Vanguard

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Vanguard 2025 private equity market outlook

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- Private equity (PE) exit markets are on the path to recovery as global PE exit activity rebounded sharply at the end of 2024. For 2025, we maintain our view that exit markets hold the key to reigniting the private capital life cycle.
- While waiting for PE exit markets to fully recover, investor demand for liquidity propelled the secondary market to record deal volumes in 2024. This creates a highly attractive opportunity in 2025 for skilled, well-capitalized investors to find high-quality assets at attractive prices.
- Long-term returns for PE compare favorably to public markets, even though the recent run-up in technology stocks has helped propel public equities over the past several years. Vanguard believes a diversified, global PE portfolio can outperform global public equities over the long term by ~350 basis points, or 3.5%, annually.
- Vanguard's 10-year median expected annualized return for global PE is 8.9% compared with 5.4% for global public equity, based on the December 31, 2024, running of the Vanguard Capital Markets Model®. Amidst an environment with a more cautious equity outlook, PE can be a useful tool to deliver outperformance relative to public equities for suitable investors with a tolerance for illiquidity and active risk.

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Recent PE market trends

Exit market rebound poised to continue in 2025

After a challenging two-year period of declining transaction volumes, global PE exit markets are nearing a turning point. In the U.S., an estimated 1,501 exits generated a combined $413 billion in 2024, reflecting a remarkable 49% growth in value from the prior year.[1] The momentum also carried over to international markets, as European exit activity solidly outpaced its pre-COVID averages by nearly all available measures.[2] While general partners (GPs) continue to be selective in choosing which assets to sell, these trends are nonetheless encouraging for an industry that since 2021 has largely struggled to generate distributions and return capital back to limited partners (LPs).

Looking ahead to 2025, we maintain our view that exit markets hold the key to reigniting the private capital life cycle. Without a robust exit environment, distributions back to LPs are likely to remain slow, thus limiting available capital for fundraising and new deal activity. Fortunately, the industry remains well positioned to drive exits higher as a combination of aging dry powder and a significant backlog of exit inventory are expected to further incentivize dealmaking. Add to these dynamics a resilient U.S. economy and lower interest rates, and exit markets should have ample support for a sustained recovery in 2025.

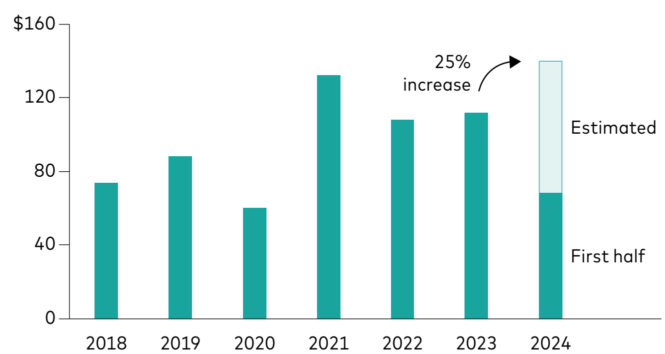
Demand for liquidity leads to robust activity in secondary markets

Secondary market deal volumes surged 58% in the first half of 2024, closing at $68 billion and surpassing the previous high of $57 billion set in the first half of 2022.[3] The rush of activity came as no surprise given the rapidly expanding need for liquidity solutions across the industry. LPs—needing cash to fuel new commitments—brought larger and more diversified assets to market as distributions remained scarce and pricing steadily improved. GPs have also contributed to higher volumes as they increasingly turned to continuation funds to extend holding periods on quality companies while waiting for exit markets to fully recover. Moving forward, a backdrop of resilient pricing, increased transaction supply, and ample secondaries fundraising is likely to result in record deal volumes for 2024, as shown in **Figure 1**.

FIGURE 1

Secondary market poised for record high deal volumes for 2024

Annual secondaries transaction volume (in $ billions)



Source: Jefferies. *H1 2024 Global Secondary Market Review*. Data as of June 30, 2024.

1 Source: PitchBook. *2024 Annual US PE Breakdown* (2025).

2 Source: PitchBook. *2024 Annual European PE Breakdown* (2025).

3 Source: Jefferies. *H1 2024 Global Secondary Market Review* (2024).

Long-term performance remains steady

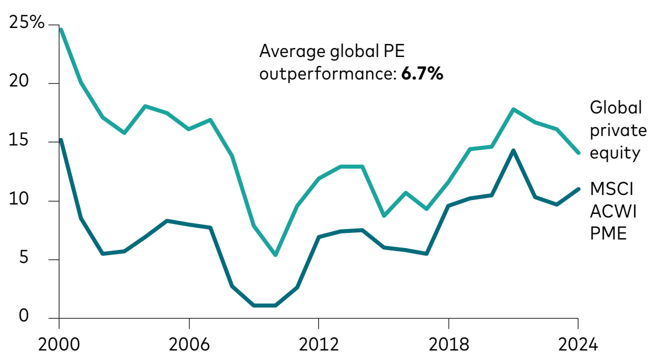
While PE performance has trended slightly downward in recent years, long-term returns for the asset class remain strong and compare favorably to public markets. As shown in **Figure 2** and **Figure 3**, global PE funds have consistently outperformed their public proxies over rolling 10-year horizons, while public equities have prevailed over periods of less than five years.

