Commercial Real Estate as an Inflation Hedge

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When making investments, many investors are concerned about whether these investments will outpace inflation so that they do not lose purchasing power in the future.

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In 1991, a major study found that direct (private) real estate was an effective hedge against inflation[1], except during periods of market imbalance (high vacancy rates), hinting at a viable option to the problem. Now, 20 years later, the data for both private and public real estate has been examined to futher prove the trend. The results show that both private and public real estate (REITs) exhibited the ability to hedge against inflation over a 38-year period and produced returns that were much higher in up markets versus down.

This paper provides some insight into these findings and the value of real estate as an investment.

What is inflation and how is it measured?

Inflation is the increase in prices of goods and services that reduce consumers' purchasing power. In other words, a dollar spent today may not get you what it did five years ago. A popular model for showing just how inflation works is the change in the price of gasoline over time, demonstrating that a dollar spent at the pump five years ago would surely have bough you more gas than it would today. The most widely used measure of inflation is the consumer price index (CPI) which is generated by the U.S. Bureau of Labor Statistics. The CPI is an indicator of inflation that measures the change in the cost of a fixed basket of goods and services, including housing, electricity, food and transportation.

How are commercial real estate returns measured?

To compare commercial real estate returns to inflation, there are two primary real estate return indices available:

NCREIF Index (private/direct income-producing real estate)

The NCREIF Index, published by the National Council of Real Estate Investment Fiduciaries, is an index of properties owned by institutional investors such as pension funds and endowments. The index is an unleveraged return (i.e., the property's return is based on the income it generates as though there is no mortgage on the property, as most institutions buy their properties all cash) plus the price appreciation. The price appreciation is based upon quarterly appraisals done on each property and the actual sales price when the property is sold. Because many institutional investors do not use leverage, the return is lower

[1] *Journal of Real Estate Research, "The Impact of Inflation and Vacancy on Real Estate Returns," July 1991.*

than many private individual investors may experience in their equity investments when they use leverage (a fixed rate mortgage) on a property.

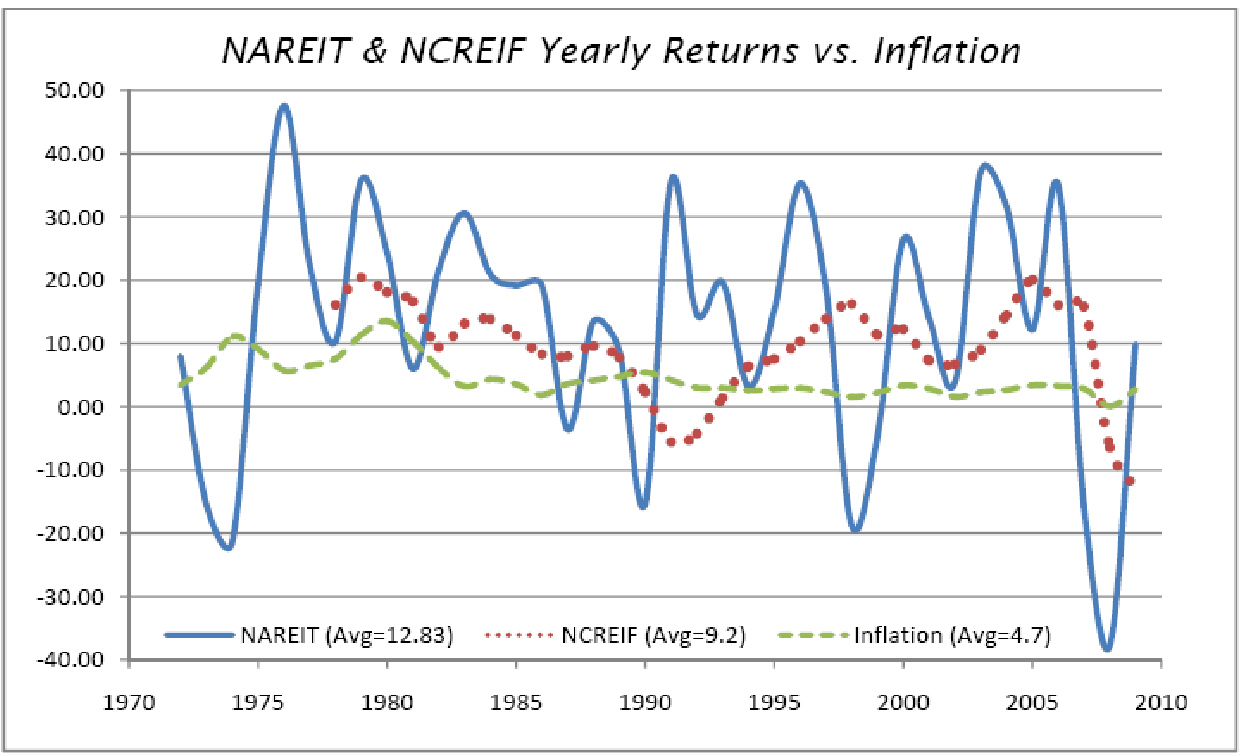
NAREIT Equity REIT Index (publicly traded real estate)

