

Reviewing the case for private market investments as interest rates rebase



Drew Thornton, CFA®Head of Thought Leadership
Invesco Solutions



Nicholas Buss, PhD Managing Director Strategic Analytics Invesco Real Estate



Mike Bessell, CFA® Managing Director Strategic Analytics Invesco Real Estate

Global capital markets have seen significant volatility in recent months as surging inflation has elicited a strong response from global central banks. This significant shift in the macroeconomic outlook has impacted the views on returns for all assets, and significant repricing of listed debt and equity markets has forced the rethinking of allocations to less liquid assets, such as private markets. In addition, many private market sectors are perceived to be more interest rate sensitive, resulting in asset allocators critically examining existing positions.

In this paper, we summarize Invesco's latest long-term Capital Market Assumptions (CMAs) and review the recent trends in market asset allocation. Against this framework, we then examine the ongoing case for private market investments in a higher interest rate environment, where we find that the combination of returns on offer, as well as the diversification benefits, mean that the case for allocating capital to private market investments within a larger portfolio remains strong. Furthermore, we find significant evidence of stronger private market returns following market corrections, suggesting that this is a compelling opportunity for those not currently invested in private markets, or to increase allocations.

Asset allocation impacts

One of the key tenets of our CMAs is that the past is not necessarily prologue when it comes to forecasting returns and risk. In a world of higher inflation and interest rates, our baseline models for long-term asset prices have shifted significantly from the prior investment era. Cash rates now provide a high hurdle for risk assets, and persistently, inflation (albeit falling as of late) has left few asset classes unscathed. Luckily our approach to strategic asset allocation takes into account these long-forgotten variables when choosing between fixed income, equities, or alternatives.

- In general, we anticipate a more attractive environment for fixed income from both an absolute and risk-adjusted basis, particularly within shorter-duration credit instruments.
- Global equities are still anticipated to return around 7% in USD despite a more difficult macroeconomic environment for valuation expansion going forward.¹
- Alternatives, both public and private, still play an important role in portfolios for both return enhancement and diversification of income.

Private market considerations

Globally, private market investments continue to adjust to the increased yield environment, as lower liquidity and periodic valuations result in a lag before such impacts are fully reflected in pricing.

However, despite the capital market uncertainty, occupier fundamentals in most global real estate sectors remain robust. We continue to believe that demand remains for investment in yield assets, such as real estate, which offer both attractive long-term returns and also significant diversification against other asset classes.

Figure 1 below summarizes our latest long-term CMAs (in USD), from which we will highlight a number of points:

- 1. These are 10-year CMAs, and for some sectors, the estimates are relatively consistent over time, while for others, this blends weaker 2023 returns with subsequent recovery.
- 2. For obvious reasons, those asset classes where we anticipate higher total returns versus history are predominantly fixed-income markets.
- 3. Key equity markets, including US large cap, global equities, PE LBO funds, and also RE equity, have seen expectations reduce as a result of slower global growth and the higher interest rate environment.
- 4. Our expectations are for REIT markets in the US and globally to perform in line with the wider global equity indices.
- 5. Core real estate equity returns, before leverage, are comparable with global equities and US large-cap equities; value-add real estate is at the higher end of equity returns, again on an ungeared basis.
- 6. Real estate debt returns remain competitive versus private credit and syndicated loans, albeit those benefit from greater sector diversification.

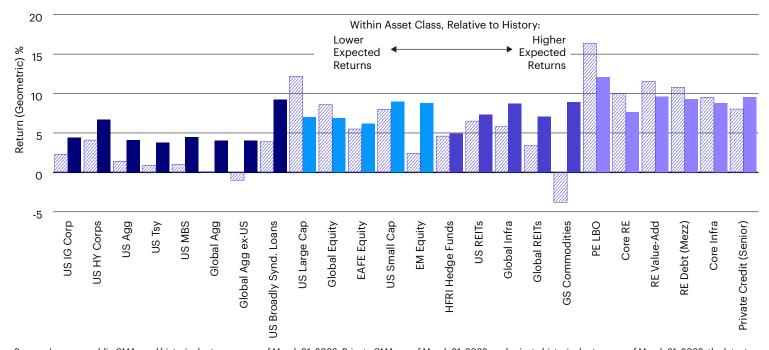
Figure 1: Comparison of returns across asset classes

Real estate returns remain competitive with global bonds and equities

■ Fixed Income 10-year CMA ■ Equities 10-year CMA ■ Alternatives 10-year CMA ■ Private Markets 10-year CMA

Historical 10-year return

Long-term capital market assumptions by asset class (10-year, USD)



Source: Invesco, public CMAs and historical returns are as of March 31, 2023. Private CMAs as of March 31, 2023, and private historical returns as of March 31, 2022, the latest data available due to private market data lags. Private asset CMAs are net of normative fees, while public asset CMAs are gross of fees. Proxies listed on page 5.

