



NCREIF PREA  
**Reporting Standards**

INCREASING  
TRANSPARENCY IN  
PERFORMANCE  
METRICS FOR PRIVATE  
CLOSED-END FUNDS

White Paper – January 21, 2026

The following three topics were identified to be included herein specifically to private closed-end funds:

- Calculating net fund level IRRs with and without the impact of subscription facilities
- Calculating gross IRRs for the portion of the fund's portfolio that is realized and unrealized shown separately
- Calculation and use of Multiple on Investment Capital (MOIC) and Investment Multiple/Total Value to Paid-in Capital Multiple (TVPI)

# Increasing Transparency in Performance Metrics for Private Closed-End Funds

## Preface

The NCREIF PREA Reporting Standards (Reporting Standards) represent a long-standing commitment to improving transparency, consistency, and comparability in private real estate investment reporting. For over 30 years, these standards have served as the authoritative framework for institutional private real estate reporting, widely recognized as the industry benchmark.

Co-Sponsored by the National Council of Real Estate Investment Fiduciaries (NCREIF) and the Pension Real Estate Association (PREA), the standards were shaped through extensive input from stakeholders across the industry, including investors, investment managers, consultants, and service providers. As such, they reflect a framework created *by the industry, for the industry*, grounded in practical application and broad consensus. Their continued evolution reflects the collective priorities of the private real estate investment industry.

## Background

On August 23, 2023, the Securities and Exchange Commission (SEC) voted to adopt new rules and amendments to enhance the regulation of private fund advisers (Private Funds Adviser Rules). The rules would have required the private fund advisers registered with the SEC to provide current investors with quarterly statements detailing information regarding private fund performance, fees, and expenses (Quarterly Statement Rule) among other requirements<sup>1</sup>. Accordingly, the Reporting Standards Board approved the creation of task forces focused on developing guidance to comply with the Quarterly Statement Rule.

On June 5, 2024, the Fifth Circuit Court vacated the Private Funds Adviser Rules as a whole stating that the SEC had exceeded its statutory authority in adopting the final rule. Significant progress had been made by the task forces who met to determine what next steps (if any) were appropriate given the court's decision.

The work completed by the Fee and Expense Disclosure Task Force relied heavily on the Total Global Expense Ratio (TGER) documentation and guidance, as the private real estate industry had already made significant progress toward consistency and transparency in reporting fund fees and expenses. Published in 2019, TGER was the first global metric of its kind and was formally incorporated into the Reporting Standards. It is now widely recognized as the global standard for fund fee and expense reporting and is required reporting for funds including performance benchmarks such as the NCREIF's Open-end Diversified Core Equity Index (NFI-ODCE) and other global data products.

The Performance Disclosure Task Force focused on the performance return requirements for illiquid (closed-end) funds outlined in the Quarterly Statement Rule. Task force members conducted research and developed guidance and illustrative examples on several topics where formal documentation currently does not exist. Alongside the Oversight Task Force, they agreed that capturing and publishing this work is important and provides valuable

---

<sup>1</sup> U.S. Securities and Exchange Commission, *Fact Sheet – Private Fund Adviser Reforms: Final Rules*, 1.  
[www.reportingstandards.info](http://www.reportingstandards.info)

guidance and insight into the private real estate investment industry—regardless of the Private Fund Adviser Rules being vacated.

The following three topics were identified to be included herein specifically to private closed-end funds:

- Calculating net fund level IRRs with and without the impact of subscription facilities
- Calculating gross IRRs for the portion of the fund’s portfolio that is realized and unrealized shown separately
- Calculation and use of Multiple on Investment Capital (MOIC) and Investment Multiple/Total Value to Paid-in Capital Multiple (TVPI)

### **Calculating Fund Level IRRs With and Without the Impact of Subscription Facilities**

A subscription-secured credit facility (also known as subscription facility(ies), subscription line(s), sub line(s)) is a loan or line of credit made by a bank or other credit institution to a fund that is secured by (i) the unfunded commitments of the investors to make capital contributions to the fund when called from time to time by the fund or the fund’s general partner, (ii) the rights of the fund or its general partner to make capital calls upon the commitments of the investors and the right to enforce payment of the same and (iii) the account into which investors fund capital contributions in response to a capital call. Typically, their terms coincide with a fund’s investment period during which capital can be called. In most instances, the “borrowing base” is limited to a certain percentage of unfunded capital commitments from creditworthy investors (Included Investors). Thus, subject to the subscription facility’s maximum loan amount, the amount a fund can borrow grows as more Included Investors are admitted into the fund, and then ultimately shrinks as more capital is called over time. Subscription facilities usually are put in place amidst a series of fundraising closings and are sized accordingly. Fund documents detail the policies and procedures specific to subscription facilities and often limit the amount of time that subscription facility borrowings may be outstanding (e.g., 90 or 120 days). Many fund advisors use a subscription facility to manage the capital call process and ease the administrative burden for their investors as well as to manage the timing differences that may occur between required capital call notice dates and investment funding dates. As a fund acquires assets and matures, it may obtain an unsecured credit line that can be tapped to manage liquidity needs as the subscription facility tails off.<sup>2</sup>

