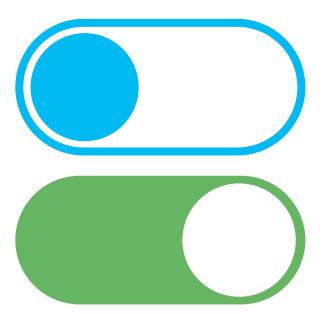
SUMMIT



ISSUE 10

While the market rarely sends clear investing signals, current market conditions are replete with clues, but as timing for corrections is difficult a move to risk-off strategies could be useful.

While the market rarely sends clear investing signals, current market conditions send an exceedingly disconcerting set of mixed signals: low unemployment levels and stratospheric (albeit, with some signs of stagnating) asset valuations juxtaposed with increasing inflation and interest rates, a sputtering economy, and war in Eastern Europe.

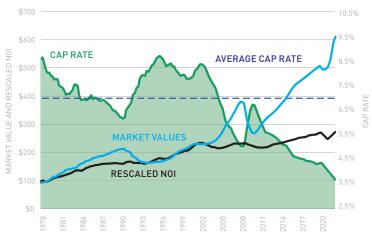
It is understandable that some real estate investors find this juxtaposition a bit bewildering. And, for most investors and fund managers, it is impractical to move to cash while awaiting a resolution of these mixed signals. Moreover, even if some investors feel that a market correction is imminent, it is incredibly difficult to time such corrections. What should thoughtful real estate investors do? Move to risk-off strategies.

CURRENT PRICING

The long-term view of current capitalization rates, for US-basedcore properties, suggests that they have never been this low.

EXHIBIT 1: NCREIF INDEX: MARKET VALUES, RESCALED NOI, AND CAP RATES BASED ON A \$100 INVESTMENT FOR THE PERIOD 1978 THROUGH Q2 2022

Source: Author

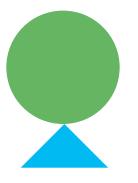


In *Exhibit 1*, the path of the blue line, indexed to the left-hand vertical axis, represents the value of \$100 invested in the NCREIF Property Index (NPI) at its inception in 1978. While the scale somewhat obscures valuation changes in the early years of the Index, at least two significant price reversals are seen: (1) in the late 1980s and early 1990s, when Index values fell by 25–30%, and (2) in the mid 2000s, when Index values fell by 35–40%. (If you like, you can add a third: the fairly minor impact¹ of the COVID pandemic is observed in the early 2020s.)

Broadly speaking, the NPI is characterized by high-quality (i.e., institutionally owned) properties. So, the "flight to quality" that occurs in most downturns (real estate or otherwise) is not observed in these data. While reliable data on lower-quality assets—those often found in non-core funds, often referred to as "transitional" properties—are difficult to come by, it is generally believed that lower-quality properties fell even further during the market corrections in the late 1980s and early 1990s, and in the mid 2000s.

Similarly, the red line in *Exhibit 1* indicates the growth in (restated) net operating income assuming US\$100 of income² in 1978 over the same period (it is also indexed to the left-hand vertical axis). Given a time series of property values and income levels, a time series of capitalization rates is constructed; these rates are shown by the top line of the green-shaded region (and are indexed to the right-hand vertical axis). The green dashed line indicates that capitalization rates have averaged approximately 6.7% over this nearly 45-year period. In general, the time-series path of capitalization rates has been downward sloping. Possible explanations include a generally declining path of interest rates and the growing acceptance of commercial real estate as an institutional asset class.

Whatever the reasons for the downward trend, cap rates cannot endlessly decline—there needs to be some bottom, if not a rebound.



ANGST ABOUT PRICING

Whatever the reasons for the downward trend, cap rates cannot endlessly decline—there needs to be some bottom, if not a rebound. And to that end, the current pricing of US commercial real estate ought to give investors pause. For example, today's prices for core properties in the primary markets are more than 50% higher than before the Global Financial Crisis (GFC), and today's cap rates, approximately 3.8%, are the lowest in the NCREIF history.

While discussions about and definitions of "bubbles" are fraught with imprecision, Greenspan—reflecting on the GFC—indicated what he thought the signs of a bubble to be:³

"... I define a bubble as a protracted period of falling risk aversion that translates into *falling capitalization rates* that decline measurably *below their long-term, trendless averages*. Falling capitalization rates propel one or more asset prices to unsustainable levels. All bubbles burst when risk aversion reaches its irreducible minimum, i.e., credit spreads approach zero, though analysts' ability to time the onset of deflation has proved elusive." (Emphasis added.)

