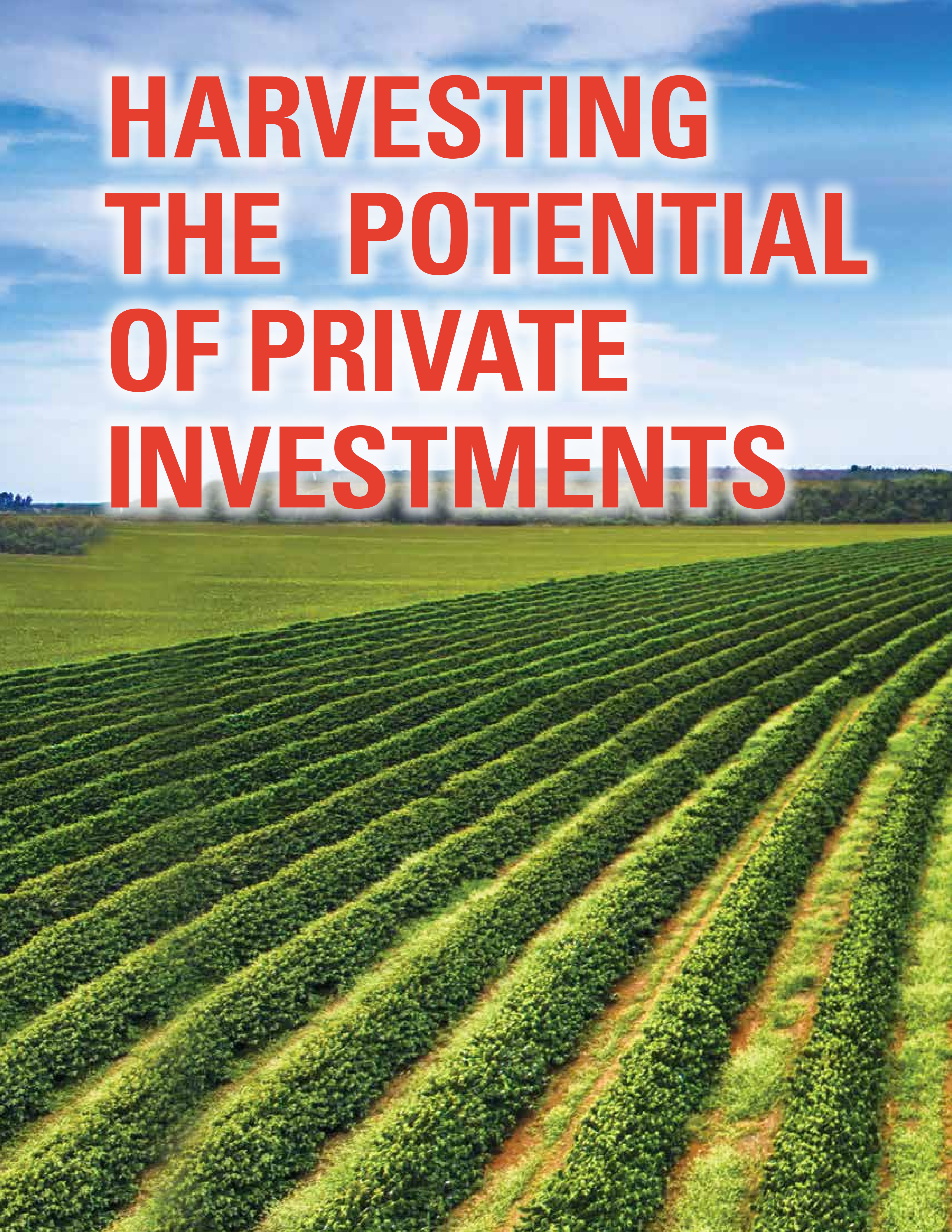
HARVESTING THE POTENTIAL OF PRIVATE INVESTMENTS



It's become more challenging for defined benefit pension plans to generate sufficient returns from traditional asset classes. Private investments, a subset of alternative investments, could help many plans generate better returns.

by | **Alex Pekker, Ph.D.**

Investment strategy, one of the biggest drivers of solvency for defined benefit pension plans, directly affects funded status, contributions and balance sheet volatility. Yet traditional asset classes—domestic and international stocks and U.S. government and corporate bonds—are unlikely to generate sufficient returns to help plans close their asset-liability gaps or fund future accruals. Hedge funds and real estate are staples of many plans' asset allocations and important in generating returns and managing return volatility, but projected returns are relatively low.