Given the sensitive nature of cash flow timing when calculating IRRs, understanding the impact of subscription facilities on the IRR calculation has become increasingly important (i.e., using subscription facilities delays the need to call capital and thus the start date of the IRR calculation.) A fund that utilizes a subscription facility and calculates the fund level IRR utilizing the dates and amounts of actual investor cash flows is considered a fund level IRR “with” the impact of the subscription facility. To calculate the fund level IRR “without” the impact of the subscription facility, various transactions must be reviewed and considered as to determine the impact on cash flows had the subscription facility not been in place. The chart below details key considerations and the associated impact on cash flows:

---

<sup>2</sup> NCREIF PREA Reporting Standards Handbook Volume II, *Performance and Risk Resource Manual*  
[www.reportingstandards.info](http://www.reportingstandards.info)

## KEY CONSIDERATIONS WITHOUT IMPACT OF SUBSCRIPTION FACILITY

### SUBLINE CASH FLOWS

- Drawdowns are reflected as contributions
- Paydowns are reflected as distributions
- Use actual cash flow dates

### INTEREST EXPENSE

- Add back interest expense using quarter end dates
- Contra-contribution or distribution
- Make sure to capture expense & capitalized interest

### UNCALLED FEE

- Add back uncalled fee using quarter end dates

### FINANCING COSTS

- Add back financing costs to secure subline using quarter end dates
- If that information is not easily obtained, add back amortization using quarter end dates

### DERIVATIVES

- Caps or swaps utilized for floating rate debt; make a determination if you'd add it back in
- Utilize quarter end dates

The following example net IRR calculation demonstrates the treatment of key considerations (as noted above) and their respective impact on a net IRR calculation. This best-practice example results in a net IRR with the impact of the subscription facility of 11.91% and a net IRR without the impact of the subscription facility of 8.22%. The same considerations would apply to a gross IRR calculation, with specific application dependent upon the level of reporting within the IRR hierarchy.

Example Calculation of IRR with and without impact of subscription facility/subline as of a 9/30/2023 reporting date

Date <sup>1,2</sup>	Investor Contribution	Investor Distribution	Liquidation NAV at Fund <sup>4</sup>	Liquidation (Subline Debt Balance)	Subline Drawdown (Contribution)	Subline Paydown (Distribution)	Subline Overhead <sup>3</sup>	Total cash flow - with subline (Net)	Total cash flow - without subline (Net)
4/18/2023	-	-	-	-	(29,917,000)	-	-	-	(29,917,000)
4/24/2023	-	-	-	-	(35,956,000)	-	-	-	(35,956,000)
6/30/2023	(2,000,000)	-	-	-	-	-	184,444	(2,000,000)	(1,815,556)
7/6/2023	(10,306,656)	-	-	-	-	-	-	(10,306,656)	(10,306,656)
7/7/2023	-	-	-	-	-	10,600,000	-	-	10,600,000
7/10/2023	-	-	-	-	(91,460,000)	-	-	-	(91,460,000)
8/2/2023	-	-	-	-	(960,000)	-	-	-	(960,000)
8/10/2023	(1,264,024)	-	-	-	-	-	-	(1,264,024)	(1,264,024)
8/14/2023	-	-	-	-	-	1,300,000	-	-	1,300,000
8/17/2023	-	-	-	-	(1,500,000)	-	-	-	(1,500,000)
8/22/2023	(50,852,650)	-	-	-	-	-	-	(50,852,650)	(50,852,650)
8/25/2023	-	-	-	-	-	52,300,000	-	-	52,300,000
8/28/2023	-	-	-	-	(49,370,000)	-	-	-	(49,370,000)
8/31/2023	-	-	-	-	(1,200,000)	-	-	-	(1,200,000)
9/29/2023	-	-	-	-	(1,100,000)	-	-	-	(1,100,000)
9/30/2023	-	5,000,000	-	-	-	-	-	5,000,000	5,000,000
9/30/2023	-	-	60,392,571	147,263,000	-	-	3,275,934	60,392,571	210,931,505
<b>Total</b>	<b>(64,423,330)</b>	<b>5,000,000</b>	<b>60,392,571</b>	<b>147,263,000</b>	<b>(211,463,000)</b>	<b>64,200,000</b>	<b>3,460,378</b>	<b>969,241</b>	<b>4,429,619</b>
							<b>XIRR</b>	<b>11.91%</b>	<b>8.22%</b>

