

# WHY NOT BOTH?



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Investors looking to achieve the best risk-adjusted returns on their private real estate investments, might consider including private real estate debt as part of their real estate allocation rather than the fixed income allocation.

The case for combining equity and debt investments in a portfolio is almost a century old. Benjamin Graham, who is widely known as the “father of value investing,” was one of the first to suggest that a portfolio should be reasonably split between the two asset classes, often using 50/50 as a starting point.

Ever since the invention of the modern portfolio theory (MPT) in the 1950s, institutional and private investors have been experimenting with various equity and debt allocations to optimize risk-adjusted returns of their holdings, with real estate and alternative asset classes being among the relatively more recent additions to the framework.

In this article we make a similar case for combining equity and debt investments, but in the context of a private real estate portfolio. Traditionally, institutional investors treat private real estate debt as part of their fixed income allocation rather than real estate. While there are some practical reasons behind the current approach, it does not mean that it is always the best one. In fact, we would argue that investors looking to achieve the best risk-adjusted returns on their private real estate investments might consider including private real estate debt as part of their real estate allocation rather than the fixed income allocation.

Just because investors have been following a certain approach for decades does not mean it is their only viable option. For example, Berkshire’s experience of the last two decades suggests that combining private apartment equity and debt investments into an optimized portfolio can produce substantially higher risk-adjusted return relative to investing in them separately.

We also come to a similar conclusion based on the analysis of reported private apartment equity and debt returns since 1978. We find that private apartment equity and private debt investments (in this analysis, represented by senior fixed-rate mortgages) have little correlation with each other and have different exposures/sensitivities to various macro factors, which makes them complementary when investing in different phases of the business cycle.

Additional research can help explore this thesis for private apartment debt investments represented by subordinated variable-rate mortgages whose return/risk characteristics fall between private equity and senior debt. Overall, even this initial analysis offers practical implications both to investors seeking exposure to the US apartment market as well as investment managers whose business focuses on the two quadrants.

## COMPARING HISTORICAL PERFORMANCE

The purpose of this viewpoint is to compare historical performance of private apartment debt and equity investments and explore how combining both in a hypothetical portfolio impacts investment performance. We find that an optimized portfolio with balanced equity and debt allocations has the highest potential to improve risk-adjusted return relative to those that allocate to equity or debt only.

The analysis compares returns, return volatilities, and volatility-adjusted returns over the last 47 years and several business cycles during this period, as well as sensitivities of the two quadrants to various macro risk factors (i.e., economic growth, inflation, credit spreads, etc.).<sup>1</sup>

## COMPARATIVE RETURN PROFILE

The analysis uses two sources of apartment returns, both of which have quarterly time series starting in 1978. Private equity returns are based off NCREIF's National Property Index (NPI) which tracks unleveraged property-level investment performance for institutional quality real estate assets, including apartments.<sup>2</sup> Private debt returns are based off Giliberto-Levy's index (GL-1) which tracks investment performance (credit loss adjusted) of senior fixed-rate commercial mortgage loans for institutional real estate, including apartments.<sup>3</sup>

While other forms of real estate debt—such as subordinated, mezzanine, or distressed debt—do have risk exposures that are closer to those of equity, prior research suggests that the general thesis presented here will likely hold when applied to subordinated private debt.

Over the last 47 calendar years, apartment returns averaged 9.9% per year for private equity vs. 7.9% for private debt. Private equity outperformed private debt in 28 out of 47 years by an average of 8.5% over those periods, while private debt outperformed private equity in 19 out of 47 years by an average of 7.7%.

