Real Estate, Other Private Assets, And Extreme Market Conditions

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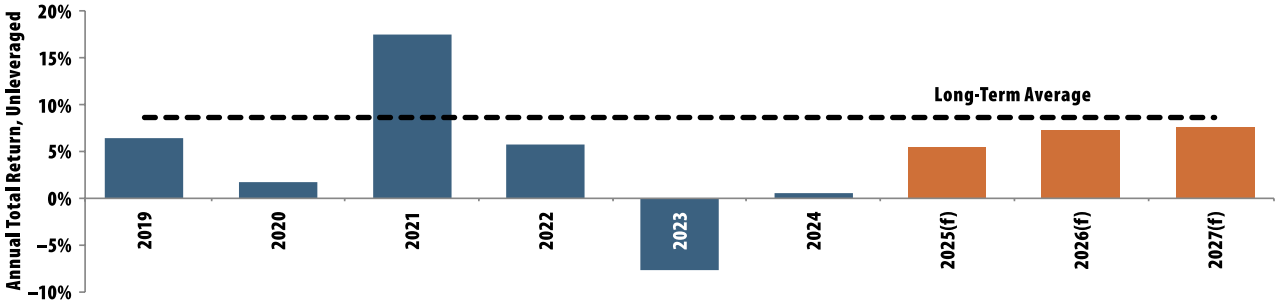
"Cautious optimism" was a term often used to describe the prospects for the US real estate market at the beginning of the year. There was a general feeling in the market that valuations for most sectors had reached bottom, or were at least very close, and returns going forward would improve from the recent past. As shown in Exhibit 1, however, the consensus was that returns in the next few years would be better than the recent past but below the long-term average—a slow, U-shaped recovery for real estate, rather than a strong V-shaped one, seemed to be the general opinion in the market.

This type of outlook can present problems for those trying to raise capital for real estate investment strategies. Why should an investor commit capital to real estate when the near-term prospects look to be below long-term averages, especially when return prospects for other asset classes look better? Private credit, in particular, seems to have received increasing interest from institutional investors recently, with potentially higher returns under current conditions and, hence, as an alternative to real estate.

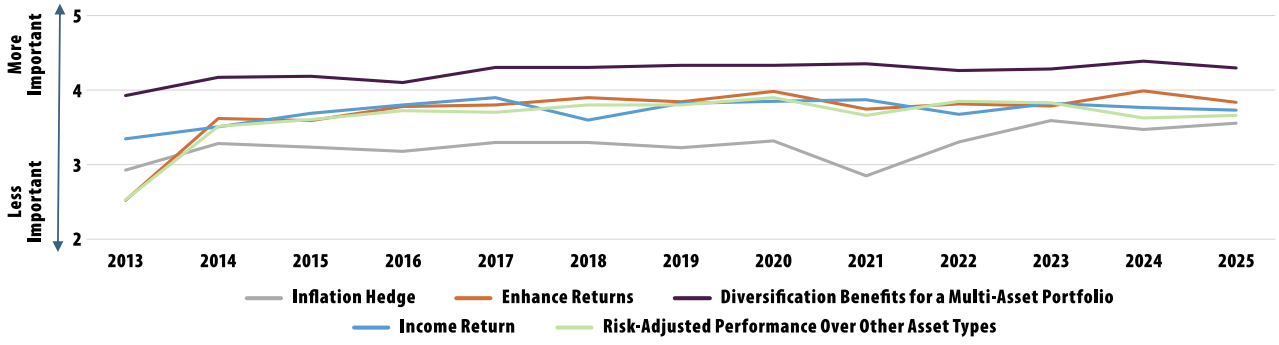
Obviously, higher returns are preferred to lower. But remember that returns are not the end of the investment story—both risk and return matter, and part of the risk story is the diversification that an investment brings to the overall portfolio. Exhibit 2 shows that, on average, institutional investors consistently rank diversification of the portfolio as the most important attraction to real estate as an asset class. Investors cannot ignore return prospects in an asset class when making investment decisions, but they also should not ignore other characteristics of the

Exhibit 1: Past and Forecast Returns, Unleveraged



Sources: PREA Consensus Forecast Survey, 1Q2025; NCREIF
Note: Long-term average return is calculated from 1978 to 2024.