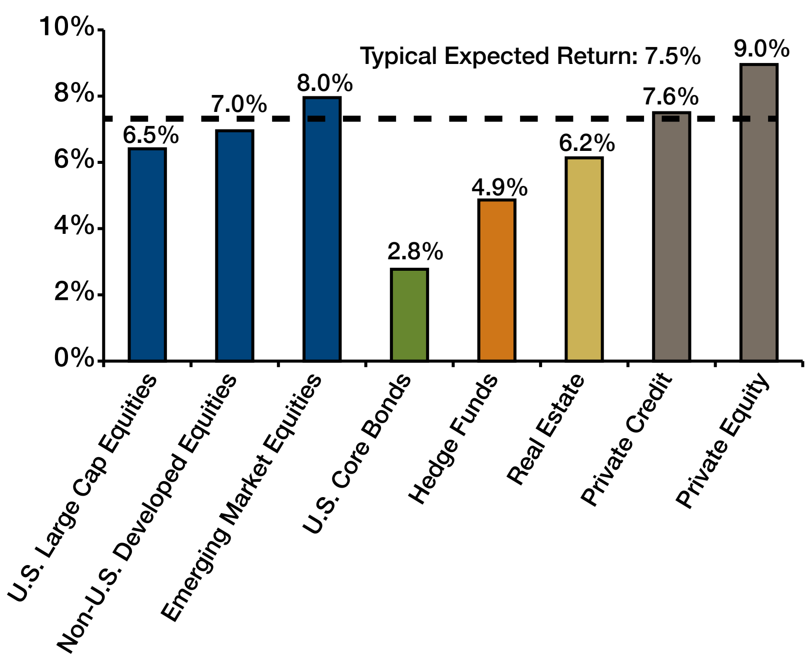
Conversely, *private investments (PIs),* that is, private equity and private credit, could be an important driver of improved return for many plans. Of course higher potential return comes with higher risk. Indeed, compared with the public markets, PIs are characterized by lower transparency, greater illiquidity and a much wider disparity among returns generated by managers within the asset class.

Plan sponsors and trustees often avoid PIs because they overestimate their plans' need for liquidity while also assuming that all PIs have extremely long periods during which they cannot be easily liquidated (i.e., *lock-up periods).* Yet the PI space is quite diverse, with characteristics that fit many different cash flow needs and liquidity preferences. A well-designed PI program—one that takes into account plan cash flows (both in and out) over the next ten to 20 years, includes the best managers and fits the plan's size, horizon and governance structure—can go a long way toward achieving investment objectives.

FIGURE 1

Expected Ten-Year Annualized Market Returns

Survey of 35 investment advisors



Note: Private credit is estimated as high yield + 2.5%.
Source: Horizon Actuarial Services, LLC, 2017.

PI Returns Are Attractive

For a host of reasons—prolonged low interest rates, low inflation, weak economic growth and high equity market valuations, etc.—market returns for the next ten years are projected to be low (Figure 1). Based on the Horizon Actuarial Services 2017 survey of 35 investment advisors, a typical 60% global equities/40% U.S. bonds portfolio is projected to return only 5.6% over ten years, or 1.9% below a typical target return of 7.5%. Even this estimate may be too rosy, however. Assuming bond yields and equity market valuations return to long-term averages over ten years, Cambridge Associates estimates a ten-year compound return of only 4.0% for a 60/40 portfolio.

