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## CASE STUDIES

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“Case Studies” presents a case pertinent to contemporary issues and events in investment management. Insightful and provocative questions are posed at the end of each case to challenge the reader. Each case is an invitation to the critical thinking and pragmatic problem solving that are so fundamental to the practice of investment management.

### MANAGING MARKET DOWNTURNS WITH NAV LOANS

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Jane and Jon, the long-time managing partners of TPEF, a major private equity (PE) firm, are at odds again. One of TPEF’s high-growth tech funds, Fund HGT, has fully deployed all capital and is approaching the anticipated exit timeframe for many of its investments. However, with the 2023 market downturn in this sector, the environment remains highly unfavorable for exits. While the major indices in the US ended 2023 at or within a few points from all-time highs, the high-growth tech sector has yet to fully recover.<sup>1</sup> At the same time, several portfolio companies are facing a runway of six months or less, with their survival critically hinged on their ability to secure

additional follow-on capital to continue financing operations.<sup>2</sup>

Jane suggests that, from a market timing perspective, the fund’s *limited partners* (LPs—i.e., investors in the fund) should be particularly amenable to providing additional capital to prolong the investment horizon of Fund HGT. Jon points out, though, that the environmental stresses that have made exits unattractive also translate to difficulties in raising additional private equity capital from current LPs. Instead, he suggests an increasingly popular method of PE financing: the net-asset-value (NAV) loan.

Unlike *subscription lines of credit*, which are secured by a fund’s *dry powder* (i.e., uncalled capital), NAV loans are secured by the fund’s investment portfolio. Based on early conversations with potential lenders, Jon expects that Fund HGT can obtain a \$50-million term loan with a three-year maturity based on the fund’s \$250-million NAV.<sup>3</sup> Jon argues that the timing is particularly ripe for taking on a NAV loan,

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since he is certain that equity is currently undervalued, thereby making debt capital relatively cheap. The NAV loan could serve to infuse follow-on equity capital to existing portfolio companies and finance new investments as well as return some capital to LPs while waiting out the current distressed environment. As an aside, Jon

also mentions that the NAV loan would boost not only Fund HGT's *internal rate of return* (IRR) but also its *distribution to paid-in capital* (DPI) and *total value to paid-in capital* (TVPI), tying into an earlier unsettled discussion regarding the perils of placing undue emphasis on any single performance metric.<sup>4</sup>

**Table 1** Fund performance metrics based on a \$500—million exit.

Year	No NAV Loan	Using NAV Loan	
		5% Interest	8% Interest
<i>Panel A. Timeline of Cashflows to/from LPs</i>			
0	—	—	—
½	(50 MM)	(50 MM)	(50 MM)
1	(25 MM)	(25 MM)	(25 MM)
1½	—	—	—
2	(75 MM)	(75 MM)	(75 MM)
2½	(20 MM)	(20 MM)	(20 MM)
3	(20 MM)	(20 MM)	(20 MM)
3½	—	—	—
4	(10 MM)	(10 MM)	(10 MM)
4½	—	—	—
5	—	50 MM	50 MM
5½	—	—	—
6	—	—	—
6½	—	—	—
7	—	—	—
7½	—	—	—
8	\$500,000,000	\$442,118,750	\$437,014,400
<i>Panel B. Net Profit, IRR, and DPI</i>			
At Year 5:			
DPI	—	0.250	0.250
At Year 8:			
Total Capital Invested in Portfolio Companies	200 MM	200 MM	200 MM
Net Profit to LPs	\$300,000,000	\$292,118,750	\$287,014,400
DPI	2.500	2.461	2.435
IRR	15.042%	15.731%	15.552%

The NAV Loan scenarios assume a \$50-million 3-year term loan undertaken at Year 5, based on a \$250-million NAV, to pay out to LPs while awaiting a full exit of all investments at Year 8. DPI is calculated as the cumulative distributions to LPs scaled by total capital paid in by LPs.