These estimates are forward-looking, are not guarantees, and they involve risks, uncertainties, and assumptions. Please see page 6 for information about our CMA methodology. There is no guarantee that the simulated results will be achieved in the future. These estimates reflect the views of Invesco Investment Solutions, the views of other investment teams at Invesco may differ from those presented here.

While ungeared core real estate returns are expected to be in line with listed equities, diversification still provides a strong argument in favor of an allocation to real estate within any broader portfolio. At a global level, real estate offers considerable diversification against the traditional asset classes of equities and bonds, as shown in **Figure 2**. We see that core real estate equity has a negative correlation to both bonds and equity markets, while value-add real estate and real estate debt remain negatively correlated to treasuries but are slightly more correlated to equities, reflecting sensitivity to the wider business cycle.

Figure 2: Correlation of public and private assets (period from Jan. 2011 to Mar. 2022) **Broadly Private** RE RE US US Syndicated Credit Value-Debt Core Core **Treasuries Equities** Commodities Loans (Senior) RE Add (Mezz) **PE LBO** Infra 1.00 **US Treasuries** -0.46 1.00 **US Equities Commodities** -0.54 1.00 **Broadly** -0.50 0.83 1.00 **Syndicated Loans Private Credit** -0.54 0.94 1.00 (Senior) Core RE -0.25 -0.19 0.14 -0.19 -0.10 1.00 1.00 **RE Value-Add** -0.29 0.19 0.22 0.12 0.26 -0.54 0.35 0.04 0.30 1.00 **RE Debt (Mezz)** 1.00 **PE LBO** -0.50 0.81 -0.10 0.42 **Core Infra** -0.46 0.65 0.07 0.46 0.81 1.00

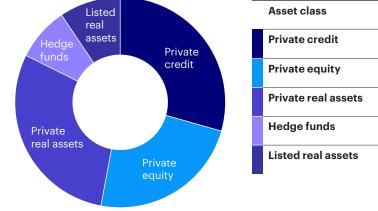
Sources: Invesco, Bloomberg L.P., Burgiss as of March 31, 2022. Proxies listed on page 5. Latest data available due to private market data lags.

Funding these assets requires an understanding of key client considerations, such as liquidity risk and risk tolerance. For portfolios looking to diversify their public asset exposure with private assets, where to allocate from becomes a topic worth exploring. By understanding the types of characteristics and exposures that private assets have, one can make funding decisions based on credit and duration risk, sourcing mostly from public fixed income, or growth and inflation risk, and sourcing from public equity assets **Figure 3**.

Figure 3: Potential alternative asset allocation range and funding source

Investment allocation will vary with client objective and risk tolerance

Sample diversified alternatives portfolio



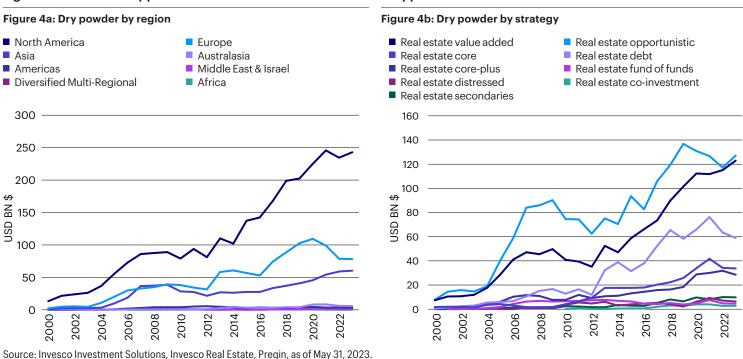
Asset classAllocation rangeFunding sourcePrivate credit25-35%70% bonds/30% equitiesPrivate equity20-30%100% equitiesPrivate real assets25-35%50% equities/50% bondsHedge funds5-15%100% bondsListed real assets5-15%70% equities/30% bonds

The portfolios shown are for illustrative purposes only and do not constitute investment advice or investment recommendations.