<sup>1</sup>Without subline calculation begins with first Subline/LOC Drawdown.

<sup>2</sup>With subline calculation begins with first LP Capital Call.

<sup>3</sup>Includes subline interest, both capitalized and expensed, the quarterly uncalled fee, financing cost amortization for the subline and cost of derivatives if applicable.

<sup>4</sup>NAV per Statement of Changes in Net Assets --> 60,392,571

Disclaimer: This example is meant to show the mechanics of applying the considerations noted above and may not be reflective of actual fund timing.

## Calculating IRRs for the Portion of the Fund's Portfolio that is Realized and Unrealized Shown Separately

When the SEC included a requirement for illiquid funds to disclose an IRR for the portion of the fund's portfolio that is realized and unrealized shown separately, the wording of the requirement was ambiguous and caused diversity in interpretation. Through discussions at and after the NCREIF Spring 2024 conference, it became apparent that regardless of the Private Fund Advisers Rules, many private real estate closed-end funds were already presenting realized and unrealized IRRs separately in reporting to their investors. A follow-up interview style survey was done with eighteen managers represented in the task forces working on this guidance. Sixteen managers indicated that realized and unrealized IRRs shown separately were currently being reported for at least one of their private real estate closed-end funds. ALL sixteen managers agreed on all the following best practice:

- The realized and unrealized IRRs were calculated using cash flows between the closed-end fund and its investments.
- The trigger point for moving cash flows from the unrealized bucket to the realized bucket was the sale or disposition of the asset or the investment in the event multiple assets were grouped together as a portfolio and reported as a single investment.
- The realized and unrealized IRRs were presented on a gross basis. However, it should be noted that a net basis may also be required depending on the use of the IRRs and application of the SEC Marketing Rule. The investment manager should discuss with the appropriate parties (e.g., attorneys and/or compliance team) to make any determination regarding the SEC Marketing Rule and should present and disclose accordingly.

The example on the next page demonstrates the methodology described above and includes the following assumptions:

- All cash flows are bucketed as unrealized until disposition of the asset. At which time, all cash flows are moved to the realized bucket.
- After the disposition of an asset, unless deemed material, the IRR would not be recalculated at the next reporting date.
  - Deal 1 sold on 12/31/2023 and distributed \$17.5mm to the fund.
  - Deal 2 partially sold on 9/7/2023 and distributed \$5mm to the fund. The remainder sold on 12/31/2023 and \$6mm was distributed to the fund. On 12/31/2024, there was a residual value of \$50k. The residual value was not deemed material; subsequently the IRR was calculated through 12/31/2023 and not recalculated for the residual value of \$50k.
  - Deal 3 had a partial sale on 9/7/2023 and the remainder of the investment is still active. Therefore, the residual value (net asset value) at the reporting date was used.
  - Deal 4 is still active. Therefore, the residual value (net asset value) at the reporting date was used.

This example results in a gross realized IRR of 12.88% and a gross unrealized IRR of 9.68%.

Example Gross IRR calculation with Realized and Unrealized Portions of a Portfolio Shown Separately

	Deal 1	Deal 2	Realized	Deal 3	Deal 4	Unrealized	Total
Contribution	10,000,000	10,000,000	20,000,000	8,525,000	8,000,000	16,525,000	36,525,000
Distribution	17,500,000	11,000,000	28,500,000	5,000,000	-	5,000,000	33,500,000
Residual Value	-	50,000	50,000	10,000,000	10,000,000	20,000,000	20,050,000
Net Cash Flow	7,500,000	1,050,000	8,550,000	6,475,000	2,000,000	8,475,000	17,025,000
Gross IRR*	15.52%	5.27%	12.88%	13.31%	5.10%	9.68%	11.07%
Investment Multiple or TVPI	1.8	1.1	1.4	1.8	1.3	1.5	1.5
Realization Multiple or DPI	1.8	1.1	1.4	0.6	-	0.3	0.9
Paid-In Capital Multiple or PIC	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Residual Multiple or RVPI	-	0.0	0.0	1.2	1.3	1.2	0.5

