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Private Credit Risk
Part 1:
Commercial Lending

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Agenda:

- The importance of the private credit asset class
- Types of private debt strategies
- Private debt – the space between equity and debt
- Drivers of private credit risk
- Differences in the risk characteristics of the private debt strategies
- Higher moments and idiosyncratic risk
- Liquidity profile of private debt funds
- Risk in the eye of the beholder: what is at risk for private credit fund investors?

Private Credit Role As an Asset Class

- Provides financing opportunities to sub-investment grade and less established borrowers

- Gives investors opportunities to participate in a market outside of the universe of publicly traded issuers and, therefore, offers potential diversification

- Often is a hybrid between actual debt and equity participation

- Aims to deliver a liquidity profile that provides either a relatively stable cash flow stream on one end of the spectrum, or highly speculative lump sum outcomes similarly to a venture capital on the other end.

Private Credit Strategies

- Mezzanine - investing in subordinated debt, sometimes also including warrants and other equity-like payoff components.

- Senior Lending – also known as Direct Lending. Investing in tranches of debt of higher seniority than mezzanine, but not necessarily the most senior levels of debt.

- Capital Appreciation – investing in preferred and hybrid debt instruments that offer some periodic yield as well as some built-in equity like appreciation, that normally does not dilute common equity control.

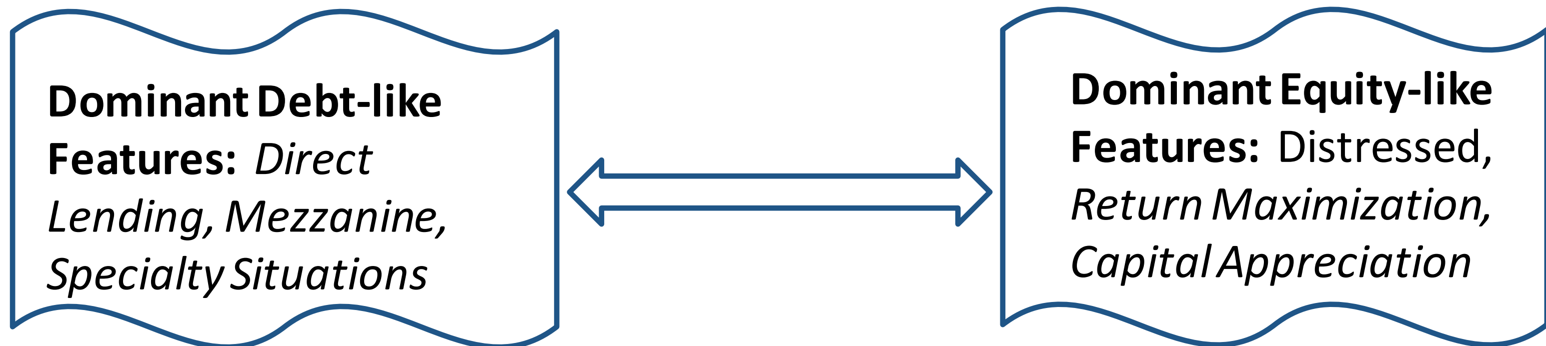
- Return Maximization – investing in distressed debt and other high stakes situations that involves speculation of significant improvement in the chances of a debt tranche for redemption at or closer to par.

- Special Situations – niche investing in a manager's core specialty field, often in the form of buying royalty streams.

Part Credit, Part Equity

- In some private credit strategies, there are embedded components of equity-like payoffs which include convertibility options, warrants, capital appreciation linked to firm assets, etc.

- As strategies span the spectrum between debt and equity, there is a lot of variety of terms of conditions even for strategies that normally gravitate to one end of the spectrum



Drivers of Private Credit Risk

- Rate indices used to anchor the coupon rate
- Prepayment
- Credit Risk:
  - Potential for default
  - Value of collateral
- Idiosyncratic:
  - Bets on outcomes of bankruptcy proceedings
  - Governance and control
  - Restructuring
  - Legal interpretation and ambiguity in the seniority of tranches
  - Other

Differences in Risk Characteristics

- Direct Lending - predominantly driven by coupon rate changes and credit risk
- Mezzanine – driven by credit risk, coupon rate changes, if floating, and equity performance
- Return maximization and Distressed Debt – very much related to the fate of the equity of a company and its risk drivers
- Capital Appreciation – very much related to the value of the assets of the company and their risk drivers
- Special Situations – resembling the payoff pattern and risk of perpetual debt, with increased "default risk" due to the possibility of royalty income not to materialize or to wane

Private Debt Statistical Properties

- The general statistical distribution of a debt payoff is strongly skewed – there is a limited upside that is relatively close to the invested amount, and the possibility of a full loss at the other end of the spectrum of outcomes.
- For debt that is closer to investment grade, the distribution has a negative (left) skew.
- For debt that is close to default, the distribution has a positive (right) skew
- In both cases, there is kurtosis present that is higher than that of a normal distribution
- It should be noted that these higher moments diversify away in a portfolio where the deals have outcomes with relatively independent probability
- Skewness will diversify faster than variance, and kurtosis faster than skewness

Private Debt Deal Portfolio Diversification

- Private debt serves borrowers which do not have ready access to the public markets. By definition, these borrowers are in a situations different than the majority in the debt market, which indicates their higher idiosyncratic risk.