With interest rates expected to remain elevated for longer, the industry must look beyond multiple expansion and financial leverage to maintain performance. For GPs, this will require creating value organically by growing revenues and boosting margins to generate the steady returns for which the asset class has historically been known. Evidence suggests that these trends are already well underway, as prior Vanguard research shows that financial leverage as a percentage of total PE value creation has steadily declined over time.[4]

FIGURE 2

PE has historically outperformed public equity markets

Rolling 10-year net internal rate of return for PE vs. public markets

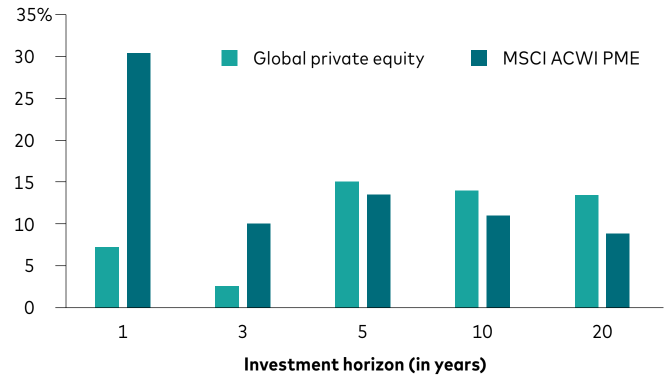


Source: MSCI performance data as of September 30, 2024. Our PE benchmark is a global universe of 7,025 buyout, growth, and venture capital funds tracked by MSCI.

FIGURE 3

PE's long-term return premium persists, but strong tech stock returns have helped give public equity the edge in recent years

End-to-end pooled net internal rate of return for PE vs. public markets



Source: MSCI performance data as of September 30, 2024. Our PE benchmark is a global universe of 7,025 buyout, growth, and venture capital funds tracked by MSCI.

The PE return premium over public equity markets is not a new phenomenon, and the asset class has a long history of generating strong returns in a variety of economically volatile periods.[5] The outperformance of PE over public stocks is driven by two primary factors—the liquidity premium[6] and manager excess returns.[7] Vanguard believes a diversified, global PE portfolio assembled by a skilled manager can outperform global public equities over the long term by ~350 basis points, or 3.5%, annually.[8]

4 See Vanguard (2024a).

5 See Vanguard (2024b).

6 The PE liquidity premium includes funding risk—the uncertainty about the timing and size of future capital calls and distributions, and the penalties investors face for failing to meet capital commitments. Though this risk can be mitigated, the procyclical nature of PE cash flows supports the notion that investors should demand compensation through higher expected returns.

7 Managers can add value to portfolio companies through improving their *operations* by increasing margins or adjusting firm strategy, enhancing *governance* by aligning incentives or altering board composition, and/or changing the firm's *financial structure*.

8 See Vanguard (2023a).

PE market outlook

Vanguard's capital markets model projections

Vanguard's equity return outlook over the next decade is cautious with a wide range of possible outcomes, especially in the U.S.[9] Given this potential return environment, PE can be a useful tool to deliver outperformance relative to public equities for investors who seek capital appreciation and have a tolerance for active risk and illiquidity.

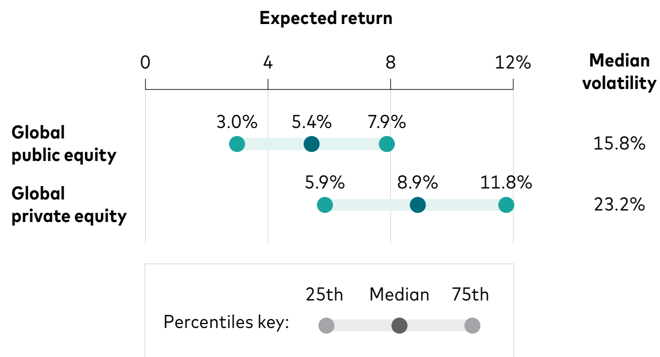
As shown in **Figure 4**, Vanguard's 10-year annualized return outlook for PE is 5.9%–11.8% (25^{th}–75^{th} percentile) with a median expected return of 8.9%, compared to 3%–7.9% (25^{th}–75^{th} percentile) and a median expected return of 5.4% for global public equity.