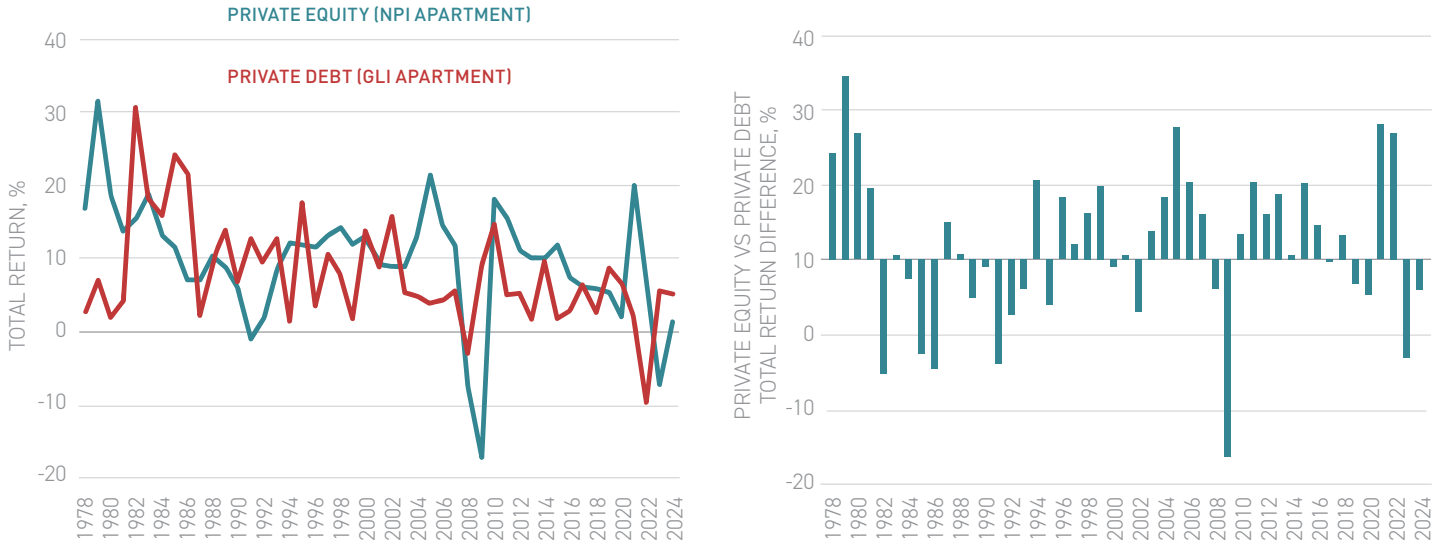
The lowest calendar year return for private equity was in 2009 at -17.6% (following -7.3% return in 2008) while the lowest calendar year return for private debt was in 2023 at -9.8%. The lowest five-year trailing average calendar year returns were 3.9% in 2010 for private equity and 1.9% in 2024 for private debt, respectively.

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While volatility of returns as measured by their standard deviation over the last 47 years was higher in private equity in absolute terms, private equity did have a higher volatility-adjusted return when comparing the ratios of returns to their standard deviations.

Over the last 47 years, the US economy experienced five major business cycles or recessions: 1980/82 (oil bust); 1990/91 (commercial real estate bust); 2001 (high-tech bust); 2007–2009 (residential real estate bust); and 2020 (COVID pandemic).<sup>4</sup> Considering that both private equity and private debt returns are calculated based off appraisal values (rather than daily prices in publicly-traded real estate equity and debt) and tend to react to the macro-economic and capital market conditions with a lag, we compared investment performance of the two quadrants over the two-year period after the recession year (i.e., for the recession that started in 1980, we compare calendar returns over 1981/1982 period, and so on).

As *Exhibit 3* shows, private debt returns were higher over two calendar years after the starting years of the recessions, except for 2021/22 period following the COVID pandemic. Private debt has performed notably better than private equity over 1991/92 and 2008/09 periods which were particularly challenging for apartment fundamentals. The reasons behind this have to do with sensitivity of private debt and private equity returns to different macro-economic and capital markets factors which are explored in the next section.

**EXHIBIT 1: PRIVATE APARTMENT EQUITY VS. DEBT: CALENDAR YEAR TOTAL RETURNS, 1978-2024**


Sources: Giliberto-Levy; NCREIF; Berkshire Research.

**EXHIBIT 2: PRIVATE APARTMENT EQUITY VS. DEBT: AVERAGE RETURNS AND RETURN VOLATILITIES, 1978-2024**

QUADRANT	AVERAGE RETURN	STANDARD DEVIATION	RATIO
PRIVATE EQUITY	9.9	8.0	1.2
PRIVATE DEBT	7.9	7.2	1.1

Sources: Giliberto-Levy, NCREIF, Berkshire Research.