For instance, Jon's back-of-the-envelope calculations, shown in Table 1, demonstrate that taking on a NAV loan would provide an interim boost in the fund's DPI along with a substantial improvement in the fund's IRR at the anticipated exit. Moreover, Jon contends that there are additional factors at hand that are not captured by these

performance metrics, as he firmly believes that LPs are increasingly eager to trade off greater (ultimate) total return on capital for the return of capital today. Proceeding with the NAV loan addresses LPs' growing anxiety under this weak exit environment, where the proportion of trapped fund value is uncomfortably high.<sup>5</sup> To strengthen

**Table 2** Fund performance metrics based on a \$225—million exit.

Year	No NAV Loan	Using NAV Loan	
		5% Interest	8% Interest
<i>Panel A. Timeline of Cashflows to/from LPs</i>			
0	—	—	—
½	(50 MM)	(50 MM)	(50 MM)
1	(25 MM)	(25 MM)	(25 MM)
1½	—	—	—
2	(75 MM)	(75 MM)	(75 MM)
2½	(20 MM)	(20 MM)	(20 MM)
3	(20 MM)	(20 MM)	(20 MM)
3½	—	—	—
4	(10 MM)	(10 MM)	(10 MM)
4½	—	—	—
5	—	50 MM	50 MM
5½	—	—	—
6	—	—	—
6½	—	—	—
7	—	—	—
7½	—	—	—
8	\$225,000,000	\$167,118,750	\$162,014,400
<i>Panel B. Net Profit, IRR, and DPI</i>			
At Year 5:			
DPI	—	0.250	0.250
At Year 8:			
Total Capital Invested in Portfolio Companies	200 MM	200 MM	200 MM
Net Profit to LPs	\$25,000,000	\$17,118,750	\$12,014,400
DPI	1.250	1.211	1.185
IRR	1.891%	1.484%	1.056%

The NAV Loan scenarios assume a \$50-million 3-year term loan undertaken at Year 5, based on a \$250-million NAV, to pay out to LPs while awaiting a full exit of all investments at Year 8. DPI is calculated as the cumulative distributions to LPs scaled by total capital paid in by LPs.

his case, Jon points to an important precedent involving PE bellwether, Carlyle Group, which recently closed on a €1.25-billion NAV facility reportedly to accelerate distributions in furtherance of preserving its fund's DPI.<sup>6</sup>

However, Jane counters that Jon's narrow reliance on the upside obscures the reality that additional debt serves as a lever not only to magnify potential gains but also potential losses. In her own offhand calculations, shown in Table 2, Jane demonstrates that under a less sanguine assumption for the exit value, all of the terminal performance metrics are decidedly worse. That is, if the market does not recover in a timely fashion or, worse, if the current market downturn represents a rational market correction rather than a temporary undervaluation, then the additional debt could disproportionately damage Fund HGT's performance metrics and the reputation of TPEF.

Thus, Jane argues that, under these circumstances, LPs may very well prefer to directly take out their own loans to manage liquidity crunches as necessary. After all, taking on a NAV loan at the fund level restricts LPs from exercising their own discretion based their respective preferences—i.e., to either: (i) borrow money to commit additional capital to Fund HGT and/or deploy the capital for some other purpose; (ii) use existing funds to commit additional capital to Fund HGT; or (iii) do nothing and simply await their portion of the distribution once the market has recovered. To underscore her position, Jane points to pending policy proposals underway allowing the California State Teachers' Retirement System (CalSTRS), a major LP across numerous PE funds, to access NAV-based liquidity while waiting for markets to normalize.<sup>7</sup>

Realistically, though, Jon reasons that he and Jane possess a distinct and superior understanding of the market, hence why their LPs are not GPs (*general partners*)—i.e., why their investors are

not fund managers themselves. Considering the improved performance metrics and other unquantified goodwill from immediate distributions in the current environment, Jon urges Jane that they move quickly so as to secure the reputational benefits prior to the roadshow for TPEF's next fund. Now in full agreement, Jane and Jon prepare a proposal for the Investment Committee's review.