Exhibit 2: Investors' Views—Why Do They Allocate to Real Estate?



Source: PREA Investment Intentions Survey, 2013–2025

Exhibit 3: Correlations

	Equities	Bonds	Real Estate	Private Equity
Bonds	0.05			
Real Estate	0.03	–0.18		
Private Equity	0.52	–0.07	0.23	
Private Credit	0.59	–0.03	0.18	0.47

Source: PREA Research based on data from MSCI, NCREIF, LSEG Datastream
Notes: Equities are represented by the S&P 500, bonds by the Bloomberg US Aggregate Index, real estate by the ODCE Index, private equity by the MSCI US Private Equity Closed-End Fund Index, and private credit by the MSCI US Private Credit Closed-End Fund Index. Based on quarterly returns from 1Q1985 to 3Q2024.

asset class, such as its ability to provide risk-reducing diversification that stabilizes the portfolio.

This is especially important now. In recent weeks, a high level of macroeconomic uncertainty and corresponding volatility has occurred in the public debt and equity markets. The degree of uncertainty (i.e., risk) in the economy means that forecasting the real estate market has become even more difficult (the forecasts in Exhibit 1 may be different in the next round of the survey—or maybe they won't be; time will tell if "cautious optimism" still applies). But even more important, it means that having effective diversification in a portfolio is extremely important. Mitigating the effects, as much as possible, of the gyrations of public markets is most important when those markets are experiencing extreme volatility.

Although diversification with commercial real estate is a topic that has been discussed for decades, in this article I return to the issue to take a closer look at the ability of real estate to provide diversification, how it compares with other private market asset classes (specifically private equity and private credit) that may be seen as alternatives to real estate, and whether that diversification holds up in extreme market conditions such as what has occurred recently.

Correlation Is Not Enough

The standard method to look for diversification potential across asset classes is to examine their correlations. Exhibit 3 shows the correlations, based on quarterly returns from 1Q1985 to 3Q2024, across two public market asset classes—equities and bonds—and three private market asset classes—real estate, private equity, and private credit. It is important to note that general private equity and private credit indices are used in this analysis, not real estate–related ones.

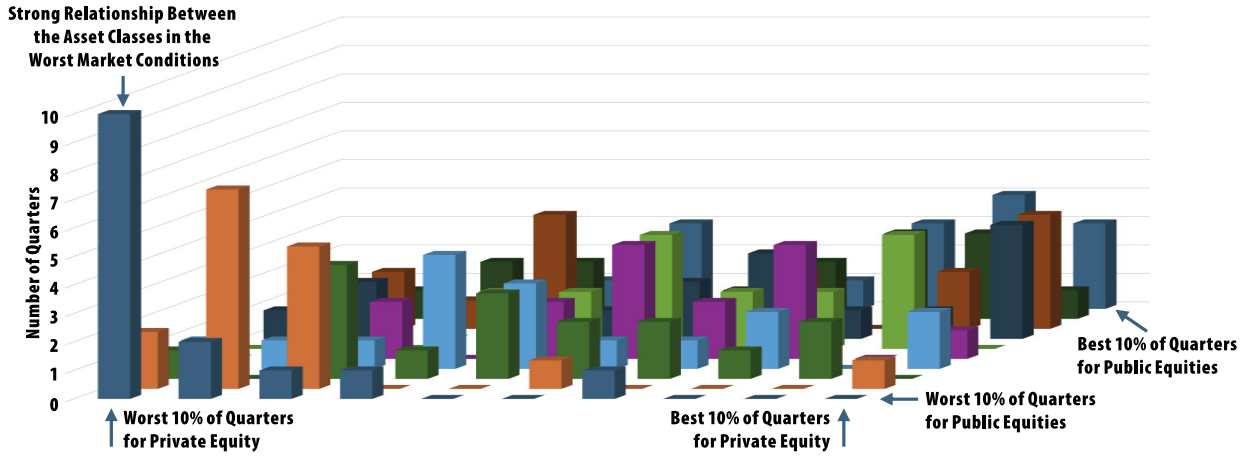
All three of the private market asset classes are positively correlated with public equities and negatively correlated with bonds. However, real estate has the lowest correlations with public markets of the three private market asset classes. Both private equity and private credit have correlations with public equities (at 0.52 and 0.59, respectively) that are much stronger than real estate's (0.03), and while all three are negatively related to bonds, the negative relationship is stronger for real estate.