If we take Greenspan's definition to the NCREIF data, we see that today's capitalization rates are nearly ' (\$ BPS lower than their long-term average:

Cap Rate Comparison

Current Cap Rate	3.68%
Long-Term (Trendless Average)	7.05%
Difference	<u>3.37%</u>

This difference represents the greatest disparity between the current capitalization rate and the then-current long-term trendless average of prior capitalization rates in the NPI history.

RISK-ON/RISK-OFF INVESTING

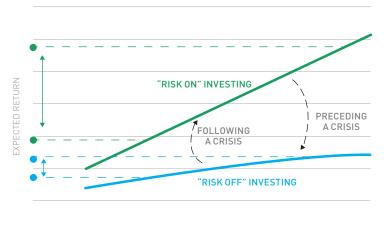
Since we are in the real estate investment business, most of us can't "go to cash" and wait for a price correction. It may never come. Instead, shrewd investors often employ a "risk on/risk off" approach to investing. Following an event such as the GFC, when investors' risk aversion is quite high, the smart money invests aggressively (i.e., "risk on"). However, as memories of the adverse event fade and risk aversion diminishes dramatically, the smart money invests conservatively (i.e., "risk off"). In the latter period, investors aren't paid much for taking risk; moreover, and assuming the adverse financial event arrives, the low-quality assets are most-harshly valued downward (i.e., there's a "flight to quality" in the downturn).

Perhaps Warren Buffett best summarized this approach: "We simply attempt to be fearful when others are greedy and to be greedy only when others are fearful."⁴

While the signs for such market extremes are imprecise, investors often look to telltale signs in both the credit markets (such as credit spreads, available leverage ratios, severity of loan covenants, etc.) and the equity markets (such as cap rates vs. risk-free rates, ease of fund-raising, the amount of "dry powder," governance provisions in fund and/or joint venture documents, etc.), the strategy can be generally described with what we see in *Exhibit 2*:

EXHIBIT 2: ILLUSTRATION OF CHANGING RISK/ RETURN CONTINUUM, AND RISK-ON VS. RISK-OFF INVESTMENT STRATEGIES

Source: Author



VOLATILITY

Very few investors have broad discretion. Most investors—and certainly operators and fund managers—have discretion within the confines of a given strategy.

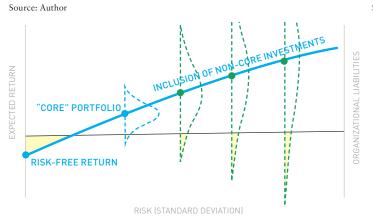
Thus, risk-on/risk-off investing is intended to tactically respond to current market conditions. Following some sort of market correction (e.g., the GFC), the risk-return continuum is typically elevated and steeply sloped. However, as the market's collective reaction to that correction wanes (e.g., more than a decade has passed), the continuum sinks and is shallowly sloped. In the former state, the expected to rewards to risk-taking are significant; in the latter state, the expected to rewards to risk-taking approach insignificant.

That said, de-risking depends on each real estate investor and fund manager. Very few investors have broad discretion. Most investors-and certainly operators and fund managers-have discretion within the confines of a given strategy. As one example, the core real estate manager⁵ might avoid the "style drift" (in this case, a tendency to move towards core-plus and/or value-added strategies) often found in "late cycle" investing, and instead concentrate on best-in-class assets. Such a rebalancing avoids the dilutive effects of the promoted interests paid to operating partners and the increased drag of transaction costs that typically accompany the short-term nature of non-core investments.⁶ Furthermore, investors and fund managers may-where possibleconsider lowering the leverage ratio of their investments, thereby reducing the chances of financial distress often associated with significant market downturns. Similar arguments could be made on behalf of non-core managers and strategies.

WHEN THE INCREASE IN RISK DWARFS THE INCREASE IN RETURN

In today's low-return environment, some investors have moved their real estate portfolio allocations further out on the risk/return continuum, arguing that low-risk strategies provide insufficient rewards. And while it is true that moving further out on the risk/return continuum increases the investor's expected return, it does so at the increasing risk of a significant shortfall with regard to the investor's liability management.⁷ To illustrate this proposition, consider *Exhibits 3* and 4:

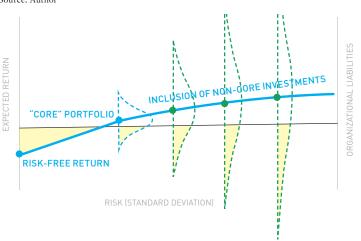
EXHIBIT 3: RISK-ON ENVIRONMENT: ILLUSTRATION OF RISK-RETURN CONTINUUM (NET OF FEES) AND ESTIMATED LOSS PROBABILITIES FOR SELECTED PORTFOLIOS



The first of these two exhibits is meant to convey the general sense of a risk-on market, in which the chances of the realizing a return below the investor's liabilities or a given threshold are fairly small in comparison to the second of these two illustrations. *Exhibit 4* is meant to convey the cost of "reaching for yield" (or, equivalently, "swinging for the fences") in a low-return/risk-off world; such behavior significantly increases the risk of realizing a shortfall with respect to the organization's liabilities.