**EXHIBIT 3: PRIVATE APARTMENT EQUITY VS. DEBT: RETURNS OVER TWO YEARS FOLLOWING RECESSIONS**

PERIOD	AVERAGE RETURN, %		
	PRIVATE EQUITY	PRIVATE DEBT	DIFFERENCE
1981-1982	14.7	17.5	-2.8
1991-1992	0.2	10.9	-10.7
2002-2023	8.9	10.4	-1.6
2008-2009	-12.5	2.8	-15.3
2021-2022	13.6	-3.9	17.5

Sources: Giliberto-Levy, NCREIF, Berkshire Research.

Overall, there was virtually no co-movement in private apartment equity and debt investments historically: the correlations in their calendar year returns were only 10.6% over the last 47 years, 1.6% over the last 30 years, and 8.2% over the last 15 years. Low return correlations between the two quadrants suggest a potential diversification benefit from combining them in a portfolio, which is further reinforced by our finding that private equity and private debt returns are exposed to different risk factors in any given year.

## COMPARATIVE RISK EXPOSURES

To compare private apartment equity and debt returns in terms of their exposure to various risk factors, we used linear regressions to estimate return sensitivities or “betas” to a few key macro variables.<sup>5</sup> The three major sources of risk known to impact on private real estate returns are the stock market, economy/labor market (including expected and unexpected inflation), and capital market (interest rates of different maturities, slope of the yield curve, credit spreads, and debt liquidity).

The full list of variables and return sensitivities are summarized in *Exhibit 4*. Sensitivities (betas) reflect how much total returns each year are associated, on average, with changes in the key risk factors. For example, when total US employment expands by 1%, this tends to boost private apartment equity returns by 2%, on average, while having no meaningful impact on private apartment debt returns. The same applies to broader economic growth—while GDP growth has tangible positive impact on private apartment equity returns, its impact on private apartment debt returns is not statistically significant.

Broader stock market as measured by S&P500 returns is positively related to both private apartment equity and debt returns and with similar impact, but the timing of impact is different: more immediate in case of private debt and lagged in case of private equity. Not surprisingly, broader debt liquidity (measured by change in total US debt outstanding) is also positively linked with both private apartment equity and debt returns each year, but with a more pronounced impact on equity.

There are major differences between private apartment equity and debt returns when it comes to their exposure to unexpected inflation and interest rate risks. Unexpected inflation in this case is the difference between the actual inflation and inflation expectation, as reported a year prior by the University of Michigan Survey.

Private apartment equity returns tend to benefit when inflation ends up being higher than expected (all else being equal) while private debt returns tend to suffer under such circumstances. Both private equity and debt are sensitive to changes in short-term (three-month) Treasury rates but also in opposite directions – private equity returns react to such changes positively while private debt returns react negatively. Considering that movements in short-term interest rates are often triggered by inflation, investors should be monitoring both risk factors closely when thinking about their potential impact on returns.

## EXHIBIT 4: RISK EXPOSURES FOR PRIVATE APARTMENT EQUITY AND DEBT RETURNS

RISK FACTOR	TOTAL RETURN SENSITIVITY (BETA)	
	PRIVATE EQUITY	PRIVATE DEBT
<b>S&amp;P 500 INDEX</b>		
Change Over Year	<i>Insignificant</i>	0.2
Change Over Year (1 year lag)	0.2	<i>Insignificant</i>
<b>GDP</b>		
Change Over Year	1.6	<i>Insignificant</i>
<b>EMPLOYMENT</b>		
Change Over Year	2.0	<i>Insignificant</i>
<b>INFLATION</b>		
Expected	<i>Insignificant</i>	<i>Insignificant</i>
Unexpected	2.2	-1.0
<b>3-MONTH TREASURY RATE</b>		
Change Over Year	1.6	-1.9
<b>10-YEAR TREASURY RATE</b>		
Change Over Year	<i>Insignificant</i>	-4.3
<b>SLOPE OF THE YIELD CURVE</b>		
Change Over Year	-2.0	<i>Insignificant</i>
<b>AAA BOND SPREAD</b>		
Change Over Year	<i>Insignificant</i>	0.1
<b>TOTAL DEBT OUTSTANDING</b>		
Change Over Year	1.0	0.6

Sources: Federal Reserve, Giliberto-Levy, NCREIF, Berkshire Research.