Skillful investment managers can potentially exceed these market return expectations. In addition, exposure to alternatives such as hedge funds and real estate as well as tactical asset allocation decisions, if successful, can supplement expected public market returns. However, private credit, private equity and emerging markets equities have the highest projected ten-year returns, with PIs offering the greatest potential, according to the Horizon survey.

In addition to having high future expected returns, PIs historically have outperformed their public counterparts by considerable margins. Indeed, over the past ten, 15 and 20 years, global private equity funds have outperformed the global public equity markets by 410 to 630 basis points (net of fees) (Figure 2). Evaluating the past performance of private credit strategies is more challenging, since the number and types of these strategies have been growing steadily since the financial crisis, meaning that few sufficiently long-term benchmarks exist. For purposes of comparison, over the past ten years, direct lending funds (a type of private credit strategy) have outperformed high-yield bonds by 230 basis points, a significant value-add.

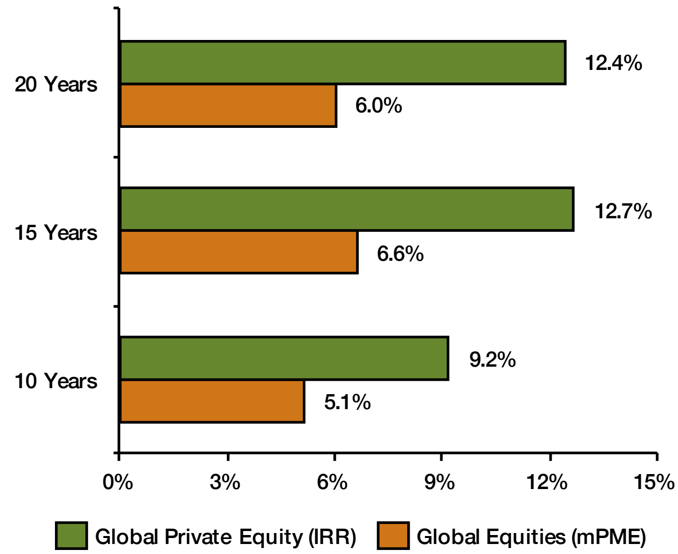
PI Strategies Are Diverse and Opaque

So what are private investments, and why are they expected to outperform public markets? PIs include a wide collection of strategies, each with different objectives and attributes, but with a common trait: illiquidity (Figure 3). In each strategy, investors commit capital to a fund, but not all of the committed capital is contributed at once (as is the case with most public market investments). Committed capital is contributed, or *called*, during an initial period of a few years and is then returned over the last few years of the fund's life. Income (as opposed to capital appreciation), such as interest on commercial loans or pharmaceutical royalties, may be distributed throughout the fund's life as well. It is extremely difficult to liquidate a PI while invested and, if successful, the liquidation usually comes at a steep discount to the carrying value of the investment.

It is important to note that PIs are generally quite opaque, potentially making them difficult to analyze and even locate. Because PIs are not publicly traded, their prices and holdings are available only to current (and sometimes prospective) investors and some intermediaries, such as investment

FIGURE 2

Historical Index Returns (Annualized)



As of December 31, 2016

Note: Global private equity returns represent the internal rate of return (IRR). Global equities returns figures represent the modified public market equivalent (mPME). Cambridge Associates mPME methodology replicates private investment performance under public market conditions and allows for an appropriate comparison of private and public market returns. The mPME analysis evaluates what return would have been earned had the dollars invested in private investment been invested in the public market index instead. Total return data for the MSCI All Country World Index are gross of dividend taxes through fourth quarter 2000 and net of dividend taxes therafter.

Sources: MSCI and Cambridge Associates LLC. MSCI data provided as is without any express or implied warranties.

