insightful comments for this article. Thank you.