Date	Type	Deal 1	Deal 2	Realized Total	Deal 3	Deal 4	Unrealized Total	Grand Total
1/6/2020	Contribution	-	-	-	(8,000,000)	-	(8,000,000)	(8,000,000)
1/19/2020	Contribution	-	-	-	-	(2,000,000)	(2,000,000)	(2,000,000)
1/22/2020	Contribution	-	-	-	(500,000)	-	(500,000)	(500,000)
2/14/2020	Contribution	(10,000,000)	-	(10,000,000)	-	-	-	(10,000,000)
2/24/2020	Contribution	-	-	-	-	(5,000,000)	(5,000,000)	(5,000,000)
3/2/2020	Contribution	-	-	-	(25,000)	-	(25,000)	(25,000)
12/31/2021	Contribution	-	(10,000,000)	(10,000,000)	-	-	-	(10,000,000)
7/30/2023	Contribution	-	-	-	-	(1,000,000)	(1,000,000)	(1,000,000)
9/7/2023	Distribution	-	5,000,000	5,000,000	5,000,000	-	5,000,000	10,000,000
12/31/2023	Distribution	17,500,000	6,000,000	23,500,000	-	-	-	23,500,000
12/31/2024	Residual Value	-	50,000	50,000	10,000,000	10,000,000	20,000,000	20,050,000

\*Gross IRR is calculated using the XIRR function in Excel.

## Calculation and Use of Multiple on Investment Capital (MOIC) and Investment Multiple/Total Value to Paid-in-Capital Multiple (TVPI)

Multiple on Investment Capital (MOIC) is a term historically used in private equity and not typically used in the private real estate industry. When the SEC approved the Private Fund Advisers Rule, MOIC was required for illiquid funds and required at the fund level. The SEC defined MOIC as the sum of net asset value plus distributions to date divided by the total amount paid in. This definition is very similar to the investment multiple or total value to paid in capital multiple (TVPI) used in the private real estate industry. As such, the metrics have been used inconsistently (and often interchangeably) in the marketplace.

MOIC is generally calculated as total value returned over total value invested.

As detailed in NCREIF PREA Reporting Standards Handbook Volume II, *Performance and Risk Resource Manual*, TVPI is required and can be calculated at fund level, investment level, or property level. It is calculated as total value divided by Paid in Capital (PIC). Below are the input definitions for each level:

### Total Value

**Fund (or SMA) Level:** Sum of residual fund net assets (NAV) plus aggregate fund distributions to investors since inception.

**Investment Level:** Sum of residual investment net assets (NAV) plus aggregate distributions to investors / the fund / SMA which were attributed to the investment.

**Property Level:** Sum of property fair value (net of debt) plus aggregate distributions paid since inception (Note: if actual property distributions are not separately maintained, estimates can be calculated by aggregating the property's net operating income (after interest expense on any debt) and subtracting principal).

<b>Paid in Capital</b>	All capital drawn down including the amount recalled.
<b>Total Distributions</b>	<p><b>Fund Level:</b> Aggregate fund distributions paid to investors since inception.</p> <p><b>Investment Level:</b> Aggregate investment distributions paid to the fund since inception.</p> <p><b>Property Level:</b> Aggregate property distributions paid since inception.</p> <p>*Note that distributions since inception within the Reporting Standards includes all distributions paid regardless of type (i.e., operations and return of capital).</p>
<b>Committed Capital</b>	<p><b>Fund Level:</b> Cumulative fund PIC plus unfunded capital commitments.</p> <p><b>Investment Level:</b> Cumulative investment PIC plus unfunded capital earmarked to the investment.</p> <p><b>Property Level:</b> Cumulative property PIC plus unfunded commitments from all owners (e.g., budgeted construction costs or renovation reserves)</p>
<b>Residual Value (RV)</b>	<p>RV is defined as NAV representing the remaining equity of a fund, investment, or property.</p> <p><b>Fund Level:</b> Net asset value (NAV) of the fund.</p> <p><b>Investment Level:</b> Net asset value (NAV) of the investment.</p> <p><b>Property Level:</b> Net asset value (NAV) of the property</p>

In addition to TVPI, the following three multiples are required by the Reporting Standards to be reported alongside IRR and can also be calculated at fund, investment, and property levels as defined above. The IRR and corresponding multiples reported should be at the same level.