- This may be due to a number of reasons – a more specialized business or revenue stream, unique circumstances, dependence on restructuring or bankruptcy proceeding of a specific court jurisdiction, etc.

- Importantly, the higher independence of outcomes across deals which is synonymous with idiosyncratic behavior suggests a quicker level of diversification of skew and kurtosis than in analogous public debt portfolios

- Therefore, we can expect private debt portfolios to have probability distributions closer in shape to those of private equity portfolios

Private Debt Fund Liquidity Profile

- Direct Lending and Mezzanine: usually having maturities in the range of 5 to 7 years, which defines a relatively predictable liquidity profile for a fund, provided a certain deal acquisition timeframe in the early several years of the fund existence.

- Return maximization and distressed debt investing on the other hand have a varied horizon of redemption monetization due to the possible dependence of such deals on workout and restructuring arrangements. But often deals get to "mature" faster than those of direct lending due to the need for a timed resolution of restructuring or bankruptcy.

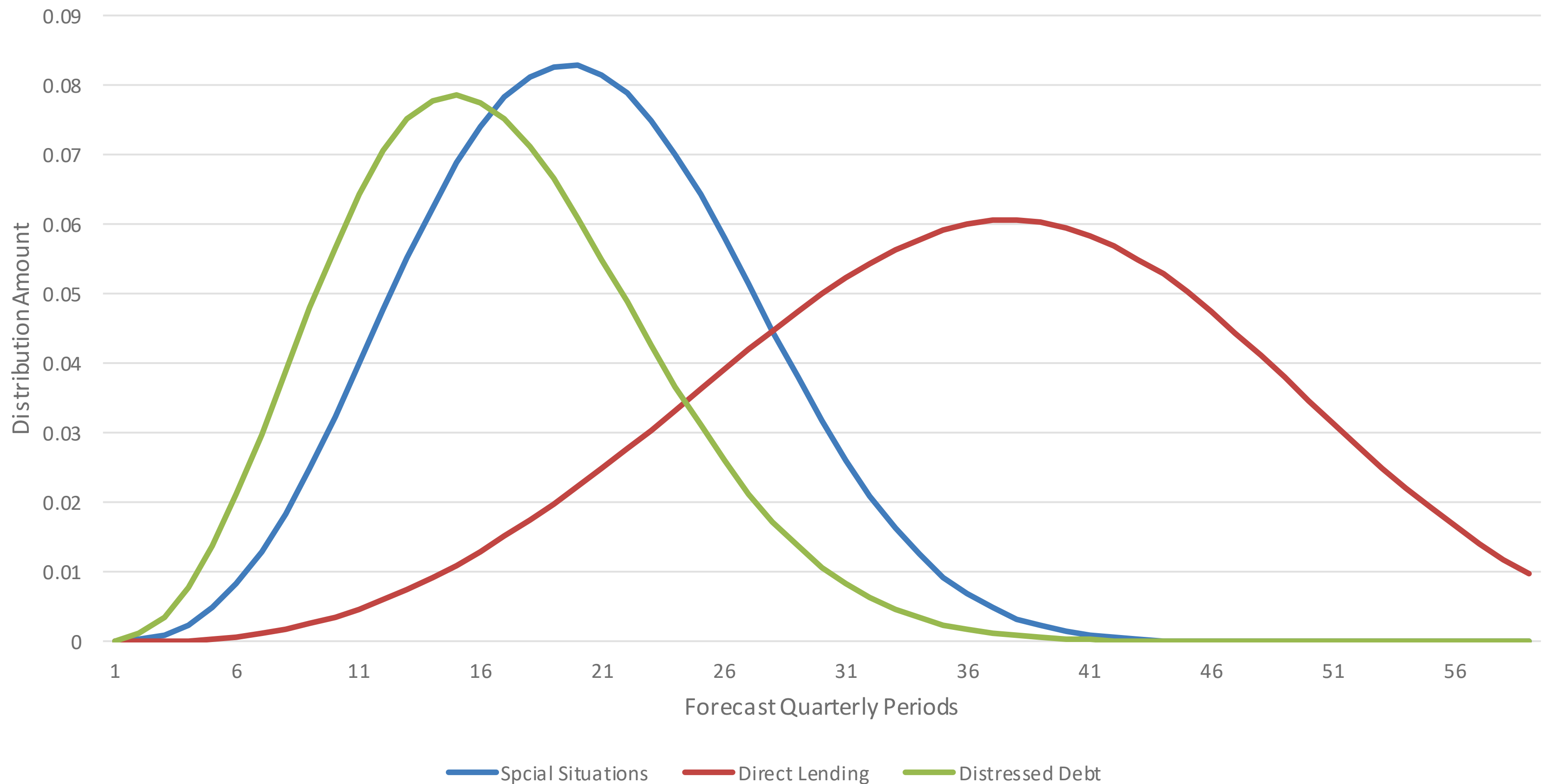
- Capital appreciation strategies are often dependent on preferred equity and therefore the maturity of each deal is uncertain. Similarly, liquidation in special situation funds is not predefined since deals often resemble perpetual debt but are almost always sold by the fund over a finite time horizon.