FIGURE 3

Summary of Private Investment Types and Key Characteristics

	Private Credit				Private Equity		
	Royalties	Direct Lending	Capital Solutions/ Mezzanine Debt	Distressed/ Opportunistic	Buyouts	Growth Equity	Venture Capital
Growth Potential	Varies	Low	Moderate	Moderate	Moderate	Moderate	Very High
Income Potential	High	High	Moderate	Low	None	None	None
Volatility/ Drawdown Risk	Low	Low	Moderate	Moderate	High	High	Very High
Predictability of Cash Flows	Varies	High	Moderate	Low	Low	Low	Very Low
Typical Fund Life	Varies depending on industry	5–10 years	8–12 years	6–10 years	10–12 years	10–12 years	10–12 years

Note: This is a *partial* list of common private investment strategies and their general characteristics. A specific strategy will have unique characteristics that may be different from those shown here.

Source: Cambridge Associates LLC.

consultants. Moreover, since PIs generally invest in or lend to private companies, financial data on those companies also may not be publicly available. There are well-known, large PI fund managers, but many, especially those with niche or innovative strategies, are less well-known as well as *capacity constrained,* meaning that the amount of capital they can take in is limited, and not all investors wishing to invest in their funds can be accommodated.

takeaways

- *Private investments (PIs)* are investments in non-publicly traded equity or private credit.
- Challenges of investing in PIs include illiquidity and lack of publicly available financial information on the companies in which PIs invest.
- Private equity investment funds focus on appreciating in value by investing in a variety of businesses. Types include venture capital, growth equity and buyouts.
- Private credit funds focus on income-generating opportunities, such as lending money to private firms.
- Key considerations for plans evaluating whether to dive into PIs include size of the plan, investment horizon, governance and cash flow structure.
- Returns can vary widely among PI managers, so careful manager selection and ongoing monitoring are important.

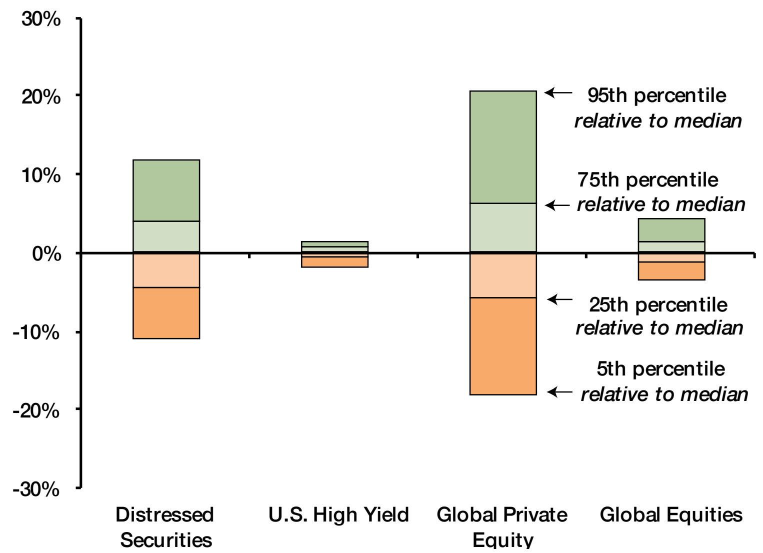
PI strategies generally fall into two categories: *private equity* and *private credit*. Private equity investment funds focus on appreciating in value by making investments in a variety of businesses. Types of investments include venture capital, which invests in early-stage start-ups; growth equity, which invests in developed but growing companies; and buyouts, which are investments in mature companies ready for a turnaround. The life of these funds is typically ten to 12 years.

Private credit funds have a somewhat shorter fund life, potentially as short as five years. Instead of investing in the companies, investors in such funds are lending money to private firms. Strategies include *return maximizing*, which lends money to companies that are in financial distress, or *capital preserving*, which are less risky and lend money to more stable companies. In addition, strategies in specialty finance—including investments in aircraft leases and in entertainment, pharmaceutical and other kinds of royalties—can have both return generation and capital appreciation characteristics. Unlike private equity, private credit typically has both income and appreciation components; in other words, it produces cash flow during the life of the fund, not only in the last few years.