FIGURE 4

Vanguard's 10-year return forecast for global public and private equity

10-year annualized forecasts

Range of 25^{th} to 75^{th} percentile of the distribution of likely returns around the median



Note: Global public equity = 60% U.S. equity, 40% International equity—unhedged.

Source: Vanguard calculations, using asset-return projections from the Vanguard Capital Markets Model.

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9 See Vanguard, 2024c.

Vanguard projections for PE in a portfolio

PE presents an attractive risk-return opportunity over the long term for individual investors, even if macro conditions are likely to be less accommodating for equities than the prior decade. In **Figure 5**, we show Vanguard's latest 10-year outlook for public equity and PE, including portfolios that include 10%, 20%, and 30% of their equity allocation to PE relative to an all-public portfolio of 70% stocks and 30% bonds.

For investors who have a long time horizon and tolerance for active risk, PE can generate significant outperformance over an all-public portfolio, even when adjusted for the relatively higher volatility of PE returns. For an investor with 30% of their equity portfolio allocated to PE, we forecast their portfolio could generate an additional 0.8%, or 80 basis points, of annual return, while improving the Sharpe ratio, a measure of risk-adjusted returns, by 0.06x, or 23%. This investor's chance of meeting a 6% annual return target rises from 49% to 65%, or 15% higher than if the investor did not have an allocation to PE.

FIGURE 5

Private equity offers an opportunity for enhanced risk-adjusted returns

Portfolio risk and return projections with inclusion of private equity

						PE Share of total equity allocation			Difference between 30% PE scenario and 70/30 portfolio	
Median 10-year projections	**U.S. equities**	**International equities**	**Global equities**	**Private equity**	**70/30 portfolio**	**10%**	**20%**	**30%**	**Absolute**	**Percentage**
Return	3.9%	8.1%	5.4%	8.9%	6.0%	6.2%	6.5%	6.8%	+0.8%	+13.8%
Probability of meeting >6% return target	31.1%	71.5%	43.7%	74.0%	49.4%	54.1%	58.8%	64.7%	+15.3%	+30.9%
Volatility	16.1%	17.6%	15.8%	23.2%	10.9%	11.2%	11.6%	12.0%	+1.1%	+10.1%
Sharpe ratio	0.08x	0.32x	0.17x	0.33x	0.24x	0.26x	0.28x	0.29x	+0.06x	+23.2%

Note: 70/30 portfolio consists of a 70% allocation to equities (42% to U.S. equities, 28% to non-U.S. equities) and 30% allocation to fixed income (21% to U.S. bonds and 9% to non-U.S. bonds).

Source: Vanguard calculations, using asset-return projections from the Vanguard Capital Markets Model.

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Strategies to harvest PE's excess returns

Capturing PE's return premium in a more uncertain macro backdrop requires a thoughtful plan. Vanguard believes three actions will be critical for investors to realize PE's return and diversification potential: invest with highly skilled managers, embrace diversification, and adhere to a disciplined commitment program.

To solve for these challenges, investors may wish to consider partnering with a skilled fund-of-funds (FOF) manager. Recent Vanguard research has shown that investing in a low-cost FOF program that delivers broad-based diversification across manager, strategy, vintage, and region can improve downside protection and risk-adjusted returns over time.[10]

In the face of increasing uncertainty, investors may be tempted to alter their PE commitment program. However, much like the public equity markets, timing investments in PE tends to be futile.[11] Recent Vanguard research has shown that PE has historically generated stronger investment results during periods of economic uncertainty, and investors who decrease or pause their commitments during such periods experience lower investment gains. As a result, we believe a consistent PE commitment strategy that allows investors to stay invested through all stages of the market cycle is critical for achieving investment success.

Conclusion

PE can improve investor outcomes through higher returns and increased diversification across market cycles. Whether investing in the public or private markets, investors can improve their chances of investment success by maintaining a long-term perspective and focusing on factors within their control.

Investors with the scale and resources to maintain consistent access to top managers are likely to continue earning financial benefits from PE's inclusion in a portfolio. Adhering to a strategic PE commitment program and embracing diversification are effective strategies for navigating prior market cycles and should continue to serve investors well through the current one as well.

10 See Vanguard (2024d).

11 See Vanguard (2024b).

Appendix

More about the Vanguard Capital Markets Model (VCMM)

IMPORTANT: The projections and other information generated by the Vanguard Capital Markets Model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and overtime.

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More important, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model is a proprietary financial simulation tool developed and maintained by Vanguard's primary investment research and advice teams. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as 1960. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes, as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.

Asset classes and proxy indexes

- **U.S. equity:** MSCI US Broad Market Index
- **Non-U.S. equity:** MSCI All Country World ex USA Index
- **U.S. bonds:** Bloomberg US Aggregate Index
- **Non-U.S. bonds:** Bloomberg Global Aggregate ex-USD Index
- **Private equity:** MSCI ACWI + 350 basis points

References

Jefferies, 2024. *H1 2024 Global Secondary Market Review*. Available at: https://www.jefferies.com/wp-content/uploads/sites/4/2024/07/Jefferies-Global-Secondary-Market-Review-July-2024.pdf.