- Regardless of the case, it is important that the liquidity characteristics of these types of funds are appropriately modeled using cash flow forecasting analytics.

Different Liquidity Profiles

- There are several determinants of the liquidity profiles of private debt funds. One of them is the typical maturity of the underlying loan deals.
- Some funds reinvest debt that matures within the lifetime of the fund.
- It is hard to time full reinvestment due to the specifics of different amounts of debt demanded at different times, so some capital may be reinvested in new loans, and other may need to be returned to investors in the form of fund distributions.
- Deployment of capital and finding new opportunities will depend on how niche a strategy is - the lesser number of opportunities, the slower the deployment of capital, and therefore the slower the return on and of capital.
- We can expect that funds that have quicker deployment of capital, shorter deal maturity, and lower reinvestment to be the funds that bring more liquidity to the investor over shorter horizons.

Cash Flows From Debt Fund Strategies



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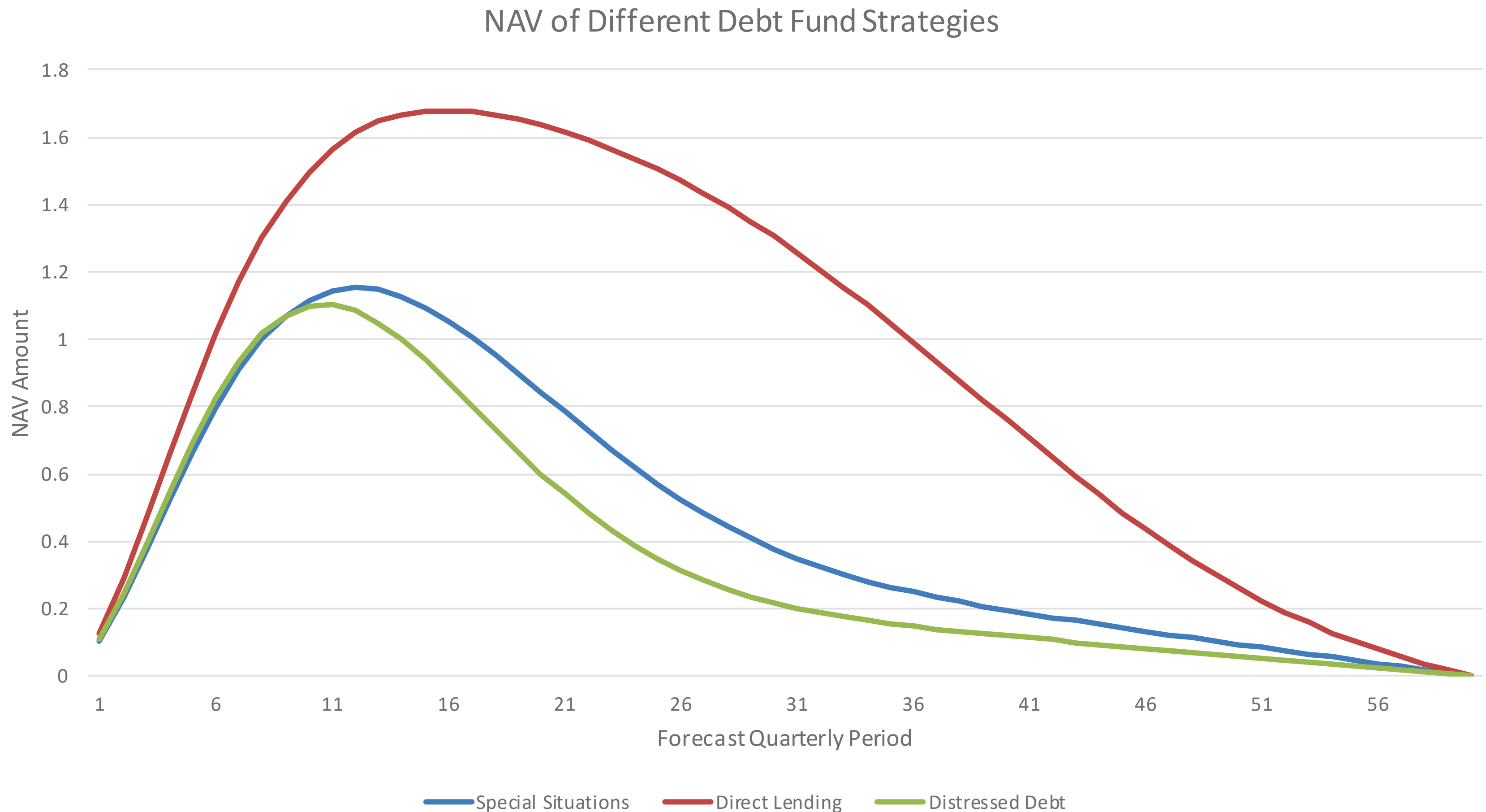
NAV Lifecycle of Debt Fund Strategies