Though trustees frequently assume that all PIs are alike, especially when it comes to illiquidity, each type of PI fund has a distinct liquidity profile and specific cash flow characteristics. At one extreme is venture capital, with no yield and unpredictable cash flows (both commitments and return of capital), and at the other is direct lending, with a large current income component and a more predictable, bondlike cash flow profile. Thus a plan that has large net inflows and a long time horizon and is focused primarily on return generation could invest in venture capital, while a plan that is cash flow–constrained could instead utilize private credit.

FIGURE 4

Range of Ten-Year Manager Returns Relative to Median



As of December 31, 2016

Note: Range of ten-year manager returns for U.S. high-yield and global equities use Cambridge Associates LLC (CA) Manager Universe Statistics, which are derived from the CA proprietary database covering investment managers. Managers that do not report in U.S. dollars, exclude cash reserves from reported total returns and have less than $50 million in product assets are excluded. Performance results are generally gross of investment management fees. To be included in analysis of any period longer than one quarter, managers must have had performance available for the full period. Manager returns for global private equity managers and distressed securities are pooled horizon internal rate of return (IRR) calculations, net of fees, expenses and carried interest. Global private equity data represent mature funds (vintage years 2006 through 2010). Performance results for private investment managers for which the IRR is unavailable or can't be calculated are not included. The timing and magnitude of fund cash flows are integral to the IRR performance calculation. Manager returns for public asset classes are average annual compounded return calculations, which are time-weighted measures over the specified time horizon and are shown for reference and directional purposes only.

Sources: Cambridge Associates LLC.

Plan Characteristics Must Be Right for a PI Program

PIs may not be appropriate for all plans. Key considerations include time line and plan size. From risk management and diversification perspectives, plans should invest in multiple funds with different start and end dates, requiring a minimum investment horizon of eight to ten years for realizing returns and a minimum total asset base of at least $100 million.

Another consideration is governance. Because these investments can be complex and opaque, trustees, as fiduciaries, should appoint and develop a trusting relationship with investment and legal advisors who are highly experienced in PIs. In addition, because PI funds have specific closing dates and legal requirements, investment decisions must be made efficiently (but diligently). Multiemployer plans particularly may encounter challenges in this area, since committees typically meet quarterly, represent so many different interests and can deliberate extensively. Unless these issues around governance—expert investment and legal advice and a structure that enables timely decisions—can be addressed, PIs may not be appropriate.

One way to address these challenges is by appointing an investment advisor as a discretionary manager for the PI program, either on a fully or semidelegated basis. In *semidelegated management,* trustees retain "veto power" over the advisor's investment implementation decisions within a short time frame (e.g., a week). This approach can also help allay any tensions that may exist on the committee, reduce staff administrative burdens, enable trustees to focus on the bigger picture and prevent conflicts of interest that potentially can occur between managers and trustees.

Program Construction Should Be Customized

Even if a plan has satisfied the size, time horizon and governance criteria, trustees often overestimate the amount of liquidity that their plans require and avoid, or minimize, their allocations to PIs. Extensive asset and liability cash flow modeling and stress testing are critical to determine the appropriate target weight to PIs, the types of strategies to include, the timetable for investing in the chosen strategies and the implications for the rest of the portfolio. Indeed a program can never be constructed in isolation; different types of PIs have different correlations to other parts of the portfolio, and their valuations are still subject to economic and market conditions.

No plan should find itself in a position where the allocation would become so large it causes a liquidity crunch, forcing a plan to draw excessively on other investments—public equities or those non-PI assets that, like PI, may also have restrictions on when they can be sold (such as real estate or some hedge funds)—in order to pay benefits or administrative expenses. Furthermore, since these strategies can't be easily sold or reduced in size, asset and liability modeling should ensure that in future years the program doesn't grow too large relative to its target weight or contribute excessively to portfolio risk.

