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Net Asset Value in Private Equity



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Synonyms

[Fair value](#); [Fund reporting](#); [Fund valuation](#); [Mark-to-market](#); [Performance analysis](#)

Definition/Description

The valuation of seasoned closed-end drawdown funds, which include private equity buyout and venture capital (VC) funds, plays a crucial role in portfolio management and investment decision-making. Despite the lack of observed market values for these funds, investors heavily rely on net asset values (NAVs) as a primary metric. However, NAVs can be influenced by managerial discretion, introducing potential biases in the process. This entry examines the challenges faced in valuing such funds, the impact of mark-to-market rules like SFAS

157, and the broader implications of NAVs on the industry and future fund performance.

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Valuation of seasoned closed-end drawdown funds, such as private equity buyout and venture capital (VC) funds, is challenging because the vast majority of assets have no observed market values. Still, it is important to understand the economic value of funds over their life for a number of portfolio management and regulatory compliance reasons. Investors typically rely on net asset values (NAVs) reported by fund general partners (GPs). These interim NAVs, imperfect as they may be, profoundly influence the entire industry by affecting asset allocation, manager selection, capital commitments, and livelihoods of fund managers, investors, and capital-seeking businesses.

As a practical matter, it is critical for limited partner investors (LPs) to understand the valuation pattern over a fund's life because LPs often make decisions based on estimates of current value and future expected returns. For instance, LPs need to regularly report valuations for their various stakeholders, such as trustees (in the case of endowments, foundations, funds-of-funds, etc.) and regulators (in the case of insurance companies, pension funds, etc.). LPs also rely on valuations to help determine secondary sale or purchase prices. In addition, NAVs are

routinely used as the key variables in making investment and asset allocation decisions.

Estimates of past and current fund performance serve as one of the most important marketing tools during fundraising. While the performance of fully resolved funds is known with certainty, the performance of unresolved funds relies on estimates of NAVs and is thus subject to managerial discretion. In fact, the more recent the fund vintage, the more interesting the performance metrics are to investors in a follow-on fund, *and* the more one must rely on NAV for performance estimates. Thus, fund managers may have the incentive to distort their recent NAVs when seeking new capital (Brown et al. 2019). For example, fund managers with relatively weak performance have the incentive to overstate NAVs. However, if they do, these actions will result in the appearance of lower subsequent performance (relative to what would have been observed with undistorted NAVs). The unwinding of such overvaluations is not necessarily immediate, but it is inevitable as actual cash flows eventually determine all fund returns. This presents a disincentive to engage in NAV inflation activities.

Historically, fund managers have been sluggish to update assessments of the fund valuation and reluctantly embraced fair value concepts, usually using cost or the value of the last round of financing as their best estimate of fair value in between financing events. The use of cost to estimate fair value was driven by three key factors: (1) a historical convention that identified “conservatism” as a positive attribute; (2) draft 1989 National Venture Capital Association’s guidelines (which were never ratified or adopted), which encouraged the use of cost; and (3) an investor (LP) base that had less strict fair value reporting requirements. Confirming this industry participants’ point of view, Gompers and Lerner (1997) note that in order to present a conservative assessment of the portfolio valuation, private equity managers often refrained from marking portfolio firm values to market, preferring instead to maintain the investments at book value. The practice was prevalent among both venture capital and buyout investments.

Since November 2007, most funds have been required to adopt mark-to-market rules (e.g., SFAS 157, also known as ASC 820). The goal of Statement 157 was to produce independently verifiable values, where possible without relying on management views for the numbers. SFAS 157 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, that is, at exit value. This definition represents a major change in the previous generally accepted idea that fair value was the price a private equity fund pays to acquire an asset, that is, entry value. Consequently, SFAS 157 has likely made reported values better measures of true economic value over the last decade (Borysoff 2021; Harris et al. 2014; Scharfman 2012). At the same time, financial regulators are concerned that even though the PE industry was provided with guidelines for fair value measurement, practical implementation and use of the new standard may be slow or non-existent in some cases.