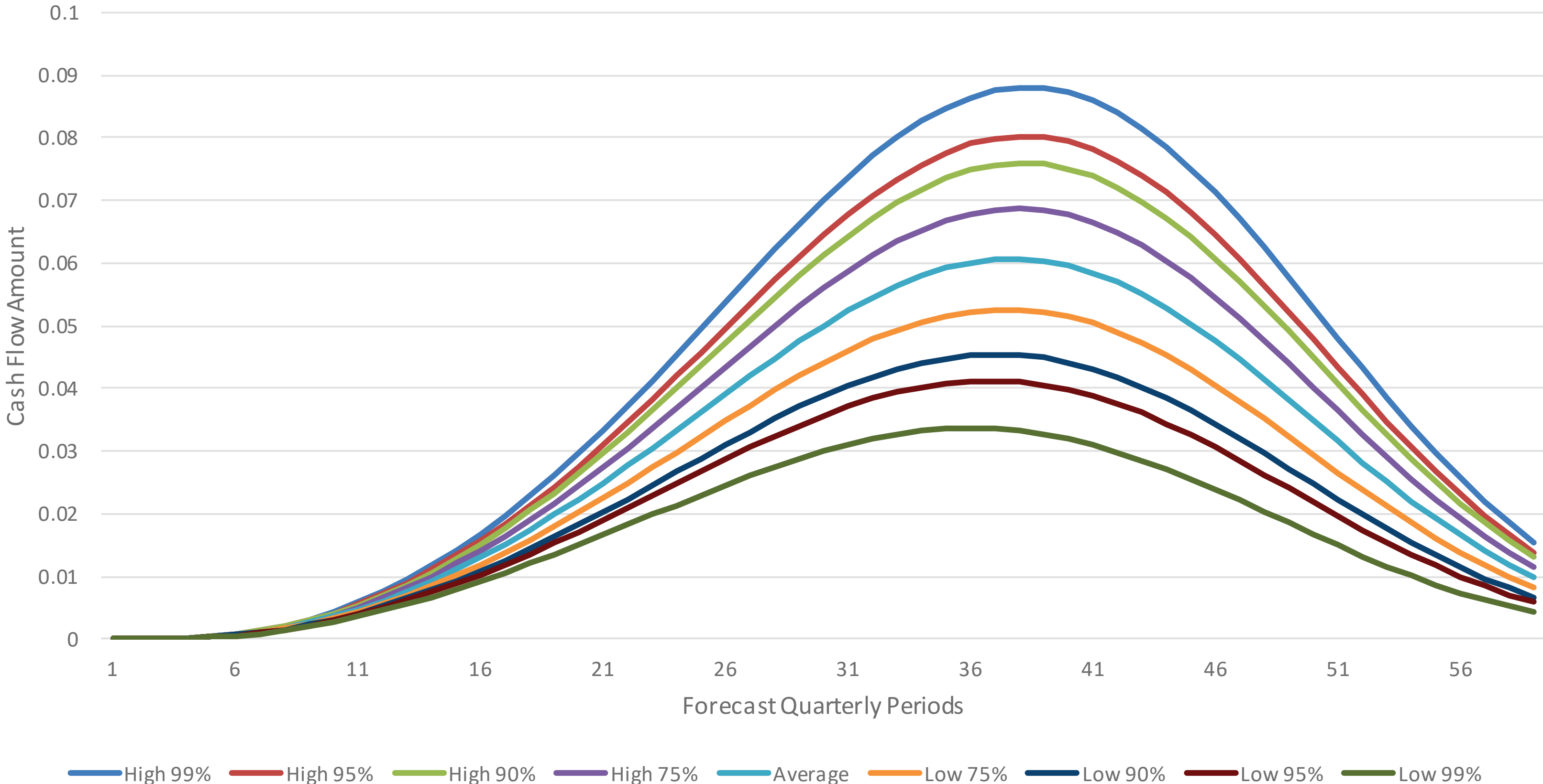
What is at Risk for Private Debt Lenders?