So on the surface, the correlations indicate that there is considerable potential for reducing risk in a portfolio by diversifying across the five asset classes, with real estate in particular playing a strong diversifying role.

Correlation is an important but simple statistic. It measures the relationship between two asset classes on average across all market conditions historically. But major upheavals in the markets are generally not average market conditions. Many will remember the global financial crisis, when most major asset classes dropped simultaneously. Talk at the time was of "correlations going to one" across asset classes and that "diversification failed when investors needed it most." Similarly, in the recent market turbulence in April 2025, both stocks and bonds (and many other assets) dropped, meaning that under highly volatile conditions they failed to provide the diversification their simple correlations imply.

It is well known that the relationship between different assets can change depending on market conditions—the relationship in "normal" conditions may be quite different from the relationship in down markets, and the relationship in up markets may be different yet again. Measuring diversification with a single number, such as correlation, does not capture the complex relationships in the market. This is important to investors—extreme market conditions are when diversification should be the most valuable to

Exhibit 4: Private Equity Versus Public Equities



Source: PREA Research based on data from MSCI, LSEG Datastream
Notes: Based on quarterly returns from 1Q1985 to 3Q2024. Equities are represented by the S&P 500, private equity by the MSCI US Private Equity Closed-End Fund Index.

investors—but correlation may not capture how different asset classes tend to react under those conditions.

To really show how different asset classes diversify a portfolio when market conditions are extreme, a different way to look at the data is needed. So I turn to an examination of "copulas."

What the Heck Is a Copula? And Why Should I Care?

An alternative to correlation for describing the relationship between two asset classes is a copula (the word derives from the Latin word for "link"). A copula is far more flexible than a correlation and can capture the complex dynamics at work in the markets. Think of a copula as an equation that describes the relationship between returns to two asset classes. Because it is an equation, rather than a single number, like in a correlation, a copula can incorporate the fact that the relationship may change depending on what is happening in the two markets being examined. Determining the exact equation can get very mathematical very quickly and is pretty much the reserve of risk management super nerds. In this article, however, I take a fairly straightforward graphical approach (known as an "empirical copula") that offers insights on diversification between asset classes without requiring a PhD in mathematics.

For each of the five asset classes (equities, bonds, real estate, private equity, and private credit), I rank all returns each quarter from best to worst and break them up into ten buckets (i.e., the 10% of quarters that had the best returns, the 10% of quarters that had the second-best returns, all the way down to the worst 10% of quarters). For each pair of asset classes, I then plot a three-dimensional histogram, which shows how many quarters fall into each cross category for the two asset classes.

The concept is easiest to see with an example, as in Exhibit 4, which plots public equities against private equity. The front left corner of the chart indicates how many times private equity had one of its worst quarters at the same time public equities had one of their worst quarters. The front right corner shows how many times private equity had one of its best quarters while public equities had one of their worst quarters, and the next column back shows how many times private equity had a top-returning quarter while public equities had one of their second-worst quarters. The back right column shows both private equity and public equities having their best quarters simultaneously, and so on for the rest of the columns across the ten buckets. If there were no relationship at all between the two asset classes, all the columns in the chart would be the same height (i.e., what is happening in one does not impact what is happening in the other).

The key insight from Exhibit 4 is that private equity and public equities have a strong relationship during the worst market conditions. The tallest column is in the front left—i.e., when the public equities market has one of its worst quarters, the most common outcome is for private equity