The FTSE/NAREIT Equity REIT Index is published by the National Association of Real Estate Investment Trust in conjunction with the international EPRA/FTSE stock index group and is the index of publicly traded real estate investment trusts in the United States. REIT returns come from the dividends they pay (REITs must pay out 90% of their taxable income to retain their tax pass-through status like mutual funds) and the change in their stock price. REIT returns include the use of leverage and management's ability to purchase and sell properties for a larger overall portfolio profit.

Comparing commercial real estate returns to inflation

The annual average returns for NCREIF and NAREIT are plotted against the CPI in Exhibit 1 below. The NCREIF return over the last 32 years has averaged 9.2% per year, which is 2.02 times the average rate of inflation of 4.55%, and the NAREIT return of 12.83% over the last 38 years was 2.8 times the average rate of inflation. Based on these returns, it is clear that income-producing commercial real estate has outpaced inflation by a wide margin. However, the graph also shows that there has been volatility in the returns including two periods of negative returns for the NCREIF index and five negative periods for the NAREIT index, due to the volatility in public REIT company prices. Therefore, to confirm our assertion, we also need to look at investing in real estate during different economic cycles.

Exhibit 1



Commercial real estate performance during different investment return cycles

As seen above, income-producing commercial real estate has produces, on average, positive returns over the past 38 years for both public and private real estate. Real estate does follow economic cycles, so looking into periods of increasing and decreasing returns we found that private NCREIF returns were 285% higher than inflation during increasing return times and 254% higher in decreasing and negative return times. We also found that public NAREIT returns were 399% higher than inflation during increasing return times and 151% higher than inflation during decreasing and negative return periods.

Considering these results, we can concluded that while commercial real estate performance, both public and private, produces generally positive returns, it is affected by market cycles, producing higher returns versus inflation during increasing return periods than in decreasing cycles.

Commercial real estate performance during occupancy cycles

Knowing when return trends may be increasing or decreasing is difficult, so looking at commercial real estate occupancy as an objective measure of fundamental real estate market health may help investors make better decisions. We found that private NCREIF returns were 310% higher than inflation during increasing occupancy times and 140% higher in decreasing occupancy times. We also found that public NAREIT returns were 555% higher than inflation during increasing occupancy times and 20% higher than inflation during decreasing occupancy time periods.

While we can conclude that both public and private real estate returns are higher than inflation regardless of whether occupancy rates are increasing or decreasing, it is also apparent that real estate produces significantly higher returns during those times where occupancy rates are increasing.

Conclusion

Commercial real estate has historically been a delayed mirror of the economy. GDP growth turned positive in 3Q2009 and employment growth followed three quarters later in 2Q2010. Following historic patterns real estate demand growth resumed in the second half of 2010, and with very low new construction the existing vacant space began to be absorbed. This absorption resulted in real estate occupancy increases in 3Q2010 for all five major property types.

Commercial real estate supply growth is the slowest it has been in 40 years which should create increasing occupancy rates as we continues to navigate the recovery periods and move back to a time of increasing returns. Public REIT returns turned positive at 27.99% in 2009 and 27.95% in 2010, both well above the historic average. Private NCREIF returns turned positive in 2010 with a 13.11% rate (which is well above the historic average). This follows the historic real estate return patterns of much higher returns in periods of increasing occupancies, thus the future for real estate investing looks appealing in 2011.

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