- Private Debt is "patient capital" provided by long-term investors. They expect a return form the natural distributions that come form interest payments, liquidation, debt redemptions, and equity participation monetization generated by the fund. Consequently, such investors are concerned with the risk of the cash flows over the long run rather than the risk of the NAV of the fund at any particular horizon, which, by definition, is not liquid.

- Conversely, observing the risk to NAV is warranted, if an investor is concerned with the potential of a fire sale. As an extension of the previously demonstrated forecasts of NAV, one can project a full statistical distribution to estimate NAV risk alongside the no-fire sale views reflected by cash flows risk.

- As a hybrid between the two, some funds may offer partial redemptions of NAV for investors that seek liquidity earlier than the fund stated maturity. The ability of a fund to do so will depend on certain factors like accumulated distributions that may be earmarked for reinvestment and influx of new investor capital.

Cash Flow At Risk



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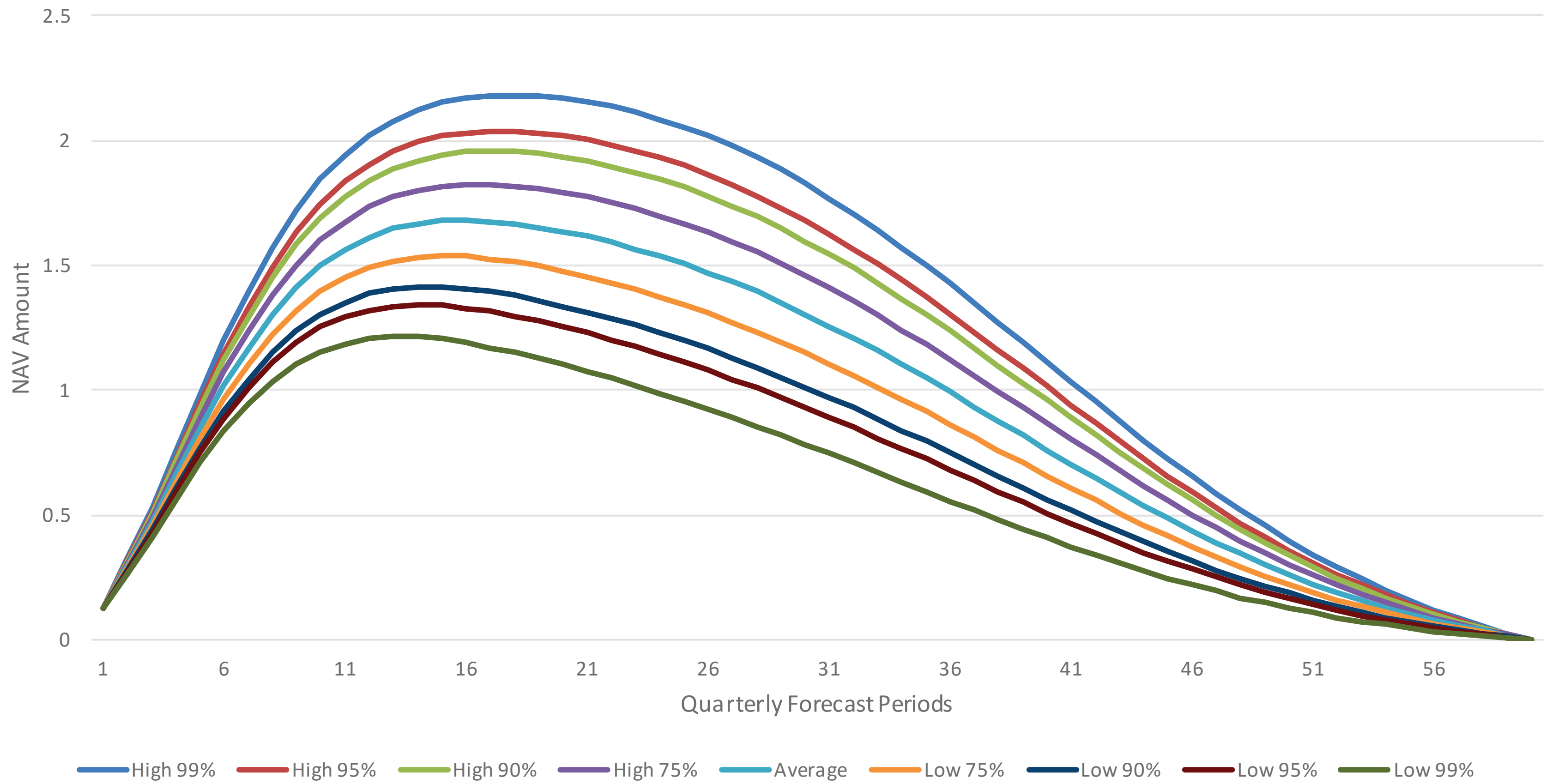
NAV At Risk