- Realization Multiple or Cumulative Distributions to Paid-In Capital Multiple (DPI) calculated as Distributions divided by Paid in Capital.
- Paid-In Capital Multiple or Paid-In Capital to Committed Capital Multiple (PIC) calculated as Paid in Capital divided by Committed Capital
- Residual Multiple or Residual Value to Paid-In Capital Multiple (RVPI) calculated as Residual Value divided by Paid in Capital

At the investment level, MOIC and TVPI are generally considered the same. However, if referring to a fund level or property level metric, MOIC and TVPI may not be interpreted the same. As mentioned above, MOIC is predominantly used in private equity while TVPI, DPI, PIC, and RVPI are used in the private real estate industry. Care should be exercised when using these terms to ensure calculation methodology is understood.



## Applicability to other Templates or Requests for Information

Many questions have been received as to the applicability of the guidance contained herein to other templates or requests for information.

**Disclaimer:** The information provided below reflects the collective interpretation by task force members and is intended solely as guidance. For authoritative definitions and standardized language, users should refer directly to the applicable template(s) or other associated documentation.

The Total Global Expense Ratio remains the established global standard for fee and expense reporting in private real estate. [Click here for additional details on the Total Global Expense Ratio.](#) The ILPA Reporting Template is designed for and may not meet the needs outside of closed-end private equity funds.

Regarding the ILPA Performance Template:

- Gross Fund IRR is optional reporting in the ILPA Performance Template.

[Click here for established Reporting Standards on reporting gross and net IRR for private real estate funds.](#)

[Click here for the Reporting Standards Research Paper: "Gross and Net IRR: Adding transparency and comparability to closed-end fund performance and investor specific reporting".](#)

- Net IRR – the guidance contained herein aligns with the considerations and treatment thereof in the ILPA Performance Template as of the date of this paper.
- IRRs for the portion of the fund’s portfolio that is unrealized and realized shown separately – the guidance contained herein is considered best practice for the private real estate industry and should include calculation methodology disclosures.

MOIC and TVPI, often used interchangeably in private equity, should be clearly defined and accompanied by transparent calculation methodology disclosures.

## Conclusion

This whitepaper reflects the collective expertise and thoughtful deliberation of industry professionals committed to advancing transparency and consistency in private real estate reporting. While the Private Fund Adviser Rule was vacated, the guidance developed by the Performance Disclosure Task Force remains highly relevant and valuable to the industry. The methodologies and examples outlined herein aim to support best practices and foster alignment across stakeholders.

Readers are encouraged to treat this document as interpretive guidance and to consult the NCREIF PREA Reporting Standards at [www.reportingstandards.info](http://www.reportingstandards.info) for authoritative definitions and requirements. As the industry continues to evolve, collaboration and clarity will remain essential to informed decision-making and effective reporting. In this context, investment managers are encouraged to consult with appropriate parties - such as legal counsel or compliance teams - when determining how to apply the SEC Marketing Rule, and to ensure that related presentations and disclosures are made accordingly.



## **Acknowledgements**

The Reporting Standards mission to establish, manage, and enhance transparent and consistent reporting standards for the real estate industry fostering comparability and informed investment decision-making cannot be achieved without dedicated industry professionals willing to give their time and energy to its various projects. The Reporting Standards Board and Council would like to thank and acknowledge the task force members listed below. These industry professionals assembled quickly, and discussed, interpreted, and produced thoughtful work in a very short time frame.

### **Steering Focus**

Ken Robinson, CFA Institute  
Maritza Matlosz, RS Board, NCREIF Board, MetLife  
Diane Wild, RS Council, LaSalle Investment Management  
Jamie Kingsley, RS Director

### **Fee and Expense Focus**

Michelle Clements, RS Council, Citco  
Benay Kirk, RS Council, AlterDomus  
Matt Racketa, RS Council, Townsend Group

### **IRR With and Without Subline Focus**

Lauren DeMartini, RS Council, MetLife  
David DiPaolo, Former RS Council, PMC Vice Chair, Clarion Partners  
Kim Everaerts, PMC Vice Chair, Walton Street  
Brendan Fullum, Rockpoint  
Julian Worthington, QuadReal Property Group

### **Unrealized/Realized Portion Shown Separately Focus**

Rosellen Bounds, PMC Chair, ACA Group  
Amanda Carrillo, CBRE  
Paul D'Elisa, RS Council, Sentinel Real Estate  
Bob Redican, Nuveen