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October 2023

As we continue our series on private markets investing through an outcome-oriented lens, we thought it would make sense to address a specific subtopic of keen interest to many of our clients – distressed debt. While not a formal component of our four-part series, the topic of distressed investing, particularly portfolio integration of this unique asset class, is quickly capturing investor attention.

Intuitively, distressed debt investing involves taking positions in the existing debt of an entity, typically a financially distressed company. These investments are made with the hopes of initiating a turnaround, reorganization, or restructuring at the targeted entity, with a high probability that these positions will eventually be converted to equity. Often times, these entities are engaged in bankruptcy proceedings. Highly skilled managers can assist companies in navigating these complex situations and in the process generate outsized returns for investors. Unsurprisingly, the primary source of these returns comes from capital appreciation (not income). This is a key point as we move into the analysis.

One item that is less intuitive for investors is where this sub-asset class fits in a diversified portfolio. While it might be tempting to lump this investment into the "private credit" allocation, we'd argue that it fits in the private market growth sleeve (along with private equity and venture capital), given its equity-like characteristics. Distressed debt has distinctly different characteristics from typical direct lending investments and a similar volatility profile to global equities, which we'll demonstrate using our Invesco Vision tool and Long-term Capital Market Assumptions.

12.00 Distressed Debt (DST) 10.00 First Lien Direct Lending (DL) 8.00 60% GEQ/30% Return (%) GBND/5%DST/5%DL 55% GEQ/35% Global Equities (GEQ) GBND/5%DST/5%D 6.00 60% GEQ/40%GBND Global Aggregate Bonds 4.00 (GBND) 2.00 0.00 0.00 2.00 4.00 6.00 8.00 10.00 12.00 14.00 16.00 18.00 Absolute Risk (%)

Figure 1 - Efficient frontier analysis

Source: Invesco Vision, data as of 31 March 2023. Return estimates are based on the Q12023 Long-Term Capital Market Assumptions. These estimates are forward-looking, are not guarantees, and they involve risks, uncertainties, and assumptions.

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We analyzed the following building blocks to construct an efficient frontier analysis, and have included their expected return and risk, which are generated through our Long-term Capital Market Assumptions framework.

Portfolio components	Return (%)	Risk (%)
Global Equities (MSCI ACWI)	6.9	16.7
Global Bonds USD - hedged (Bloomberg Global Agg Bond USD) Return	4.0	3.7
First Lien Direct Lending Return	9.6	4.1
Distressed Debt Return	11.4	15.2

Source: Invesco Vision, data as of 31 March 2023. These estimates are forward-looking, are not guarantees, and they involve risks, uncertainties, and assumptions.

As you can see from the return and risk expectations, distressed debt has a volatility much closer to equities than to global core bonds or direct lending. When thinking through the proper funding mechanism for making a distressed allocation, we believe it is more effective to fund this position from equities to both reduce risk and increase return.

Further diving into the Vision analysis, we created two sample portfolios to highlight this process.

	Traditional 60/40 portfolio	Portfolio 1	Portfolio 2
Composition	60% Global Equities 40% Global Bonds	60% Global Equities 30% Global Bonds 5% Direct Lending 5% Distressed Debt Return	55% Global Equities 35% Global Bonds 5% Direct Lending 5% Distressed Debt Return
Return (%)	6.1	6.8	6.7
Risk (%)	10.2	10.7	9.9

Source: Invesco Vision, data as of 31 March 2023. For illustrative purposes only. There can be no assurance that any estimated returns or projections can be realized.

While integrating both direct lending and distressed debt improves the portfolio, Portfolio 2 provides the best risk-adjusted outcome, with higher returns and lower risk than a traditional 60/40 portfolio. The enhanced diversification from the "equity-funding" of distressed debt allows the investor much more portfolio flexibility, which for example could be leveraged to allow for additional exposure to growth assets to enhance returns and scale the portfolio to the level of risk comparable to a traditional 60/40 portfolio.

In sum, it's important to not only think about which asset classes to implement in a diversified portfolio, but how to best effectuate those positions to maximize benefits to investors. Additionally, and particularly when investing in private markets, the final step of manager selection is integral. For distressed debt, a successful active manager can generate returns meaningfully higher than the asset class median or asset-class level return forecast (i.e., CMA). It's essential that investors partner with the right manager to leverage strong opportunities in the space, in addition to properly implementing the overall portfolio construction approach.



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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 errors 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.

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.

Approach to risk. A key principle of our risk methodology is to represent alternatives as a combination of both private and public exposures. This captures a distinct private element that is not correlated with traditional assets, while at the same time recognizing the underlying exposures themselves are often more public or traditional in nature. Taking private credit as an example, our methodology assumes exposure to a private debt factor as well as a public credit spread factor. The result is a private credit correlation with traditional assets that is greater than 0, but less than what would be suggested by public credit spread exposure alone. Because our Vision modeling platform extensively leverages the Barra framework, absolute risk for a number of alternative strategies is a byproduct of the Barra factor exposures. For alternative strategies not explicitly captured by Barra, we assume overall risk is consistent with history, with factors being mapped to the private and public factors that our alternatives specialists believe best represent the strategy.



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