RVK Market Update
June 2020

Executive Summary

Written By:

RVK, Inc.

Given the extent of the recent, pandemic-driven economic and market disruption and the highly levered state of most US corporate borrowers, we expect that a large and sustained distressed debt cycle is likely to emerge over the course of the next year. In past periods of economic stress, the inefficient and intensely cyclical distressed debt opportunity set has afforded some of the most compelling risk-adjusted returns available to institutional investors, provided that those investors have a tolerance for the high credit risk and low liquidity that distressed debt investing entails. As such, we believe that an investment targeting distressed debt has the potential to augment a diversified portfolio of credit assets, and to aid in reaching many investors' long-term return targets. However, given the expected size of this opportunity set and the likely severity of the pandemic-driven recession, we caution investors to evaluate this opportunity set thoroughly and to carefully assess the risks and benefits before deciding whether distressed debt is likely to play a beneficial role in their portfolios. Though the coming distressed debt cycle is likely to include many exceptional opportunities, it is also likely to persist for a significant period of time, allowing investors ample time to position for the coming distressed debt cycle methodically and with care.

Distressed Debt - Definition and Key Characteristics

Distressed debt represents a broad and diverse opportunity set, encompassing a wide range of instrument types, borrower types, underlying collateral, and expected cash flow patterns. However, a distressed debt investment typically refers to the investment in some type of debt instrument where the default or bankruptcy of the associated borrower is either considered to be likely in the near future, or has already taken place. As such, a core component of many distressed debt investments is the successful navigation of the "workout" of a defaulted loan or bond, or the full scale bankruptcy process in the borrower's applicable jurisdiction. Most typically, distressed debt investors will:

1. Invest in a debt instrument that gives them some type of claim on borrower assets or cash flows either shortly before or after the borrower experiences default and/or bankruptcy;

2. Hold this claim on borrower assets or cash flows through the loan or bond workout or the bankruptcy process and restructuring of the borrower's capital structure. During this process, some distressed debt investors may play an active role and even inherit partial ownership of the borrower entity, and;

3. Sell the assets or new, restructured security that their original investment entitled them to after the workout or bankruptcy process is complete, or after visibility on future borrow-level or asset-level cash flows has significantly improved.

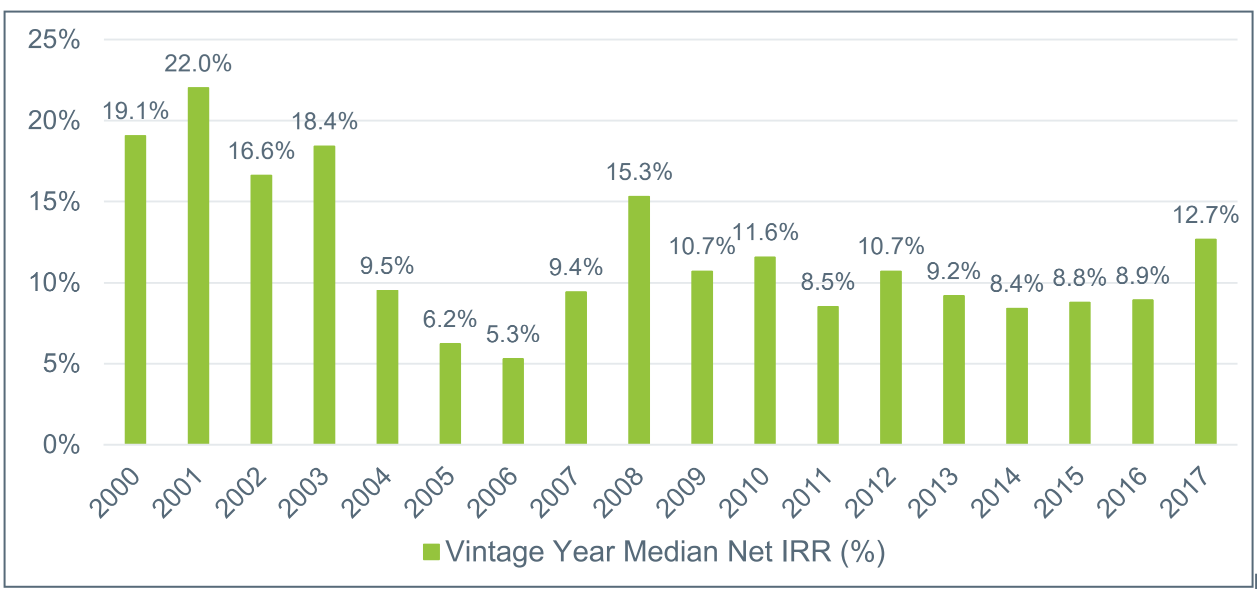
Common distressed debt investment types include distress-for-control, non-control distressed debt, rescue financing, special situations, asset-backed distressed debt, and many other categories, representing an extremely broad range of investment approaches and targeted security and collateral types. Generally, the collateral and forward path to positive cash flow associated with most distressed debt investments tend to be more work-intensive and more complex than those of most other types of credit investments, and typically involve a longer required time horizon.