## Questions

- What are the relative pros and cons for TPEF versus Fund HGT's LPs if Jane and Jon decide to: (i) do nothing for now (i.e., to simply not make additional investments in portfolio companies nor provide distributions to LPs), (ii) raise equity capital to make additional investments and/or provide distribution to LPs, or (iii) raise debt capital to make additional investments and/or provide distribution to LPs?
- What are the pros and cons of making this decision at the fund level versus at the LP level?

## Endnotes

- <sup>1</sup> At the close of the last trading day in 2023, the Nasdaq 100 index (Bloomberg ticker: NDX) was less than 1% below its all-time high posted on December 28, 2023. In contrast, the Dow Jones Small Cap Tech Index (Bloomberg ticker: DJUSSTH) ended 2023 at a level that was 21.3% below its all-time high posted on November 9, 2021. Source: Bloomberg.
- <sup>2</sup> This situation is typical of high-growth tech companies in the current stressed environment. Silicon Valley Bank reports that 46% of venture-backed tech startups must raise additional capital within the next 12 months, and one in four must raise additional capital within the next six months. See Silicon Valley Bank (2023). *State of the Markets Report*, H2 2023.
- <sup>3</sup> According to a Pitchbook Analyst Note, NAV facilities are typically structured as term loans with loan-to-value (LTV) ratios from 10% to 25%, maturities from three to five years, and interest rates pegged to the SOFR at spreads around 300 to 400 basis points (bps). See Pitchbook Analyst Note (2023). *NAVigating Considerations and Controverses Around NAV Loans*, Q4 2023.

- <sup>4</sup> See *Tradeoffs in Goosing the IRR* (Asensio and Kim, 2023).
- <sup>5</sup> Of the US venture capital funds from the 2014 vintage year (i.e., the year in which the fund's first investment is made), more than half have returned less than 25% of their investment portfolio value to LPs—or, in other words, at least 75% of their TVPI is captured by the *residual value to paid-in capital* (RVPI), which represents the unrealized value of investments and is calculated as the TVPI minus DPI. See Silicon Valley Bank (2023). *State of the Markets Report*, H2 2023.
- <sup>6</sup> See Private Equity International (2023). *DPI overthrows IRR as the king of KPIs*, June 22, 2023.
- <sup>7</sup> That is, “[t]he \$307.9 billion pension fund’s investment team wants to be able to use leverage across its entire portfolio in times of market distress by borrowing when there is low or negative cash flow, repaying the debt when flows normalize as well as employing derivatives to rebalance the portfolio.” See Pensions & Investments (2023). *CalSTRS Expected to Consider Using Leverage to Manage Risk*, November 2, 2023.
- Pensions & Investments (2023). *CalSTRS Expected to Consider Using Leverage to Manage Risk*, November 2, 2023. Accessed at <https://www.pionline.com/pension-funds/calstrs-expected-consider-using-leverage-manage-risk>.
- Pitchbook Analyst Note (2023). *NAVigating Considerations and Controversies Around NAV Loans*, Q4 2023. Accessed at <https://pitchbook.com/news/reports/q4-2023-pitchbook-analyst-note-navigating-considerations-and-controversies-around-nav-loans>.
- Private Equity International (2023). *DPI Overthrows IRR as the King of KPIs*, June 22, 2023. Accessed at <https://www.privateequityinternational.com/dpi-overthrows-irr-as-the-king-of-kpis/>.
- Silicon Valley Bank (2023). *State of the Markets Report*, H2 2023. Accessed at <https://www.svb.com/globalassets/trendsandinsights/reports/state-of-the-markets-h2-2023.pdf>.

## References

- Asensio, I. and Kim, S. (2023). “Tradeoffs in Goosing the IRR,” *Journal of Investment Management* 21(3), 1–4.