

Corporate Credit: Public vs. Private

Joint Research Project

Michael R. Bailey Chuck LaPosta, CFA Michael McGirr, CFA Sarah N. Samuels, CFA

Summer/Fall 2015





Objectives

- □ Review credit in PRIT Fund
- □ Evaluate credit market risk/return
- Apply framework to credit investing options





Summary of Findings & Investment Recommendation

Summary of Findings

- Evidence of high dispersion amongst distressed debt strategies, but manager needs to beat public high yield index.
- Data show that unless managers time the market well, they don't beat the index net of fees.
- Distressed debt strategies add 200 250 bps of alpha from timing of their investments vs. straight-line PME.
- Distressed opportunities are episodic. Lose ground to public index unless big dislocation (contraction).

So What?

- Research results raise the bar for mezzanine and distressed debt strategies:
- Mezzanine: may not be able to meet our expectations (doesn't outperform HY, low dispersion, no alpha from timing, price takers, pro-cyclical, fees eat all alpha)

Private distressed debt:

- We can likely find a number of managers with skill here, but need to see significant timing or selection skill.
- Focus on non-control distressed, de-emphasize distressed-for-control (really private equity)
- Explore more favorable terms:
- Bigger relationships (fee breaks).
- Negotiate no fee on capital committed but not yet called (Oaktree structure).
 - Negotiate carry hurdle > high yield CCC.

Potential Next Steps

- **Credit Hedge Funds:**
- Continue research to evaluate where Credit Hedge Funds fit in the credit investment spectrum.







Private Debt Opportunity Set

Distressed Debt

- HY credit trading at distressed levels (eg. 50-60 cents on the \$).
- Manager buys subordinated debt (lower on cap structure), because impaired creditor drives restructuring.
 - Restructure debt to equity.
- Distressed debt typically closely held, so usually can work out credit issues even though more covenants than public markets.
- Recovery rate better than public markets because lots have financial sponsor who would do unnatural things to save equity ("PE put").
- Some hedge funds do this.
- Late in cycle, want to invest higher in stack; early in cycle, want to invest lower in stack.
- Distressed is cyclical, episodic. Positive correlation with equities. Rips in recovery, dips in contraction.
 - Very sensitive to timing of investment.

Direct Lending/Mezzanine

- Junior unsecured/second lien.
- Borrower can't access syndicate, so mezz lenders bridge gap between bank loans and equity in cap stack.
- Borrower typically LBO sponsors, small HY issuers, acquisitions, recaps, later-stage growth financing, project
- Stated coupon represents majority of return, with equity upside potential.

Other Providers of Junior Capital

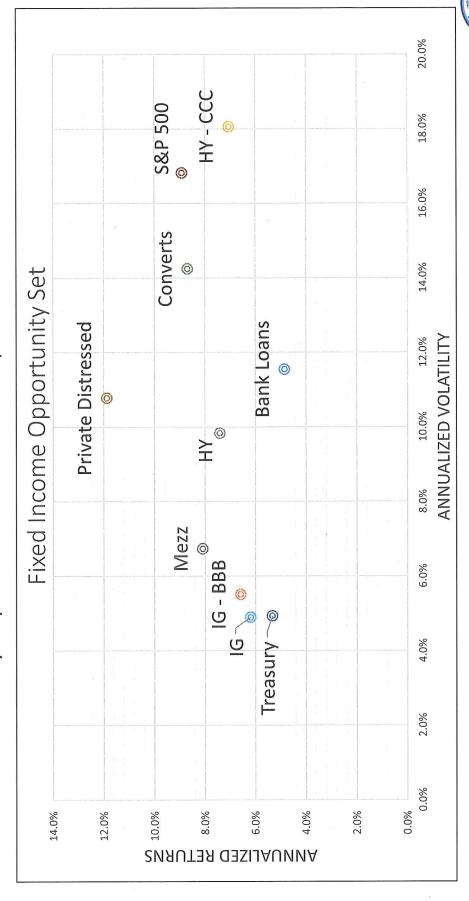
- Hedge funds.
- High yield market
- Second lien funds.





Risk vs. Return

- Distressed debt exhibits higher return and higher volatility than mezzanine debt.
- Private distressed debt return premium was generated in last market cycle (2000 2007), when it outperformed HY CCC's by 8% per year.
- Recent economic cycle: private distressed has not outperformed HY CCC.





Source: PRIM Staff. Based on quarterly returns from 3/2000 – 3/2015. Bank Loans only go back to 2005. PENSION RESERVES



- Investors must exercise care when using standard deviation of time-weighted returns as a measure of risk for private investments with drawdown structures.
 - Risk will be understated due to smoothed returns, illiquidity, and marking practices.
 - Volatility is unlikely to be <u>less</u> than the standard deviation, but is likely **larger**.
- Minimum volatilities: distressed debt 11%, mezzanine 7% (vs. 10% for HY and 18% HY CCC)
- Another measure of risk is the loss ratio. Distressed debt non-control exhibits a higher loss ratio than HY but a lower loss ratio than HY CCC. HOWEVER, this is baked into returns for both asset classes.

* W.	Return (TWR, net)	Volatility (σ)	Median Loss Ratio*	Risk-Adjusted Return	ed Return	PRIM View
				Return/ Volatility	Return/ Loss Ratio	
Private Debt	11.9%	10.7%	6.7%	1.1	1.8	Volatility understated.
Distressed – Control	8.6	10%	18.5%	1.0	0.5	Equity-like risk.
Distressed – Non-Control	10.5%	13%	6.5%	0.8	1.6	Buying after distressed situation limits further downside.
Hedge Fund Distressed Debt	9.1%	9.7%	n/a?	6.0	n/a?	ટેટેટે
Mezzanine	8.0%	%2'9	1.2%	1.2	6.7	Price-takers. Loss ratio understated due to marking.
Public HY	7.0%	8.6	2.4%	0.7	3.1	
Public HY CCC	7.0%	18.1%	12.5%	0.4	9.0	

HY historical weighted average default rate 1978 – 2010 is 4.3%, recovery rate is 45%. HY CCC historical median default rate 1982 – 2007 is 21%, recovery rate is *Loss Ratio for Private Debt = ((total realized + unrealized losses) / invested capital). Loss Ratio for Public HY = average default rate x average (1-recovery rate).

Source: PRIM Staff, Altman paper (Defaults and Returns in the High-Yield Bond and Distressed Debt Market, 2010), Moody's Global Corporate Finance Paper pg. 22 and 29.