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Hybrid Fund Liquidity Profile

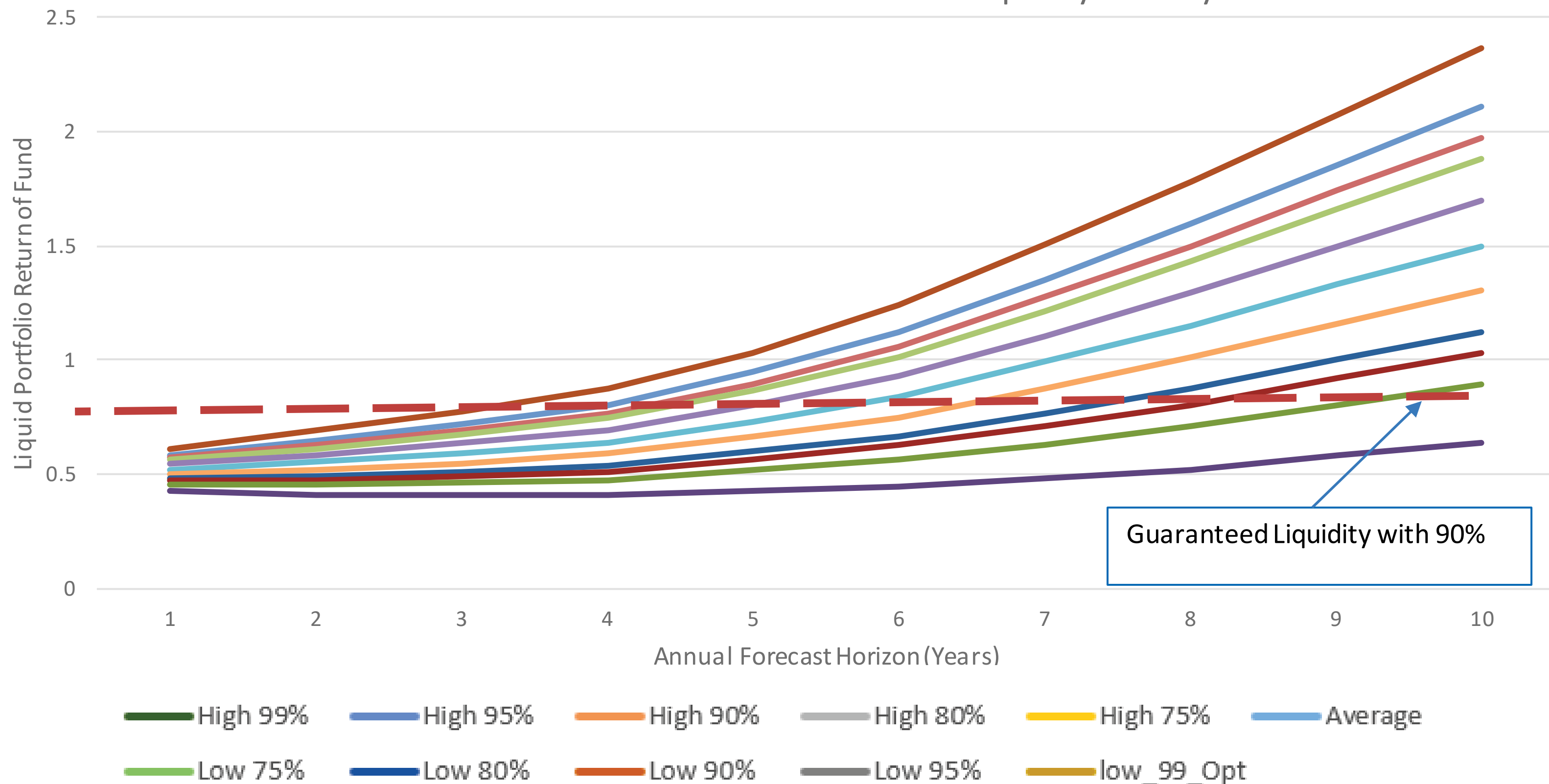
- Note that in this case the fund managers themselves must forecast cumulative distributions and NAV to determine what proportion of NAV they can redeem to investors with a certain level of confidence – i.e. with 90% probability.