Changes in the long-term (ten-year) Treasury rates have no significant effect on private equity returns during the same year while having a major negative impact on private debt returns. This may come as a surprise to private equity investors as there is a perception that changes in long-term Treasury rates are one of the major factors impacting apartment returns. Instead, their focus should be on the annual changes in the yield curve (i.e., differences between ten-year and three-month Treasuries) which do, indeed, have a major negative impact on private equity returns but with no significant impact on private debt returns. Finally, we also find that annual changes in bond risk premiums (measured by the differences between yields on AAA corporate bonds and ten-year Treasury rates) have no significant impact on private equity returns but do have a slight positive impact on private debt returns.

It is reasonable to expect that other forms of private debt investment such as floating rate and subordinated mortgages would differ from the senior fixed rate debt investments in terms of their risk factors and sensitivities to those factors (interest rates in particular). Prior research does suggest however that private subordinated debt likely falls between private equity and private senior debt in terms of its investment profile and has limited exposure to the same risk factors.<sup>6</sup> Our own recent analysis based on data across Berkshire’s apartment equity and debt portfolios supports that view, making a compelling case for subordinated apartment debt investments based on their returns over the last ten to fifteen years.

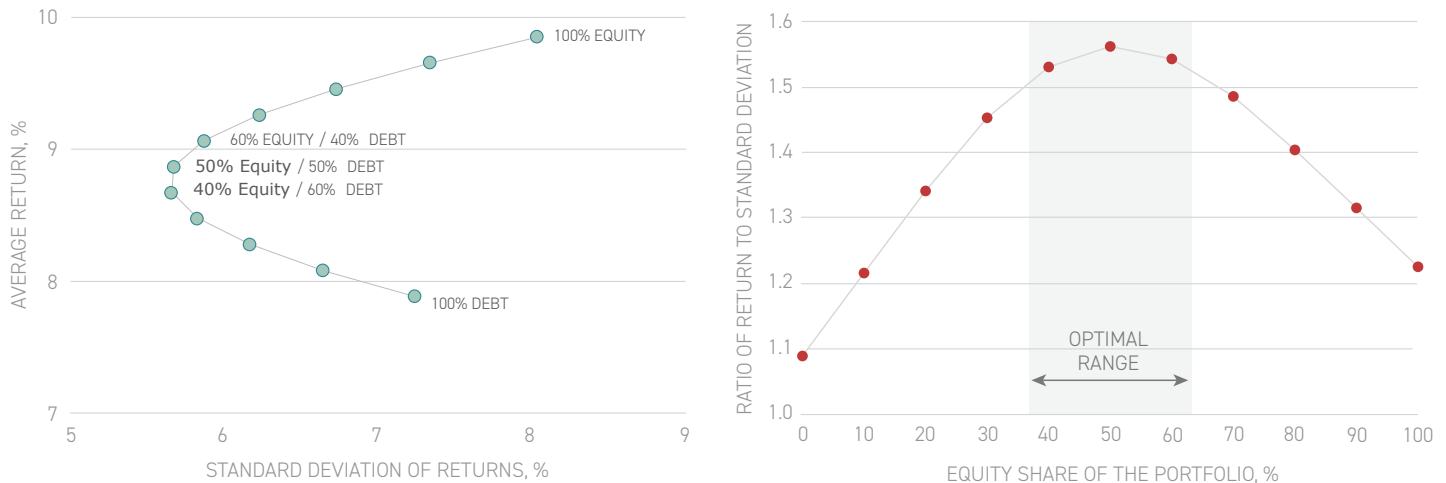
In summary, aside from being similarly impacted by the stock market and broader liquidity, yearly returns on private apartment equity and debt investment are either exposed to different macro risk factors or react to the same factors in opposite ways.

