© STEPSTONE Recovery rates as a mitigator against default rates

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An uncertain macroeconomic environment that may portend a recession usually entails greater default risk.¹ However, direct lenders can take preemptive measures to limit that risk and improve the chances of recovery if one happens.

It is important to take recovery rates into account since it is the loss rate and not the default rate itself that will affect the portfolio's performance. Because the loss rate is the combination of both the default and recovery rate, the focus of this article will be on both metrics.

¹ Defined as a missed interest or principal payment.

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Historical recovery rates

A rising number of defaults typically correlates with a decline in economic growth. However, default rates alone do not offer comprehensive insights required to evaluate the impact of defaults on returns. To fully assess this, it is essential to consider the recovery rates, which dictate the amount a lender can recuperate after a borrower defaults. Recovery rates significantly influence the final loss rates, and thus the ultimate return of the investment. The recovery rate is highly dependent on the asset class in which the investment was made, as demonstrated by the long-term ultimate recovery rates across bonds and term loans in **Figure 1**. Term loans are a good proxy for the first-lien loans found in direct lending. These loans achieved an ultimate recovery rate of 72%, far higher than the 47% typically seen in senior unsecured bonds.

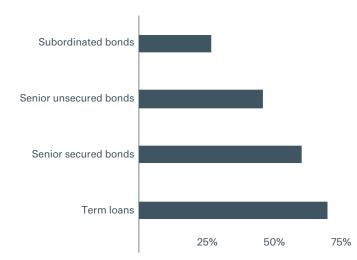


FIGURE 1: HISTORICAL RECOVERY RATES

Source: Moody's Annual Default Report, 2022.

First-lien loans have delivered superior recovery rates leading to lower loss rates than other fixed-income solutions.

Historical loss rates

The Broad Direct Lending's higher loss rates are due in part to the index's composition, most of which was made up of junior and mezzanine debt. In contrast, the Senior Cliffwater Direct Lending Index, which we believe is a better proxy for first-lien loans that constitute the vast majority of direct lending, has experienced relatively muted loss rates (**Figure 2**). Senior direct lending loans' loss rates have consistently been below 1% since the inception of the index in 2011. As mentioned in our last article, seniority in the capital stack is critical to ensuring high recovery rates and low loss rates.

FIGURE 2: HISTORICAL LOSS RATES



Sources: Cliffwater, Morningstar LSTA LL Index, Bloomberg US High Yield Index and JPMorgan Markets as of September 2023. The broad Cliffwater Direct Lending Index used to be mainly comprised of junior loans until a shift to a majority of senior debt. Currently, the broad index incorporates 80% of senior debt and 20% of subordinated debt and equity.

Note: Direct lending covers first lien, second lien and mezz; senior direct lending covers first lien.

Impact of default and recovery rates on IRRs

During calm market periods, recovery rates generally receive less attention from investors. **Figure 3** shows why as a decrease from 70% to a stressed recovery rate of 30% when the default rates are relatively low (e.g. 2%) causes a limited loss rate increase from 0.6% to 1.4%. However, in times of financial stress, a similar decrease in recovery rates from, assuming a high default rate level of 10%, results in loss rates increasing from 3.0% to 7.0%.

This difference in loss rates between low and high recovery rates has a significant impact on the final IRR, as depicted in **Figure 4.** For instance, at a 10% default rate which is similar to GFC levels for US leveraged loans, going from the direct lending long-term average of 70% to a significantly stressed recovery rate of 30% translates into IRRs of 4.5% and 0.5%, respectively. Importantly, even under these more extreme assumptions, the IRR is still in positive territory.

Loss rate mitigants

Capital structure & lending terms—Focusing on first-lien loans sitting at the top of the capital structure enhances recovery rates since as those loans will be repaid first if a borrower defaults. Moreover, maintaining robust underwriting standards, such as ensuring the company is not excessively leveraged and has sufficient equity buffer, is crucial for capital recovery. In addition, financial maintenance covenants may also increase recovery rates as it provides lenders the opportunity to react early to a borrower facing financial stress.

GP-specific—Access to diverse sourcing channels and exposure to numerous deals allow the manager to be selective in capital deployment, limiting the effects of competition between lenders. Furthermore, a credit manager with a dedicated restructuring team, or the capability to take control and manage a business, is likely to increase recovery rates.

FIGURE 3: DEFAULT AND RECOVERY RATES

Loss rates (%)		Default rates						
		2%	4%	6%	8%	10%		
Recovery rates	70%	0.6%	1.2%	1.8%	2.4%	3.0%		
	60%	0.8%	1.6%	2.4%	3.2%	4.0%		
	50%	1.0%	2.0%	3.0%	4.0%	5.0%		
	40%	1.2%	2.4%	3.6%	4.8%	6.0%		
	30%	1.4%	2.8%	4.2%	5.6%	7.0%		

Source: StepStone, for illustrative purpose only.

FIGURE 4: IMPACT ON IRR

Net IRR (%)		Default rates						
		2%	4%	6%	8%	10%		
Recovery rates	70%	6.9%	6.3%	5.7%	5.1%	4.5%		
	60%	6.7%	5.9%	5.1%	4.3%	3.5%		
	50%	6.5%	5.5%	4.5%	3.5%	2.5%		
	40%	6.3%	5.1%	3.9%	2.7%	1.5%		
	30%	6.1%	4.7%	3.3%	1.9%	0.5%		

Source: StepStone, for illustrative purpose only. SOFR: 4%.

Even with stressed default rates, we would expect direct lending to deliver positive realized returns. **Company monitoring**—A thorough and frequent monitoring of FCC, LTV and leverage levels can allow for early detection of potential upcoming financial trouble for the company. An advantage for direct lenders is their direct access to borrowers. When a company begins to underperform, lenders typically engage in negotiations with the borrower and any equity sponsors directly.

Bankruptcy negotiations—Direct lenders often have a more advantageous position compared with other lenders, including those in the leverage loan market. This advantage arises because the process typically involves a limited number of lenders rather than a large syndicate, simplifying negotiations and increasing the likelihood of higher recovery rates.

Entering an uncertain economic environment, default rates often offer valuable insights into current economic conditions. However, they only tell part of the story: Their impact on returns can be offset by higher recovery rates. Direct lenders could be ideally positioned to improve recovery rates if they maintain selectivity in their investment process, retain restructuring capabilities, and engage in negotiations before a firm's underperformance reaches an irreversible stage. Furthermore, a properly diversified portfolio can also significantly mitigate losses <u>during tail events</u>.²

² StepStone, Diversification in direct lending, 2023.

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