Misalignment in Approaches to Private and Public Valuations

13 July 2023

Speakers

Bruce Phelps, Ph.D., CFA, Managing Director, Head of Institutional Advisory & Solutions, PGIM

Alexander Dotov, Head of Investment Risk Management in Alternatives, TIAA

James Adams, Ph.D., CFA, CFA Institute

Background

The third and final webinar in the CFA Institute Private Markets series sponsored by PGIM addressed the subject of valuation in private markets. Earlier webinars addressed diversification and liquidity risk in alternative assets, and valuation was a key element in both conversations.

The discussion covered a wide range of topics, several of which are highlighted in this research note along with suggestions for further reading. The full webinar is available at https://players.brightcove.net/1183701590001/experience_644be4083e6f8800229774a5/share.html.

The Nature of Valuation, Return, and Risk for Alternative Investments

Unlike liquid public stocks and bonds, which use daily traded prices to value positions, illiquid private markets rely on methodologies from discounted cash flow to multiples to recent public transactions, as well as smoothing of public market equivalent (PME) inputs and other estimates to arrive at comparable measures.

Private equity (PE) returns over the past decade of 16% per year internal rate of return (IRR) compare very favorably to 10% per year for public equities, or more than a 1.1 in PME terms. Although private equity returns are correlated with public equities, they are far more dispersed relative to public markets, and it is very difficult to gain exposure to the aggregate private equity market. Also, some of these PE returns depend on a general partner's (GP's) skill in managing a portfolio of assets. PE investments also involve binding constraints on investors or LPs (limited partners) for many years as they commit capital to these illiquid investments. The risk to institutional investors of allocating to illiquid assets is that they may suddenly have to raise cash by selling private assets at unattractive prices.

Alternative investment risk measures also require particular attention. Differences between internal rates of return and time-weighted rates of return, as well as net and gross returns, are just a few of the complications. In addition, the variability of valuations is not necessarily comparable to the price volatility of public markets. Over the past 30 years, the standard deviation of quarterly returns of buyout strategies is 10%–12% per annum (p.a.), versus S&P 500 quarterly standard deviations of 16%–18% per year and 20%+ for small cap stocks.

Private market valuations tend to exhibit autocorrelation, and their standard deviations tend not to reflect true potential volatility, so preferred metrics include tail risk measures such as conditional value at risk. Although normal market behavior will not result in catastrophic outcomes, tail risks are a different story.

CFA Institute Research & Policy Center

Existing Investments vs. Capital Commitments

Although private investments have nice return properties, they introduce a need to be very careful about contingent cash claims on the fund due to future capital commitments. Sovereign wealth funds, corporate defined benefit (DB) plans, defined contribution (DC) plans, and endowments have very different cash requirements and sources.

Tail risks mentioned earlier stem from liquidity events rather than returns given the uncertainty of capital calls and distributions. Portfolios have other cash needs, such as mark-to-markets for interest rate and foreign exchange derivatives positions. Other cash flow events could happen, such as DC member switching or DB buyouts. Adverse market environments may be an opportunity for GPs to call capital, which may be inopportune timing for an investor. Although analysis of these risks relies on simulations using historical information, investors must ask themselves whether the tremendous recent historical performance of alternatives such as private equity will repeat itself.

The current environment is characterized by elevated inflation, rising interest rates and "down rounds" in venture capital. Buyout market valuations appear to be sticky—that is, not adjusting quickly to challenged public market conditions. Exits are being realized more slowly, reducing distribution flows. At the same time, capital calls continue, so portfolio risk in seasoned investments is rising while new risk is being added to portfolios. Although the current environment suggests that there may be attractive deals available at relatively cheap valuations, risk budgets are under pressure. Portfolio management of tail risk may be more important than adding new exposure given the dispersion in performance and valuations within and across different private equity strategies.

Reported Aggregate vs. Real-World Performance

Unlike public markets, where investors may be quickly fully invested, private market investors must hold a considerable amount of uncalled and uncommitted capital, may have little to no access to specific vintage years during which little to no secondaries trading occurs, and/or may have private strategy or manager returns that vary greatly from the private market as a whole.