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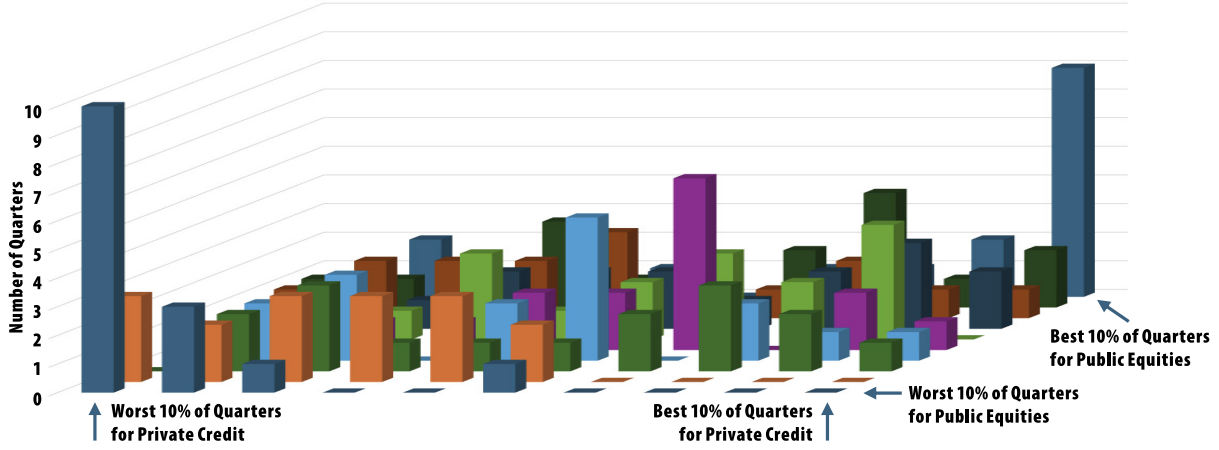
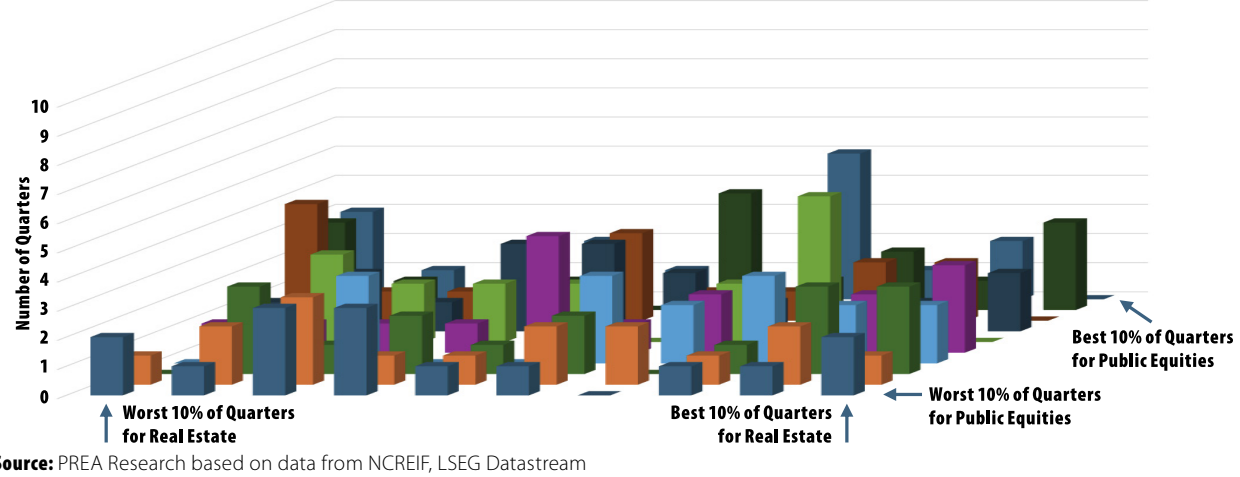
Exhibit 5: Private Credit Versus Public Equities



Source: PREA Research based on data from MSCI, LSEG Datastream
Notes: Based on quarterly returns from 1Q1985 to 3Q2024. Equities are represented by the S&P 500, private credit by the MSCI US Private Credit Closed-End Fund Index.