Relative to other types of investments, distressed debt typically exhibits several unique characteristics that we believe all potential investors should be aware of:

1. A high risk and return profile
2. Illiquidity
3. Cyclicality

Given the high level of uncertainty associated with the value of any securities or claims attached to bankrupt borrowers or borrowers experiencing negative cash flows, distressed debt investments are typically considered to have a higher risk profile than virtually any other type of debt investment. In many cases, they are also considered to be higher risk than investments in the equity of stable corporate entities. Consequently, most distressed debt investors require a similarly high level of expected return to compensate them for taking on this high level of risk. Specifically, most US-based distressed debt investments are expected to earn annualized net returns of around 15-20% during robust distressed cycles, though off-cycle returns are typically expected to be much lower. For ease of reference, **Exhibit 1** pictures the returns achieved by the distressed debt fund universe for the vintage years 2000 to 2017. Vintage 2008 distressed debt funds, which sought to capitalize on the opportunity set to arise from the Global Financial Crisis, achieved an approximately 15% median net IRR, while the distressed debt funds in the years following were only able to achieve median performance in the 8-12% net IRR range.

Exhibit 1: Distressed Debt Funds Vintage Year Median Performance



Source: Preqin.

Data represented by the Private Debt - Distressed Debt peer group. Data as of 5/2020.

Typically, there are a limited number of market participants with the skill sets necessary to value distressed debt, given the complexity and limited information surrounding most defaults and bankruptcy processes, and the absence of any positive borrower-level cash flows backing these investments. High levels of uncertainty around distressed borrowers' future cash flows or the path to the monetization of any borrower assets create additional barriers. As such, distressed debt securities are typically quite illiquid, with the only viable exit to many distressed debt opportunities reliant on the "workout" of distressed borrower entities and/or their assets, and a subsequent sale of assets or successful restructuring of the distressed borrower. The features of each distressed debt workout are highly specific to the borrower, collateral, and environment involved, but two common examples of workouts within the distressed debt space include:

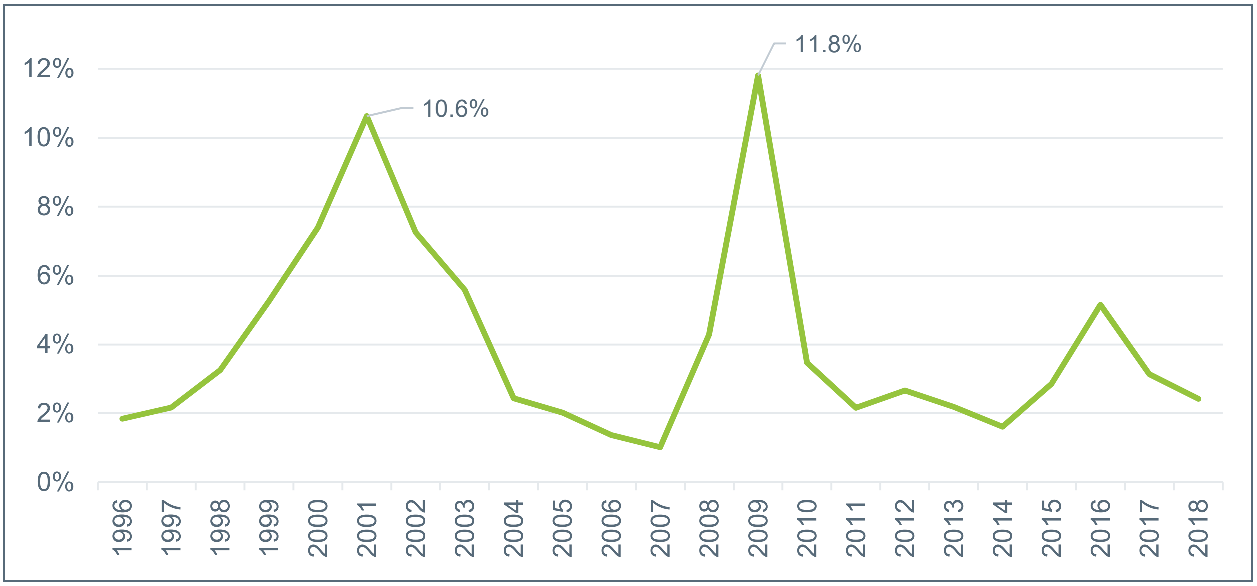
1. The private sale of borrower assets (such as equipment or inventory) that were pledged as collateral for a defaulted loan.

2. The restructuring of a borrower company's capital structure and operations through a bankruptcy process, where a distressed debt security might be converted into partial equity ownership of the restructured borrower.

These types of workouts often take up to several years, and in cases where investors wish to exit a distressed debt position before the associated workout is complete, there are often very few potential counterparties to which they can sell their investment. As a result, any distressed debt positions sold before a meaningful borrower-level or asset-level resolution is reached are sold at substantial discounts. Because of this, we recommend distressed debt strategies follow closed-end structures that insulate investors from unexpected redemptions and the "fire-sales" that would likely be necessary to return investor capital at an unexpected, early stage of the investment. Similarly, we believe that investors with high liquidity constraints or unpredictable cash needs will likely not find distressed debt investments to be appropriate for their portfolios.

Trends in the default and bankruptcy of borrowers that make up most distressed debt opportunity sets are typically cyclical, with some recessionary economic environments giving rise to large waves of corporate or even municipal and sovereign defaults, while more benign economic environments may be characterized by very little default activity. As such, the opportunity set for distressed debt investing is highly cyclical, with some periods presenting fertile opportunity sets, and others presenting would-be distressed debt investors with relatively little compensation in exchange for absorbing the risk of a distressed borrower. To illustrate, **Exhibit 2** shows the trends in US high yield corporate bond defaults over the past 20 years. In the past two recessions, the Dotcom Bubble of 2000-2001 and Global Financial Crisis in 2008-2009, the default rates of high yield corporate bonds reached over 10% and 11%, respectively. Given this cyclicality, distressed debt is typically treated as a tactical investment, and distressed debt allocations are held at non-constant sizes by most institutional investors. In many cases, distressed debt allocations may drop to 0% during extended periods of benign markets and low borrower default, such as the US environment over the past several years.