Investors pursue a pacing strategy to avoid concentrating commitments in one vintage year, seeking to distribute exposure over multiple investment years. Considering this strategy in the context of figures cited earlier, historical private equity returns with a 15%–16% p.a. IRR and volatility of 13% p.a. give us an attractive Sharpe ratio of 1.2. In contrast, 10% p.a. average S&P 500 returns with volatility of 17% p.a. give a lower 0.6 Sharpe ratio. Now assume that some of the uncalled committed capital is in the public market, reducing overall returns to 12%–13% p.a. with 17% p.a. volatility. This scenario may reduce the private market returns to an effective 0.7 Sharpe ratio, which is still above that of public markets but far less so. These relative returns are also affected by the so-called "parking places" used for uncommitted capital, which in the case of some sovereign wealth funds includes Treasury bills.

The Role of Private Debt

Although banks were big investors in and big originators of private credit prior to the 2008 global financial crisis, capital requirements have moved that business into the private sphere, with significant growth in private asset and credit funds, an exciting change for institutional investors.

These investors consider this longer-term capital and can select different exposures across the capital structure. The alpha potential stems from the bilateral nature of lending and the greater interaction between borrower and lender than in the bond market. The degree of GP skill in managing covenants and negotiating with borrowers is important, although this new asset class remains untested in a recession scenario. A key question that remains is how LPs address valuation given the significant time lag for these private assets versus public securities.

Real Estate, Timberland, and Farmland

Although the public real estate investment trust (REIT) market is down 25% from Q1 2022 to Q1 2023, Burgiss just released private real estate market returns of 2% for the same period. How does a chief investment officer (CIO) address this disconnect between public and private market valuations?

Alternative investors often cite the fact that private markets are less susceptible to behavioral risk and tend to be more deliberative.

One approach is to measure between the errors when an investor has a choice to either roll forward a private market investment and mark it down along with the public market, or leave it unchanged, with distributions flowing through as well as capital calls. Remarkably, the errors are about the same, suggesting that CIOs should perhaps have more confidence in reporting their private market returns as is rather than being fully responsive to public market changes.

As for other real assets, including farmland and timberland, similar valuation challenges exist with respect to less frequent transactions as well as the use of alternative information to measure value and risk. For example, timberland valuation involves valuing the land as well as tree species. In the case of farmland, permanent as opposed to row crops factor into the valuation with a higher weight, especially when they are being operated. In other cases, farmland is leased to farmers planting row crops and rental rates come into play.

It is important to note that the volatility of an underlying commodity being produced does not necessarily reflect the price volatility of the underlying real asset. For example, while timberland produces raw timber that is processed into lumber, the dynamics of these two markets can diverge meaningfully. During COVID, the price of lumber in the United States soared and remained volatile as construction soared, and the cost of transport, personnel, and constraints on sawmill capacity were key factors. Timber prices, however, remained relatively low and stable.

Infrastructure

Infrastructure investment will continue to grow, and we are in the early stages of capturing data for this investable asset. Whether considering social infrastructure, renewables, transport, power, or energy, all assets have very different cash flow profiles, structures (project company versus corporate entity), and business models (contracted, merchant, regulated) that affect their valuation and volatility over time.

These assets are very lumpy, which makes it a particular challenge to develop a diversified portfolio. Although diversification into infrastructure assets is often touted as an inflation hedge, recent market developments with rising operating costs have called this assumption into question, and political pressure is sometimes exerted to promote investments in certain areas of infrastructure. The long-term nature of these investments also adds to portfolio liquidity risk.

Although these highly bespoke and heterogeneous investments are challenging from a risk perspective, recent efforts to tackle data and analytics have made significant progress, providing tools to extract systematic types of factors from this interesting and growing asset class.

Suggestions for Further Reading

Frédéric Blanc-Brude and Junying Shen, "Building Portfolios with Infrastructure: Performance, Cash Flows & Portfolio Allocation," PGIM Institutional Advisory & Solutions (November 2022), EDHECinfra_PGIM_IAS-Building-Portfolios-with-Infrastructure-2022.pdf.

Xiang Xu, "Private vs. Public Investment Strategies: Reported and Real-World Performance," PGIM Institutional Advisory & Solutions, (May 2023), https://cdn.pficdn.com/cms/pgim4/sites/default/files/IAS-Private-Vs-Public-Investment-Strategies-Reported-and-Real-World-Performance-0523.pdf