Overall, the introduction of SFAS 157 altered managerial discretion over reported net asset values through (1) providing a consistent definition of fair value, (2) prohibiting carrying investments at cost, (3) requiring assets be marked to market every quarter, (4) prohibiting the use of discretionary block discounts, and (5) demanding detailed disclosure of valuation techniques, their underlying assumptions, and their inputs. Additionally, if assets are valued using Level 3 inputs, managers must disclose how their valuations would increase or decrease if they changed one or more inputs to a “reasonably possible” alternative.

However, there remains considerable discretion in valuation methodologies and existing research documents systemic misvaluations. As a consequence, fund NAVs likely incorporate a subjective assessment of true economic value. A bias could enter NAVs in several ways. First, valuing companies using comparable firms requires judgment in selecting the set of appropriate firms for comparison. Second, valuing companies using cash flow models involves a set of subjective modeling assumptions about growth rates, discount rates, etc. Finally, a bias in NAVs can derive from timing the change to fair value

versus historical cost accounting (or timing of write-downs of less successful investments). In the early years of the fund life, NAVs still tend to approximate historical cost, confirming the general preference for conservative valuation practices. However, over time NAVs generally move close to subsequent cash distributions to investors (Jenkinson et al. 2020). Additionally, the literature consistently demonstrates that buy-out fund managers value their portfolio companies more conservatively, relative to their VC fund counterparts, throughout the lives of their funds (Borysoff 2021; Jenkinson et al. 2013, 2020). Increasingly, NAVs are determined by outside valuation consultants and auditors. Still, the process is nonetheless subjective and is based on data produced by the portfolio companies directly owned by the funds. While the effect of external valuers on reported NAVs is not well documented, Borysoff (2021) examines the associations between different auditors and post-SFAS 157 NAV adjustments. The study finds that the VC clients of the Big 4 auditors recorded significant upward NAV adjustments, while the clients of the non-Big 4 auditors did not, suggesting that high-quality external auditors and valuers likely exert considerable influence on reported NAVs.

Overall, NAVs do not exhibit random changes in value over time, which one would typically observe in an informationally efficient market, and instead exhibit too smooth of a valuation pattern (Brown et al. 2020). At the same time, studies do not find evidence of systematic industry-wide asset valuation overstatements, which have been the subject of concern for financial regulators in recent years. The average results may reflect a mixture of the transitory nature of the overstatements and understatements shown by Brown et al. (2019) and the more significant effect of the longer-term understatements based on the general preference for conservative valuations. Moreover, evidence suggests that investors see through NAV overstatements during fundraising periods and that the behavior of GPs and investors is influenced by the acknowledgment of asymmetric information and the potential for gaming of reported performance. It appears that sophisticated investors are unlikely to systematically misallocate capital based

on false signals from GPs and may therefore prefer the current equilibrium to one with more regulation and (potentially) less NAV manipulation.

Perhaps the most important issue about NAVs is how well they characterize the knowable information about a fund's true economic value. If observable factors predict future fund performance based on current estimates of NAVs, then there are just two explanations for this finding. First, some factors may be correlated to the risk of a fund and therefore explain a risk premium earned by investors. Second, NAVs are systematically biased in that estimates are not taking into account all of the factors that explain future fund performance. Recent analysis of the evolution of fund performance by Brown et al. (2021) suggests that there exist both market-wide and fund-specific factors that predict future fund performance throughout the life of a fund. While the authors do not attempt to attribute factors to risk premia or NAV bias, the magnitude of the predictability raises the question of how factors such as market conditions and fund characteristics should be better reflected in NAV estimates.

A challenge for all stakeholders grappling with the effects of NAV bias is the lack of widely available data for analysis and benchmarking. The challenge is two-fold. First, the private fund industry is relatively new, with institutional-quality funds only emerging in large numbers in the 1980s. This means that the track record for fully resolved funds is quite short compared to other asset classes. Second, precise and comprehensive data for funds is hard to obtain and generally only provided to investors. Nonetheless, as data availability improves, research on NAVs will continue to enhance our understanding of both potential biases and methodologies that can correct for known biases.

Cross-References

- ▶ [Interim Valuation in Private Equity](#)
- ▶ [Private Equity Valuation](#)
- ▶ [Venture Capital Valuation](#)

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