Exhibit 2: Annual US Corporate Speculative-Grade Default Rate

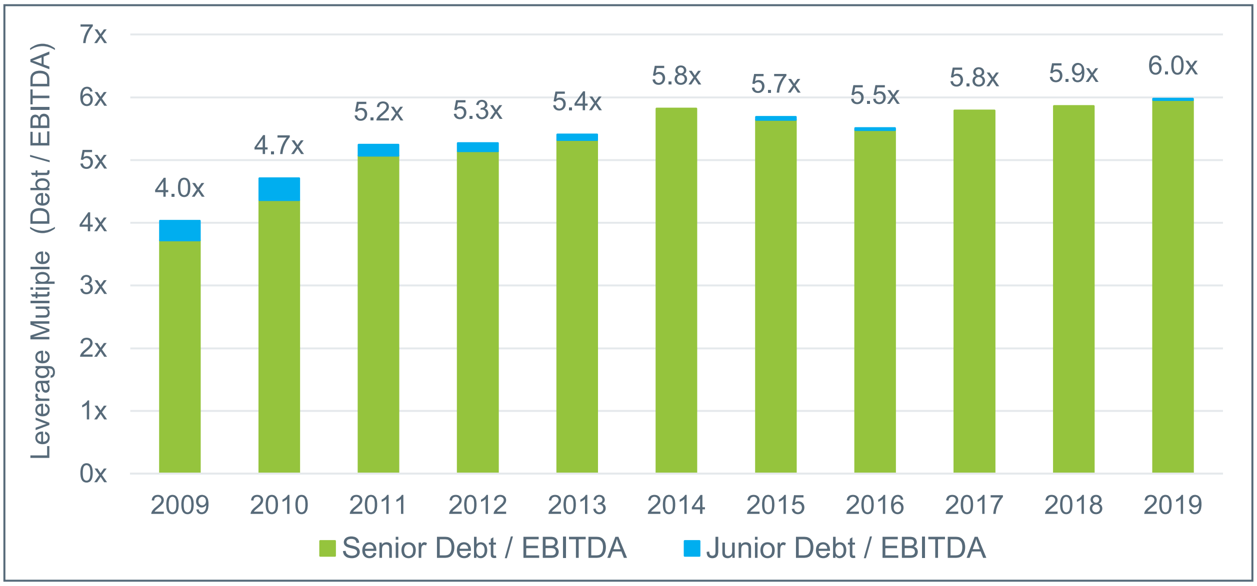


Source: S&P Global Fixed Income Research

Upcoming Distressed Debt Opportunity

Given the extent of the disruption to both economic productivity and liquidity available to borrowers that has characterized the past few months, we predict that it is likely that a new distressed cycle will begin in earnest over the course of the next year. Among other developments, we believe that an estimated 10-12% of the investment grade corporate bond market is expected to experience credit downgrades, significantly increasing the cost of capital for corporate borrowers. Concurrently, the economic shut downs that have reached many industries in the wake of the global COVID 19 pandemic has significantly disrupted borrower cash flows, making it difficult or impossible for many borrowers to pay their long-term debts without significant and relatively near-term improvement. Exacerbating the effects of this event-driven disruption is the fact that the majority of US corporate borrowers are already running at significantly high levels of leverage, as seen in **Exhibit 3**, even when measured against EBITDA levels that are often inflated by aggressive adjustments.

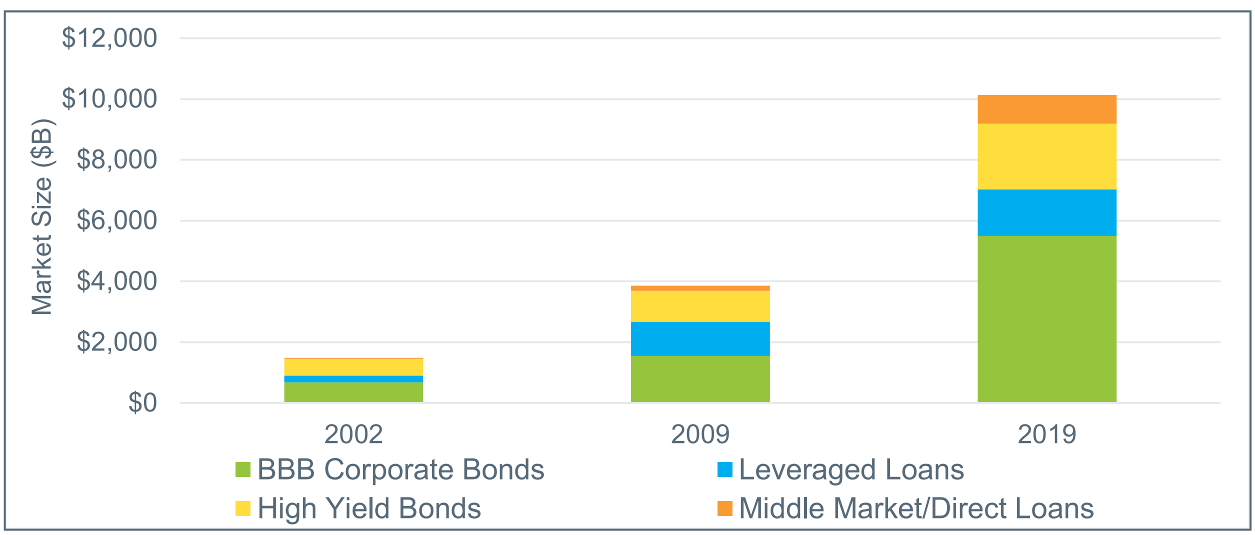
Exhibit 3: Average Leverage of Large Corporate LBO Loans