Exhibit 6: Real Estate Versus Public Equities



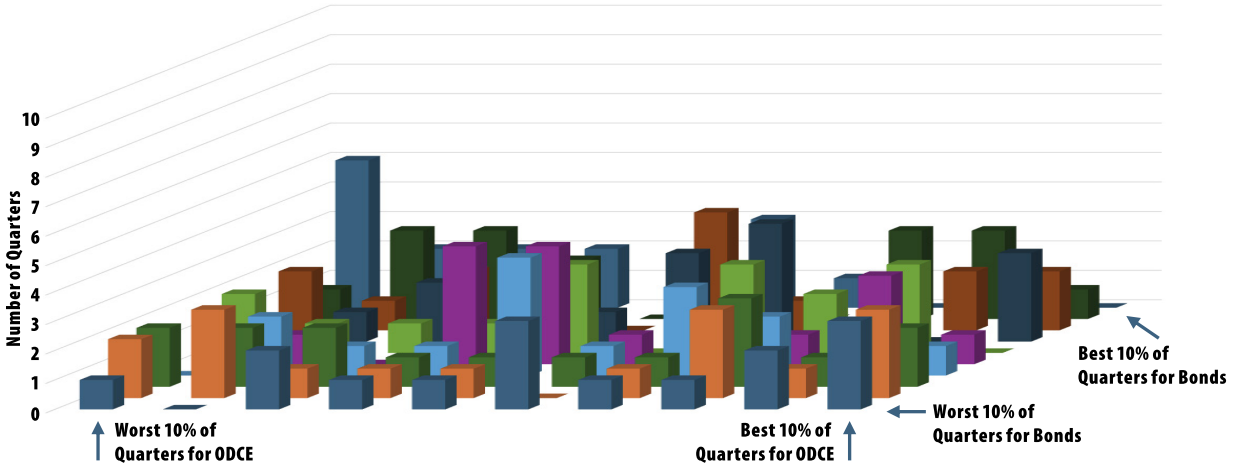
Source: PREA Research based on data from NCREIF, LSEG Datastream
Notes: Based on quarterly returns from 1Q1985 to 3Q2024. Equities are represented by the S&P 500, real estate by the ODCE Index.

to also have one of its worst quarters. When public equities have one of their second-worst quarters (second row from front), private equity most commonly does badly as well, usually having one of its second- or third-worst quarters over the period. So although private equity as an asset class offers some ability to diversify volatility in the public market, private equity and public equities tend to move together when markets are at their worst—historically, private equity provided less diversification when investors needed it most.

Exhibit 5 compares public equities to another private market asset class—private credit. In this case, a strong relationship between equities and private credit can be seen in extreme markets at both ends of the spectrum. When the equities market has a particularly bad quarter, private credit tends to have a very bad quarter as well. When equities markets do very well (back row of the chart), private credit tends to do very well at the same time. Again, there is some evidence of diversification during "normal" market conditions (in the middle of the chart), but the diversification characteristics of private credit largely disappear in extreme market conditions.

Exhibit 6 presents the same type of chart for private real estate and public equities. The diversification

Exhibit 7: Real Estate Versus Bonds



Source: PREA Research based on data from NCREIF, LSEG Datastream
Notes: Based on quarterly returns from 1Q1985 to 3Q2024. Equities are represented by the S&P 500, real estate by the ODCE Index.

potential for real estate is much more evident than it was for the other private market asset classes—the bars in the chart are more evenly distributed. Looking at the worst times for the equities market (front row), the outcomes for real estate during these times are quite spread out. In fact, it is just as likely that real estate had one of its best quarters as it is that it had a very bad quarter during the worst times for equities.

The evidence indicates that among the three private market asset classes, real estate historically provided the most diversification for an equities allocation, and its diversification tends to hold up much better in extreme markets.

Purely for space reasons in this short article, I do not show all the possible pairs from among the five asset classes. But in Exhibit 7, I show the relationship between real estate and bonds to complete the look at how real estate diversifies public market exposures. Again, real estate provides diversification against movements in the bond market even when bonds were at their worst. In fact, real estate tends to do reasonably well when bonds have one of their worst quarters. Though not shown in exhibits, the results for private equity and private credit versus bonds are quite similar. It seems that all three private market asset classes can provide reasonable diversification for bond allocations, even in extreme conditions in the bond market.

Conclusion

The general consensus is that real estate is entering a period of positive but muted returns over the next couple of years. While allocation and investment decisions need to incorporate that, they should also incorporate the risk management and diversification properties of real estate, especially when comparing it with other private market asset classes. Private equity, private credit, and real estate all seem to provide some level of diversification against moves in the bond market, including large downward moves. However, to diversify an allocation to public equities, real estate is the only one of the three private market asset classes with diversification benefits that hold up under extreme market conditions.

Given recent volatility in the markets, this is an important characteristic of real estate as an asset class. In no way is this a final answer as to whether an institutional investor should direct capital to real estate, but it should be part of the considerations in coming to an answer. ■

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