This cost is compounded by the likelihood that a real estate market correction-should it come to pass-will coincide with a similar correction in the broader capital markets, perhaps abetted by bouts of "distress" and illiquidity; all of which greatly worsens the downside of being overly invested in risky assets during a market reversal.

EXHIBIT 4: RISK-OFF ENVIRONMENT: ILLUSTRATION OF RISK-RETURN CONTINUUM (NET OF FEES) AND ESTIMATED LOSS PROBABILITIES FOR SELECTED PORTFOLIOS Source: Author



In today's low-return environment, some investors have moved their real estate portfolio allocations further out on the risk/return continuum, arguing that low-risk strategies provide insufficient rewards.

ABOUT THE AUTHOR

Joseph L. Pagliari Jr., Ph.D., CFA, CPA, is Clinical Professor of Real Estate at the University of Chicago Booth School of Business and focuses his research and teaching efforts on issues broadly surrounding institutional real estate investment.

NOTES

- ¹ While not the main point here, the minor dip of ≈ 1.7% in NPI valuations may be understated, attributable to "appraisal smoothing." As a counter example, it is estimated that asset values in the public REIT market fell by ≈ 6.7%, while asset values for those public REITs investing in the core property types fell by ≈ 10.9%. (Moreover, Green Street's Commercial Property Price Index estimates, as of Q2 2022, a near 5% decline in their all-property index—whereas NCREIF shows no such retreat.) See: "REITs Amid a Pandemic," Green Street, accessed February 1, 2022; greenstreet.com.
- ² While a \$100 property investment does not produce \$100 of income, both indices are initially set to \$100 so as to improve the visual comparison of changes in property values to changes in income levels. Without restating the income levels, it would be difficult to visually discern the differences in changing income levels.
- ³ See: Alan Greenspan, "The Crisis," Brookings Papers on Economic Activity, working paper, Spring 2010, p. 201–46; brookings.edu/bpea-articles/the-crisis
- ⁴ While Buffet's remarks were aimed at clear market turns, the tactical application of his approach is also broadly applicable. See: Warren Buffet, "Chairman's Letter," Berkshire-Hathaway Annual Report, 1986, accessed August 11, 2022; berkshirehathaway.com/ letters/1986.html
- ⁵ See: Joseph Pagliari, "High-Yield Lending's Characteristics as a Function of Asset-Level Volatility," CRE Finance Council, April 2022; faculty.chicagobooth.edu/-/media/faculty/ joseph-pagliari/docs/mezzscharacteristicfassetcharacterisitics13022.pdf
- ⁶ See: Mitchell Bollinger and Joseph Pagliari," Another Look at Private Real Estate Returns by Strategy," Journal of Portfolio Management 45, 2019; doi.org/10.3905/ jpm.2019.1.098
- ⁷ The nature of the liabilities depends on the investor's circumstances. For example, a defined-benefit pension plan has to fund future payments to the plan's beneficiaries, a university endowment plan aims to produce a certain minimum spending rate, a household would like to finance a comfortable retirement and so on.



REVIEWER RESPONSE

Joe Pagliari's article is a I share Joe's view that this is worthwhile read. His writing a good time to seek risk-off reflects a special mix of strategies, including investment academic rigor and inside in retail, where leverage is baseball from his days at an investment advisor. baseball store

He's right about the complexity of the current macro backdrop, with strong job creation occurring even as we face the possibility of a second consecutive quarter of negative GDP. Within real estate, change is already occurring as rate hikes to quell inflation mean that the cost of debt now exceeds the ultra-low capitalization rates on which assets were trading. Initially, cap rates were moving up for lesser-quality assets in lesser locations but now, cap rates are rising more widely, if not across the board.

strategies, including investment openings exceeding store closings, retail remains out of favor, hence its high initial yield. Asset selection is key, but opportunities exist. Similarly, add to the mix sectors with defensive characteristics like storage and student housing. Both have short lease termspositioning them as inflation hedges-and tenant demand that tends to hold up even as economic growth slows.

- Mary Ludgin, PhD Senior Managing Director, Head of Global Research, Heitman
- Member, Summit Journal Editorial Board