Source: S&P Global Market Intelligence

At this stage, major global ratings agencies such as Standard & Poor's (S&P) are predicting eventual default rates across US corporate high yield bonds of 10% or higher, and a similarly outsized wave of defaults is expected across the US leveraged loan market. The large and aggressively growing private lending space is expected to experience significant stress as well, leading to a liquidity crisis for many higher risk, middle market corporate borrowers which rely on the shadow-banking system for the ongoing financing of their operations and refinancing of their debt. These credit markets, in addition to the historically large BBB corporate bond market, have grown substantially in size since the two previous distressed debt opportunities in 2002 and 2009, as seen in **Exhibit 4**. We believe this growth in overall US corporate debt volume suggests that the upcoming distressed debt opportunity could be commensurately larger in size than many past distressed cycles.

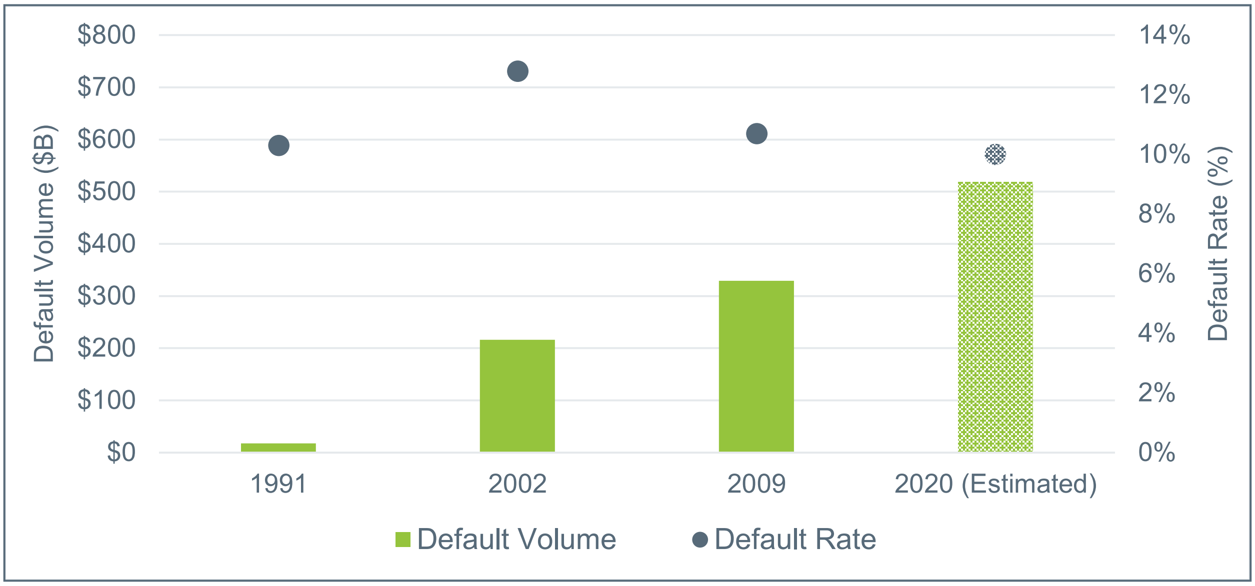
Exhibit 4: Size of US Corporate Debt Markets



