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Is Commercial Real Estate a Long-Term Inflation Hedge?

The rapid rise in consumer prices has rekindled the old debate about whether commercial real estate provides a long-term hedge against inflation. To answer this question using the latest data, we explore the dynamics of two key performance indicators for privately owned institutional properties in the United States: market value index (MVI) and net operating income (NOI), relative to consumer price index (CPI) inflation.

The analysis summarized in this article is two-fold. First, we compare average year-over-year changes in MVI and NOI relative to inflation over the entire span of historical data available for both metrics (43 years, from Q1 1979 through Q1 2022) as well as periods of above-average inflation, most of which took place in the 1980s. Second, we calculate elasticities of year-over-year changes in MVI and NOI relative to inflation, while also accounting for economic growth as measured by changes in real gross domestic product (GDP).

Our key finding is that, of the four major property types, apartments were the only one that provided a long-term hedge against inflation both in terms of market value and property income. From the perspective of real estate fundamentals, there are two main interrelated reasons for the stronger inflation-adjusted performance of apartments. On the demand side, a relatively short leasing cycle of about a year, compared to over five years in other major property sectors, allows apartments to adjust to market changes more rapidly and efficiently. In addition, inflation and interest rates tend to move together and higher borrowing costs for home purchases support rental housing demand, a factor that is not at play in other sectors. On the supply side, a shorter residential construction cycle allows developers to quickly respond to changing market conditions, keeping price levels close to equilibrium, and reducing downside volatility in rents and property revenues. Real estate investors who might be concerned about the potential scenario of persistent high inflation should consider this when evaluating their portfolio allocations to different property sectors.

At the same time, it should be noted that *within* the apartment sector various product segments and regional markets also vary in terms of their ability to counter inflation. We find, for example, that while garden-style apartments have been a better inflation hedge on the value side, NOI at high-rise apartments were more elastic relative to inflation. Furthermore, the inflation hedging potential of apartment values and NOI can vary even more widely geographically and therefore impact market allocations as part of portfolio construction. In summary, while both apartment values and NOI have indeed shown the ability to keep up with or even exceed inflation over long-term horizons (unlike other sectors), this does not apply equally to any property and location.

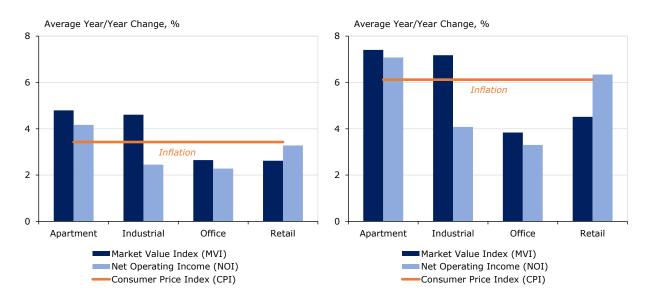
MVI and NOI Growth Relative to Inflation

Looking at MVI, only the apartment and industrial sectors achieved appreciation that exceeded inflation both over the entire span of available history as well as periods of above-average inflation. On the NOI side, apartments were the only property sector to handily beat inflation both over the entire history as well as periods of above-average inflation. Retail NOI growth was second-best after apartments and, while it lagged inflation slightly over the entire period, it also exceeded it slightly during periods of above-average inflation.



Q1 1979 – Q1 2022 173 quarters of observation

Above-Average Inflation *57 quarters of observation*



Sources: BLS, NCREIF, Berkshire Research

In the case of apartments, the main driver of above-inflation MVI growth is clearly NOI. Meanwhile, results for industrial and retail are less obvious. Industrial MVI grew above inflation while its NOI has not, but the opposite was true in the case of retail. One potential explanation for this is the varying impact of investor demand on both sectors—especially over the last few years.

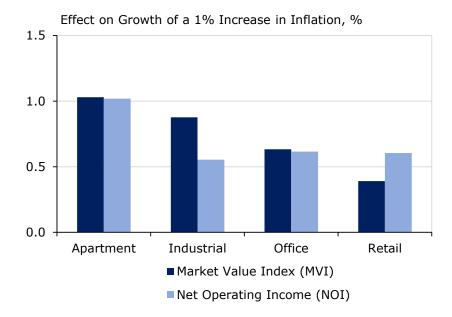
MVI and NOI Growth Elasticities Relative to Inflation

While it is helpful to know how MVI and NOI growth compared to inflation historically, what is even more relevant to answering the title question is how well growth adjusts to the changing inflation. To answer that, we calculate growth *elasticities* relative to inflation using the entire span of historical data available for both metrics (Q1 1979 through Q1 2022).¹

The chart below shows how much MVI and NOI growth change for every 1% increase in inflation. Once again, apartments are the only sector where both metrics have shown a propensity to keep up with rising inflation over time. Industrial is the second-best based on how well market values adjust to inflation (0.9% coefficient), followed by office (0.6% coefficient) while retail comes last (0.4% coefficient). At the same time, there are no substantial differences between industrial, office, and retail in terms of how their NOI growth has responded to inflation historically, with coefficients of about 0.6%.

¹ Our analysis follows the same approach as discussed in the article by Greg MacKinnon, "What Would Higher Inflation Mean for Real Estate?," *PREA Quarterly, Fall 2021*.





Sources: BLS, NCREIF, Berkshire Research

The results suggest that apartments are the only real estate sector that served as a real inflation hedge historically, followed by industrial (at least when it comes to market values). It is important to note that different types of apartments do vary in terms of how their values and NOIs respond to inflation. Available data only allows us to repeat the above analysis for garden-style and high-rise segments over the last 30 years rather than 43 years, thus missing the period of very high inflation observed in the early 1980s. However, this more limited analysis does show that garden-style apartments have been a better inflation hedge on the value side while high-rise properties were able to better keep up with inflation in terms of their NOI growth. One potential explanation for this is that high-rise apartments tend to focus more on affluent renters who are better able to absorb rent increases in a rising inflationary environment. At the same time, market values for garden apartments benefit more from stronger investor demand, even though their NOI may not keep up with inflation as well as in the high-rise segment. We find similar variation across markets, some being better inflation hedges on the value side while others adjusting better in terms of NOI.

It helps to know that apartment properties have a track record of being an inflation hedge but the other key parameter even more important than inflation itself, is broader economic and employment growth. Real estate can still deliver good investment returns when high inflation is accompanied by a strong economy and labor market. At the same time, when high inflation takes place during very weak or negative economic growth and "stagflation" sets in, no sector is immune to potentially stagnant or even declining property values and NOI after inflation is factored in. While this is not the baseline scenario for now, investors should carefully evaluate such downside risk as the global economy and capital markets deal with multiple global uncertainties stemming from Russia's war on Ukraine as well as the public health situation.

On the upside, the apartment sector is entering this period amid a record housing supply shortage that is likely to keep upward pressure on rents until inflation eventually subsides. Rental housing (including apartments) has a unique distinction within real estate of being both a form of investment as well as providing shelter, a service that accounts for over 30% of the broader inflation measurement. The increasing real estate portfolio allocations towards rental housing that was observed last year could be reflecting a growing recognition by investors of its relative advantages in the current environment.



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