PitchBook, 2025. *2024 Annual European PE Breakdown*. Available at: https://pitchbook.com/news/reports/2024-annual-european-pe-breakdown.

PitchBook, 2025. *2024 Annual US PE Breakdown*. Available at: https://pitchbook.com/news/reports/2024-annual-us-pe-breakdown.

Vanguard, 2024a. *Benefits of Private Equity Amid Higher Interest Rates*. Valley, Forge, PA.: The Vanguard Group. Available at: https://corporate.vanguard.com/content/dam/corp/research/pdf/vanguard_benefits%20_of_private_equity_amid_higher_interest_rates.pdf.

Vanguard, 2024b. Rabinovich, Michael. *Power in Persistence: Staying the Course with Private Equity Commitments*. Valley Forge, Pa.: The Vanguard Group. Available at: https://corporate.vanguard.com/content/dam/corp/research/pdf/power_in_persistence_staying_the_course_with_private_equity_commitments.pdf.

Vanguard, 2024c. *Our Economic and Market Outlook for 2025: Global Summary*. Valley, Forge, PA.: The Vanguard Group. Available at: https://corporate.vanguard.com/content/corporatesite/us/en/corp/articles/vanguard-economic-market-outlook-2025-global-summary.html.

Vanguard, 2024d. *Benefits of a Fund-of-Funds Strategy in Private Equity*. Valley Forge, Pa.: The Vanguard Group. Available at: https://corporate.vanguard.com/content/dam/corp/research/pdf/benefits_of_a_fund_of_funds_strategy_in_private_equity.pdf.

Vanguard, 2023a. Dinucci, Ted, Liz Foo, and Fran Kinniry. *The Case for Private Equity at Vanguard*. Valley Forge, Pa.: The Vanguard Group. Available at: https://corporate.vanguard.com/content/dam/corp/research/pdf/vanguard_case_for_private_equity.pdf.

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With private equity ("PE") investments, there are five primary risk considerations: market, asset liquidity, funding liquidity, valuation, and selection. Certain risks are believed to be compensated risks in the form of higher long-term expected returns, with the possible exceptions being valuation risk and selection risk. For selection risk, excess returns would be the potential compensation, however, limited partners ("LPs") must perform robust diligence to identify and gain access to managers with the skill to outperform. PE investments are speculative in nature and may lose value.

Market risk: Private equity, as a form of equity capital, shares similar economic exposures as public equities. As such, investments in each can be expected to earn the equity risk premium or compensation for assuming the nondiversifiable portion of equity risk. However, unlike public equity, private equity's sensitivity to public markets is likely greatest during the late stages of the fund's life because the level of equity markets around the time of portfolio company exits can negatively affect PE realizations.

Though PE managers have the flexibility to potentially time portfolio company exits to complete transactions in more favorable market environments, there's still the risk of capital loss from adverse financial conditions.

Asset liquidity risk: Various attributes can influence a security's liquidity; specifically, the ability to buy and sell a security in a timely manner and at a fair price. Transaction costs, complexity, and the number of willing buyers and sellers are only a few examples of the factors that can affect liquidity. In the case of private equity, while secondary markets for PE fund interests exist and have matured, liquidity remains extremely limited and highly correlated with business conditions. LPs hoping to dispose of their fund interests early—especially during periods of market stress—are likely to do so at a discount.

Funding liquidity risk: The uncertainty of PE fund cash flows and the contractual obligation LPs have to meet their respective capital commitments—regardless of the market environment—make funding risk (also known as commitment risk) a key risk LPs must manage appropriately. LPs must be diligent about maintaining ample liquidity in other areas of the portfolio, or external sources, to meet capital calls upon request from the General Partners ("GPs").

Valuation risk: Relative to public equity, where company share prices are published throughout the day and are determined by market transactions, private equity NAVs are reported quarterly, or less frequently, and reflect GP and/or third-party valuation provider estimates of portfolio fair value. Though the private equity industry has improved its practices for estimating the current value of portfolio holdings, reported NAVs likely differ from what would be the current "market price," if holdings were transacted.

Selection risk: Whether making direct investments in private companies, PE funds, or outsourcing PE fund selection and portfolio construction to a third party, investors assume selection risk. This is because private equity doesn't have an investable index, or rather a passive implementation option for investors to select as a means to gain broad private equity exposure. While there are measures an investor can take to limit risk, such as broad diversification and robust manager diligence, this idiosyncratic risk can't be removed entirely or separated from other systematic drivers of return. Thus, in the absence of a passive alternative and significant performance dispersion, consistent access to top managers is essential for PE program success.

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