Source: Oaktree Capital Management

Based on a range of estimates from experienced distressed debt investment managers that were recently shared with RVK, it is possible that distressed debt investors may be facing an opportunity set of as much as $500 billion in cumulative corporate defaults over the course of the upcoming distressed debt cycle. This has been illustrated in **Exhibit 5,** which outlines some preliminary default volume expectations from Oaktree Capital Management, one of the largest and most experienced investment managers operating in the distressed debt space. If these or similar expectations prove to be the case, the coming wave of distressed debt opportunities could represent the largest dollar value of any distressed debt cycle to date, including that generated by the financial crisis of 2008-2010. As noted previously, the large size of the upcoming opportunity set is expected to source both from the high degree of economic disruption created by the pandemic and the large scale of leverage currently present in the US financial system.

Exhibit 5: Estimated Size of the Distressed Debt Opportunity Set



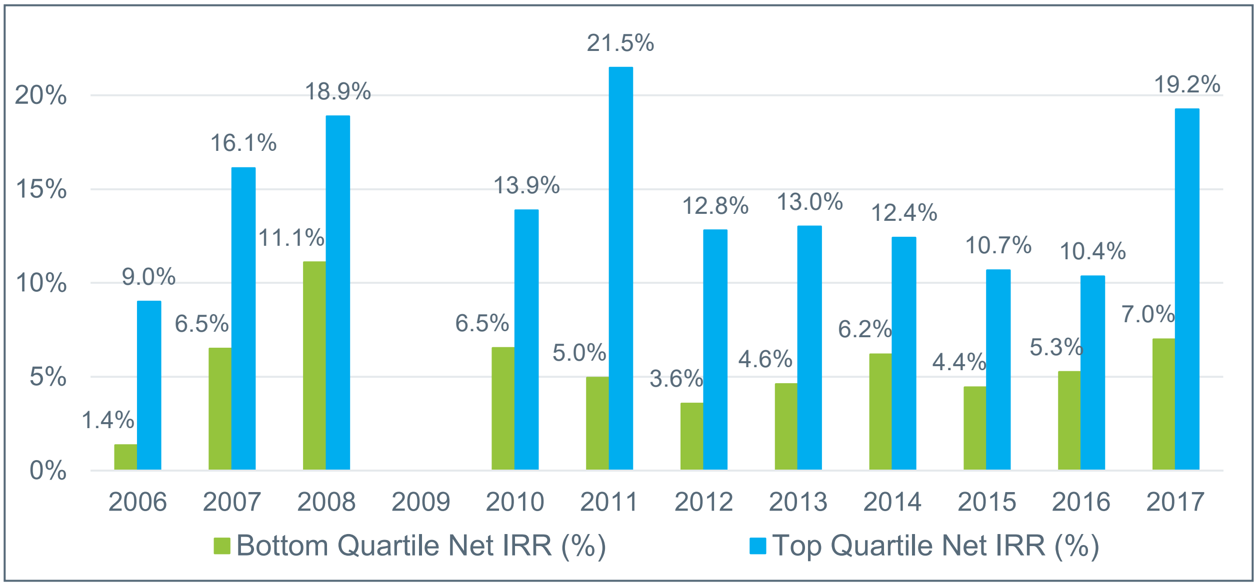
Source: Oaktree Capital Management

It is important to note, however, that in spite of the severity of the current economic environment, the upcoming distressed debt cycle is largely expected to take a significant period of time to develop in earnest, and to remain persistent for an even longer period of time once it has done so. Specifically, the covenant-lite characteristics of many loans and bonds, both public and private, are likely to delay borrower default in many cases, and the presence of what is likely to be an extremely high volume of concurrent defaults at the peak of the upcoming cycle is likewise expected to delay the resolution or “workout” of distressed assets. As such, while we believe the upcoming distressed debt cycle will represent a large and compelling opportunity set for many diversified institutional investors, we believe that the most successful forays into this space are likely to be methodical and gradual. Unlike the more limited, time-sensitive windows of investment opportunity that characterized investments such as TALF-focused strategies or many credit dislocation oriented strategies, the upcoming wave of distressed borrowers and assets should extend long enough to accommodate investors moving at many different speeds. Furthermore, given the likely scale of this opportunity set, the most dramatically discounted debt and assets are likely to become available in the midst of the cycle, as opposed to at its outset.

Best-In-Class Strategy Features

As can be seen in **Exhibit 6**, the distressed debt investment landscape is characterized by especially high levels of dispersion, with the investment results experienced by skilled and unskilled distressed debt strategies often dramatically differing from each other. The average difference between the top and bottom performing quartile distressed debt funds has been nearly 9% on average since 2006, including as high as 16% in vintage 2011.

Exhibit 6: Distressed Debt Funds Vintage Year Performance