The case for real estate today

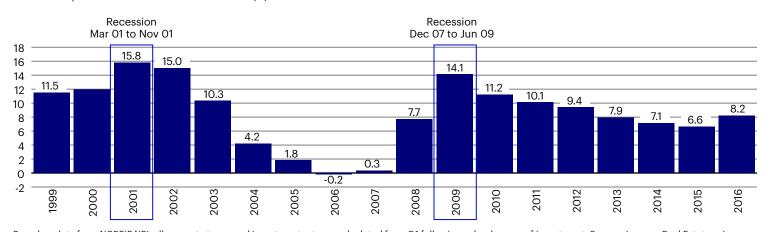
Despite the recent decline in real estate transaction activity there remains ample dry powder in major regions, notably in North America, awaiting attractive opportunities to arise amid the cloudy outlook. The key driver of the decline in transaction volumes in H2 2022 and Q1 2023 was the rapid rise in debt costs, which outpaced adjustments in cap rates and rendered debt dilutive to returns. As such, sellers have limited appetite for bringing deals to market given the current pricing environment while buyers are looking for price adjustments before committing, and this is exacerbated by a mis-match between the weight of selling pressure being at the core end of the market, and the dry powder being in higher return funds (**Figure 4a and b**).

Figure 4: Real Estate dry powder concentrated in NA value add and opportunistic



In addition, real estate investors have historically benefited from outsized returns after market corrections, as we show in **Figure 5** below, using returns from the US NPI. Our conviction is that 2024 is likely to offer similar strong returns as real estate markets come out of the current market correction.

Figure 5: US historic downturns offered opportunities for attractive vintage year investments US NPI five-year forward unlevered total returns (%)



Based on data from NCREIF NPI, all property types and investment returns calculated from Q1 following calendar year of investment. Source: Invesco Real Estate using data from NCREIF, as of April 2023. Past performance is not a guarantee of future results.

We undertook a similar analysis for Europe, in this case using data on value-add funds, separated by the year of the first closing of the fund, and then looking at the performance over the following periods. Furthermore, even adjusting for the value impact of the tightening yield environment, we see a clear pattern of outperformance for funds that invested in the aftermath of the GFC and particularly the euro crisis in 2013. Outperformance is driven in these situations by a range of factors, not least of which is being able to benefit from mispricing when transaction volumes are reduced and also picking up assets for repositioning at times when current owners lack the confidence to undertake caped projects themselves.

Appendix

Asset Class	Index
US Large Cap	S&P 500
US Top 200	Russell Top 200
US Mid Cap	Russell Midcap
US Small Cap	Russell 2000
US SMid	Russell 2500
US Broad	Russell 3000
Canada	S&P TSX
MSCI EAFE	MSCI EAFE
UK	MSCIUK
Eurozone	MSCI Euro X UK
MSCI Europe	MSCI Europe
Japan	MSCI JP
Asia Pacific Ex JP	MSCI APXJ
Emerging Market	MSCI EM
World Equity	MSCI ACWI
World Ex-US Equity	MSCI ACWI Ex-US
MSCI World Ex US	MSCI World Ex US
US Treasury	Bloomberg US Treasury
US Treasury Short	Bloomberg US Treasury Short
US Treasury Long	Bloomberg US Treasury Long
US TIPS	Bloomberg US TIPS
US Aggregate	Bloomberg US Aggregate
US Universe	Bloomberg US Universe
US Aggregate 1 to 3	Bloomberg US Corporate and Gov't (1Y-3Y)
US Aggregate Credit	Bloomberg US Aggregate Credit
US Inv Grd Corps	Bloomberg US Investment Grade
US Inv Grd Corps Long	Bloomberg US Long Credit
US High-Yield Corps	Bloomberg US High Yield
US MBS	Bloomberg US MBS
US Municipals	BOA ML US Municipal
US Intermediate Munis	BOA ML US Municipal (3Y-15Y)
US Bank Loans	CSFB Leverage Loan
US Preferred Stocks	BOA ML Fixed Rate Pref Securities
Global Aggregate	Bloomberg Global Aggregate
Global Treasury	Bloomberg Global Treasuries
Global Sovereign	Bloomberg Global Sovereign
Global Corporate	Bloomberg Global Corporate

Asset Class	Index
Global Aggregate-Ex US	Bloomberg Global
5.65a. 7.99.69a.6 <u>2</u> 7. 66	Aggregate- Ex US
Global Treasury-Ex US	Bloomberg Global
	Treasuries- Ex US
Global Corporate-Ex US	Bloomberg Global
1 II / A	Corporate- Ex US
UK Aggregate UK Gilts	Bloomberg Sterling Aggregate Bloomberg Sterling
UK GIIIS	Aggregate Gilts
UK Corp	Bloomberg Sterling Aggregate
	Non-Gilts - Corporate
UK Linker	BofA Merrill Lynch UK
	Inflation-Linked Gilt
Canada Aggregate	FTSE TMX Universe Bond
Canada Treasury	BOA Merrill Lynch Canada Gov't
Canada Corporate	BOA Merrill Lynch Canada Corp
EM Aggregate	Bloomberg EM Aggregate
EM Agg Sovereign	Bloomberg EM Sovereign
EM Agg Corporate	Bloomberg EM Corporate
EM Corporate IG	Bloomberg EM USD Agg-Corp-IG
EM Corporate HY	Bloomberg EM USD Agg-Corp-HY
Agriculture	S&P GSCI Agriculture
Energy	S&P GSCI Energy
Industrial Metals	S&P GSCI Industrial Metals
Livestock	S&P GSCI Livestock
Precious Metals	S&P GSCI Precious Metals
Commodities	S&P GSCI
BB Commodities	Bloomberg Commodity
Hedge Funds	HFRI HF
HF Event Driven	HFRI Event Driven
HF Global Macro	HFRI Macro
HF Long/Short	HFRI Equity Hedge
HF Market Neutral	HFRI Equity Market Neutral
PE US LBO	Burgiss Buyout
Early Venture	Burgiss Early Venture Capital
Mid-market Lending	Burgiss Senior Private Debt
Distressed Credit	Burgiss Distressed Debt
Core Real Estate	Preqin Real Estate
Value-Add Real Estate	Preqin Real Estate Value Added
Infrastructure-Core	Preqin Infrastructure