**OPTIMIZING PRIVATE EQUITY AND PRIVATE DEBT PORTFOLIO ALLOCATIONS**

Low correlations in total returns for private equity and private debt as well as their exposures/sensitivities to various macro risks, but with similar ratios of returns to return volatilities, suggest diversification potential of combining the two in a single portfolio.

To test this thesis, we constructed hypothetical portfolios by increasing allocation to private debt in 10% increments and calculating average returns, standard deviations of those returns, and ratios of average returns to their standard deviation. The results are summarized in *Exhibit 5* which shows the above metrics for eleven hypothetical portfolios (ranging from 100% private equity to 100% private debt).

**EXHIBIT 5: HISTORICAL INVESTMENT PERFORMANCE OF MODEL PORTFOLIOS UNDER VARYING EQUITY/DEBT ALLOCATIONS**



Sources: Giliberto-Levy, NCREIF, Berkshire Research.

Given the historical returns and volatility profile of private debt, its incremental addition to a private equity portfolio does result in lower absolute returns but with a benefit of notably better risk-adjusted return. As the charts show, however, the optimal diversification benefit is achieved when the share of private debt is in 40-60% range. Outside of that range, improvement in return/volatility ratios are insignificant, especially when the share of private debt is less than 20% or more than 80%.

A hypothetical portfolio that is 50% private equity and 50% private debt has an average return of 8.9% vs. 9.9% for a portfolio that is 100% private equity. At the same time, the above portfolio would have standard deviation of return of only 5.7% vs. 8.0% for an equity-only portfolio, over 29% reduction in return volatility, and over 27% increase in the return/volatility ratio.

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## IMPROVING RETURNS

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We find that returns on private apartment equity and private debt investments (in this analysis, represented by senior fixed-rate mortgages) have little correlation with each other and have different exposures/sensitivities to various macro factors.

As a result, combining private apartment equity and private debt investments in a portfolio can improve its risk-adjusted return, with optimal allocations to each being about equal. Additional research can help explore this thesis for private apartment debt investments represented by subordinated variable-rate mortgages whose return/risk characteristics fall in between private equity and senior debt.

Overall, even this initial analysis offers practical implications both to investors seeking exposure to the US apartment market as well as investment managers whose business focuses on the two quadrants.

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## ABOUT THE AUTHOR

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## NOTES

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<sup>1</sup> The other two investment quadrants are public equity (real estate investment trusts or REITs) and public debt (commercial mortgage-backed securities or CMBS).


<sup>2</sup> As of Q2 2025, NPI apartment subset included 2,259 properties.

<sup>3</sup> As of Q2 2025, GI-1 apartment subset included 6,043 properties.

<sup>4</sup> Recession dating procedure used by the National Bureau of economic Research (NBER) sets periods of economic expansions and contractions based on months after the peaks and troughs in the business cycle.

<sup>5</sup> MacKinnon, Greg. "Comparing Real Estate Debt and Equity Investments". *PREA Quarterly*, Winter 2015.

<sup>6</sup> MacKinnon, Greg. "The Capital Stack: How Do Different Parts Stack Up as Investments?" *PREA Quarterly*, Spring 2022.

An abstract graphic consisting of several concentric circles and horizontal lines. The circles are centered on the right side of the page. The innermost circle is a small white dot. The next circle is white with a dark blue segment on the left. The third circle is white with a dark blue segment on the left. The fourth circle is white with a dark blue segment on the left. The fifth circle is white with a dark blue segment on the left. The sixth circle is white with a dark blue segment on the left. The seventh circle is white with a dark blue segment on the left. The eighth circle is white with a dark blue segment on the left. The ninth circle is white with a dark blue segment on the left. The tenth circle is white with a dark blue segment on the left. The graphic is set against a light blue background with horizontal lines in white and dark blue.

Combining private apartment equity and private debt investments in a portfolio can improve its risk-adjusted return, with optimal allocations to each being about equal.