Source: Preqin. Data represented by the Private Debt - Distressed Debt peer group. Data as of 5/2020. Vintage 2009 lacks a sufficient number of constituents to include a bottom or top quartile.

As a result of this high dispersion of performance among distressed debt funds, we believe that manager selection plays an especially important role in this asset class – this is not a space where investors can broadly expect great success with a simple "beta trade." Specifically, we strongly recommend that investors target distressed debt strategies that:

- Are run by investment teams with significant experience, including active participation in distressed investing during the 2008-2010 financial crisis by senior decision-makers;
- Command enough scale to access appropriate resources, including legal resources and expertise in the applicable jurisdictions in which they plan to operate;
- Focus on a subset of the distressed debt landscape characterized by high barriers to entry, often through a focus on investments that require the active design of restructuring solutions, strong pre-existing networks of borrowers or co-investors, exceptional legal and/or investment diligence, or similar;
- Have a complete understanding of their targeted borrowers, as well as the necessary features of a successful restructuring or repositioning of those borrowers;
- Structure their funds with defensive characteristics in order to avoid unexpected "fire sales," especially with respect to liquidity and leverage, and;

- Demonstrate a strong track record of past investments based on realized (as opposed to unrealized) deals that share the key characteristics of their proposed investment focus for the upcoming cycle.

Although each distressed debt strategy is expected to command its own unique profile and to require slightly different skill sets in order to successfully invest, we regard the above-mentioned characteristics as necessary indicators of fitness in nearly all cases.

Typical Fund Characteristics

For ease of reference, in **Exhibit 7** we summarize the typical fund-level characteristics of most distressed debt offerings compared to those of a typical direct lending fund – the fund type which makes up the largest and most mainstream component of the private credit universe. As can be seen from the table, compared to the more "classic" direct lending strategies which make up the bulk of the private credit landscape, distressed debt strategies tend to be more illiquid, command a higher risk and return profile, and often involve higher fees due to the more intensive legal work required by most bankruptcies and restructurings.

Exhibit 7: Typical Distressed Debt and Direct Lending Fund Characteristics

	Typical Distressed Debt Fund	Typical Direct Lending Fund
Fund Structure	Draw-Down Fund	Draw-Down Fund
Fund Term	6 - 10 Years	6 - 8 Years
Management Fees	1.5% - 2%	1% - 1.5%
Performance Fees	15% - 20%	15%
Performance Hurdle	8%	6%
Expected Net Fund Return	15% - 20%	10% - 15%
Expected Net Fund Multiple	1.5X – 2.0X	1.1X – 1.4X
Expected % of Investments Experiencing Losses	10% - 50%	0% - 10%

Source: RVK

Investor Appropriateness

Because distressed debt investments are typically illiquid, cyclical, and involve greater risk, distressed debt strategies are often most appropriate for investors and portfolios with:

1. A high risk tolerance;
2. Low near-term and intermediate-term liquidity needs;
3. A tolerance for tactical, non-constant investments and allocations, and;

4. A tolerance for complex investments that may not always be priced by public markets or otherwise easily valued.

Generally, this profile limits distressed debt investors to large or mid-sized institutions with longer-term time horizons – a trend that is reinforced by the fact that most high quality distressed debt strategies feature a multi-year lockup of investor capital and relatively high minimum investment sizes. Because of the higher-risk and less liquid profile of these investments, most investors also choose to bucket distressed debt investments as part of a private credit or alternatives allocation. However, some investors may also include them as the highest-risk, most illiquid component of an opportunistic or non-core fixed income allocation.

Within a portfolio context, distressed debt is typically most effective as a return engine, achieving high levels of absolute return and helping to raise the long-term absolute returns attainable by the total portfolio. In contrast, its high level of risk and illiquid profile typically make it ineffective as a portfolio diversifier, or as a source of near-term cash generation.

Conclusion

Overall, although the presence of a robust distressed debt investment opportunity set is non-constant, we believe that a judiciously managed distressed debt portfolio can be a powerful tool for institutional investors with an appropriate tolerance for volatility, cyclicality, and illiquidity. In cases where there is interest in further exploring investment opportunities associated with the upcoming distressed debt cycle, please do not hesitate to reach out to RVK for more information.

Disclaimer of Warranties and Limitation of Liability

This document was prepared by RVK, Inc. (RVK) and may include information and data from some or all of the following sources: client staff; custodian banks; investment managers; specialty investment consultants; actuaries; plan administrators/record-keepers; index providers; as well as other third-party sources or as we believe necessary or appropriate. RVK has taken reasonable care to verify the accuracy of the information or data, but makes no warranties and disclaims responsibility for the accuracy or completeness of information or data provided or methodologies employed by any external source. This document does not constitute a recommendation by RVK or an offer of, or a solicitation for, any particular security and it is not intended to convey any guarantees as to the future performance of the investment products, asset classes, or capital markets.

RVK

RVK was founded in 1985 to focus exclusively on investment consulting and today employs over 100 professionals. The firm is headquartered in Portland, Oregon, with regional offices in Boise, Chicago, and New York City. RVK is one of the ten largest consulting firms in the US, as reported by *Pensions & Investments' 2019 Special Report – Consultants*. Additionally, RVK received a notable award in April 2020 when it was named a Greenwich *Quality Leader* among large US investment consultants, based upon Greenwich Associates' 2019 study. Greenwich is an industry-recognized third-party firm which asks plan sponsors to rank their consultants on a series of key metrics. Notably, RVK is the only firm among large US consultants to receive an award for a third consecutive year.[1] RVK's diversified client base of over 190 clients covers 30 states, and covers endowments, foundations, corporate and public defined benefit and contribution plans, Taft-Hartley plans, and high-net-worth individuals and families. The firm is independent, employee-owned, and derives 100% of its revenues from investment consulting services.

[1]Between July and October 2019, Greenwich Associates conducted interviews with 1,100 individuals at 896 of the largest tax-exempt funds in the US–including corporate and union funds, public funds, endowments and foundations–with either pension or investment pool assets greater than $150 million. Study participants were asked to provide quantitative and qualitative evaluations of their asset managers and investment consultants, including qualitative assessments of those firms soliciting their business and detailed information on important market trends. RVK is one of three firms recognized in the large investment consultant category. The ratings may not be representative of any one client's experience with RVK; rather they are representative of those clients submitted and that chose to participate in the survey. The results are not indicative of RVK's future performance.

To read the Greenwich article, please refer to the following URL: https://www.greenwich.com/sites/default/files/files/reports/Five-Factors-Distinguish-Best-in-Class-Consultants-Average-Practitioners.20-4012.pdf

For more information about RVK, please refer to the following URL: https://www.rvkinc.com/about/about.php