- A liquidity planning framework that help address this question was presented earlier this year. In the next slide we summarize the idea from the perspective of a private fund manger.

- This hybrid type of redemption possibility also changes the liquidity profile of the fund from the perspective of the investor.

- The investor now must consider the risk reflected in the combined statistical distribution of the normal liquidity from fund distributions as well as that of the partial liquidity of NAV redemption. In a few slides we show how this impacts the liquidity profile of the fund from the perspective of the investor.

Hybrid Fund - Fund Perspective



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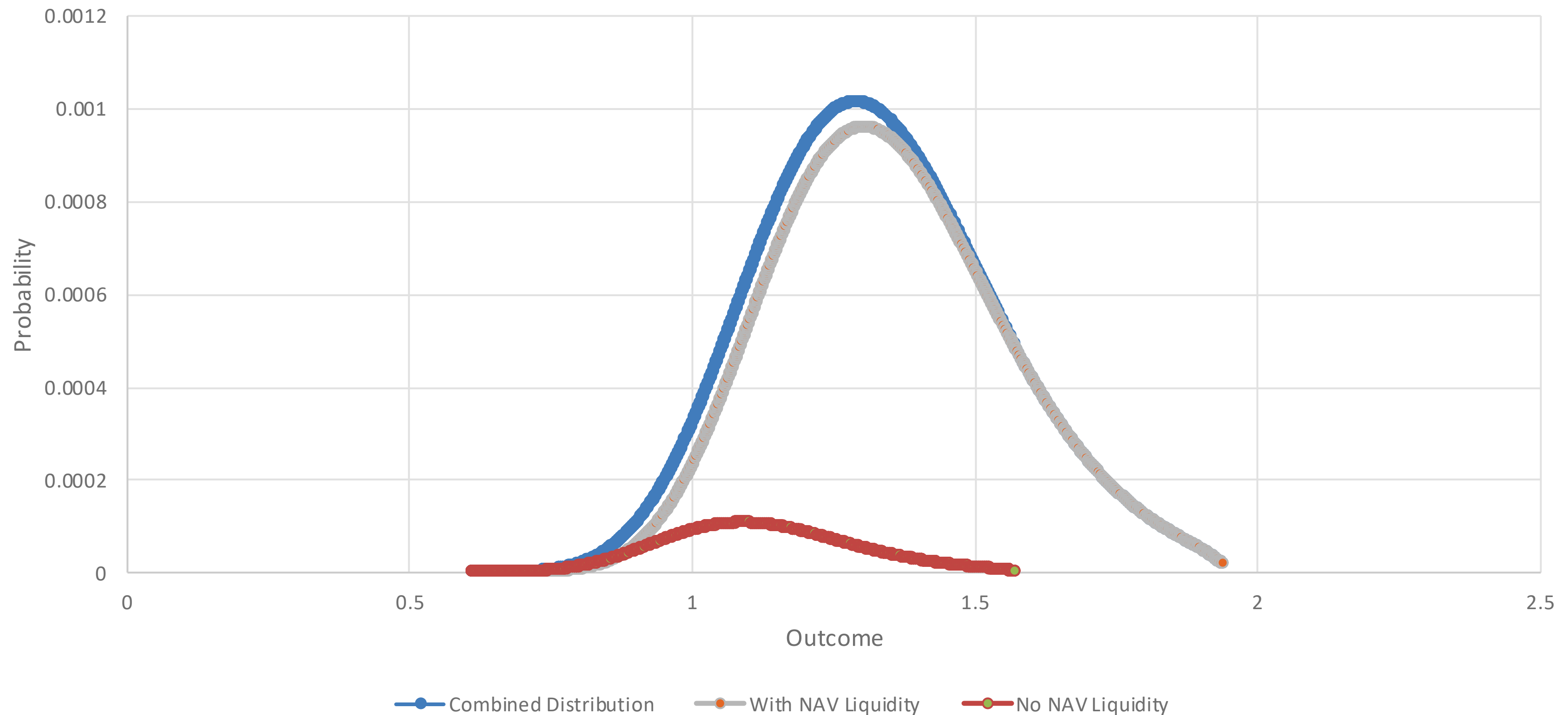
Hybrid Fund A - Investor Perspective