Past performance is not indicative of future results. An investment cannot be made directly into an index.

Investment risks

The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations) and investors may not get back the full amount invested.

Invesco Investment Solutions develops CMAs that provide long-term estimates for the behavior of major asset classes globally. The team is dedicated to designing outcome-oriented, multi-asset portfolios that meet the specific goals of investors. The assumptions, which are based on 5- and 10-year investment time horizons, are intended to guide these strategic asset class allocations. For each selected asset class, we develop assumptions for estimated return, estimated standard deviation of return (volatility), and estimated correlation with other asset classes. This information is not intended as a recommendation to invest in a specific asset class or strategy, or as a promise of future performance. Estimated returns are subject to uncertainty and error and can be conditional on economic scenarios. In the event a particular scenario comes to pass, actual returns could be significantly higher or lower than these estimates..

About our capital market assumptions methodology

We employ a fundamentally based "building block" approach to estimating asset class returns. Estimates for income and capital gain components of returns for each asset class are informed by fundamental and historical data. Components are then combined to establish estimated returns. Here we provide a summary of key elements of the methodology used to produce our long-term (10-year) and medium-term (5-year) estimates.

Fixed income returns are composed of; the average of the starting (initial) yield and the expected yield for bonds, estimated changes in valuations given changes in the Treasury yield curve, roll return which reflects the impact on the price of bonds that are held over time, and a credit adjustment which estimates the potential impact on returns from credit rating downgrades and defaults.

Equity returns are composed of; a dividend yield, calculated using dividend per share divided by price per share, buyback yield, calculated as the percentage change in shares outstanding resulting from companies buying back or issuing shares, valuations change, the expected change in value given the current Price/Earnings (P/E) ratio and the assumption of reversion to the long-term average P/E ratio, and the estimated growth of earnings based on the long-term average real GDP per capita and inflation.

Alternative returns are composed of; a variety of public versus private assets with heterogenous drivers of return given their distinct nature. They range from a beta driven proxy to public markets or a bottom up, building block methodology like that of fixed income or equities depending whether they are more bond like or stock like.

For **volatility estimates** for the different asset classes, we use rolling historical quarterly returns of various market benchmarks. Given that benchmarks have differing histories within and across asset classes, we normalize the volatility estimates of shorter-lived benchmarks to ensure that all series are measured over similar time periods.

Across a variety of alternative investment strategies, our objective is to capture the expected behavior of each strategy as represented by a broad proxy rather than a particular manager or fund. Granular data within private markets is difficult, and often impossible, to find. As such, we use objective, observable data from public proxies wherever possible as an input into our process; where data is not available, our alternatives specialists set forward-looking assumptions informed by their own experience.

Return assumptions vary by category. For **Private equity**, we use a building-block approach for US leveraged buyouts that captures earnings growth, valuation multiple expansion/contraction, fund leverage (and cost of financing), and fees to derive expected net returns. For other equity strategies such as venture capital, we compare historical returns to buyouts and then apply that difference to our forward-looking estimate for buyout returns on the assumption that return differences in the future will be consistent with the past.

Real Assets. For select real assets, namely Core US Real Estate and Core US Infrastructure, we utilize a building-block approach capturing rental income, maintenance CapEx, expected real income growth, expected inflation, expected valuation changes, leverage (and cost of financing), and fees to derive expected net returns. For other real assets, we utilize historical returns from NCREIF and Burgiss.

Private Credit. For most private credit proxies, we start with gross yields on underlying debt holdings and adjust for expected losses (based on historical averages), fund leverage (and cost of financing), and fees to derive expected net returns. For a few private credit proxies, such as distressed debt, we utilize historical relationships to derive forward-looking assumptions as described above.

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