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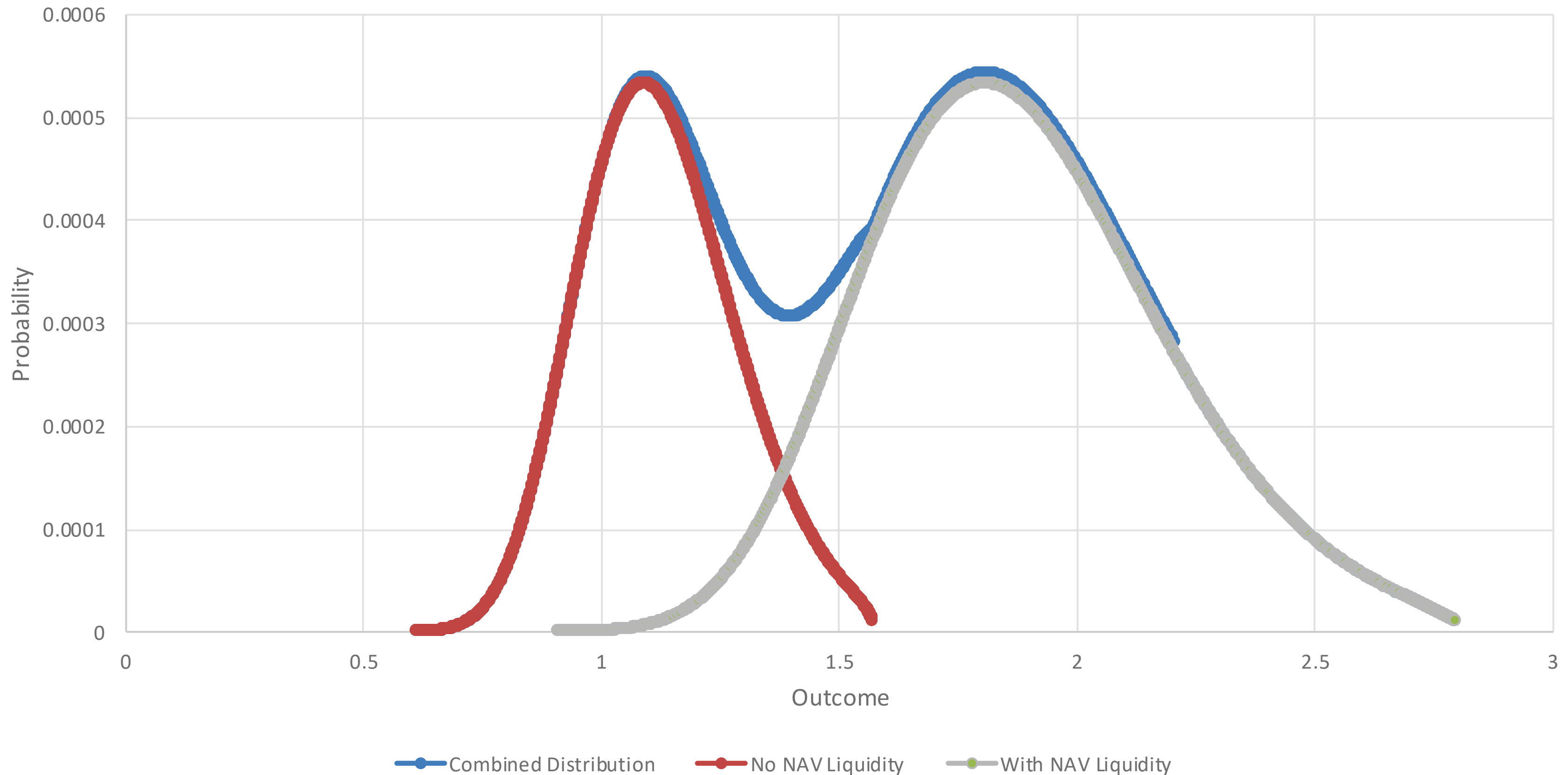
Hybrid Fund B – Investor Perspective



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Summary:

- Private Credit fulfills an important economic function by providing debt financing to borrowers which do not have access to the public debt markets or require flexibility and custom debt terms.

- It also provides hybrid equity and debt payoff characteristics to investors and variety across different strategies that span levels of seniority, sources of return, and time horizon of payoff.

- It is important that the investor uses robust analysis to explore the full range of possible investment outcomes of private debt fund investments, as determined by the statistical properties of the fund portfolio and strategy, the timing of redemption realizations, and the metrics with respect to risk that are relevant to the investor situation and objectives.

Questions, Comments, Feedback

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