What does this mean in practice? For example, a well-funded, open plan with ongoing contributions can likely undertake a well-sized, fairly risky, broad PI program, incorporating venture capital and growth equity as well as distressed private credit. On the other hand, a plan that has contributions that vary with economic conditions and relatively large outflows but a sufficiently long time horizon would likely have a smaller PI allocation and include only income-oriented, shorter lock-up pri-

Private Investment Implementation for Multiemployer Plans

Many multiemployer plans have a strong need for return generation as they face the challenges of underfunding and uncertain contribution prospects. This need often can be met, in part, by investing in PIs. Yet these plans' unique structure—two distinct groups of trustees (members and employers) representing potentially disparate interests within each group—often can lead to extensive deliberation and delayed decision making. Committees must overcome these challenges if they want to use PIs to fulfill retirement promises to their members. Of course, multiemployer plans are not alone in funding challenges, and the examples provided (with appropriate modifications) could apply to public and corporate plans as well.

We illustrate how PIs can be incorporated into an investment strategy with two sample plans, a green zone plan with reasonable demographics and strong contribution potential, yet subject to the risk of an unexpected sharp decline in work hours and contributions *not* related to economic conditions, and a red zone plan with challenging demographics and a projected accumulated funding deficiency within five years (see the table).

Qualitatively, it's clear that the green zone plan is relatively healthy and can take on both volatility and illiquidity risks. The red zone plan, on the other hand, faces a stark choice between (1) an aggressive asset allocation that has the potential to close the asset-liability gap but may accelerate insolvency in the case of a market downturn and (2) a conservative asset allocation that will almost surely result in eventual insolvency, albeit at a later date. In all cases, PIs could help, but in different ways.

A reasonable asset allocation for the green zone plan would consist of 75% in growth assets, including 30% in PIs (see the figure). Since the plan can afford many forms of risk, PI exposure is aggressive, with one-third each in venture capital, buyouts and a combination

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TABLE

Characteristics of Sample Multiemployer Plans

	Green Zone Plan	Red Zone Plan
Funded Status	102%	66%
Discount Rate/Long-Term Expected Return	7.5%	7.5%
Net Outflows as Percent of Assets	3%	6.4%
Active Participants as Percent of Total	57%	41%
Funding Standard Account Deficiency	None projected	Projected within five years
Contribution Levels	Sustainable	Unable to raise contribution levels
Main Contribution Risk	Unexpected work stoppage	Economy-dependent

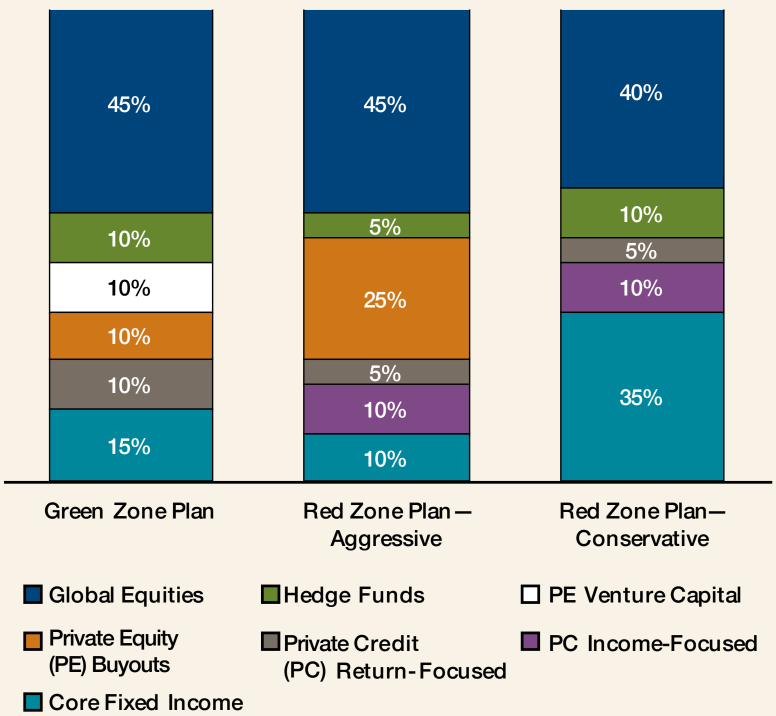
Source: Cambridge Associates LLC.

of distressed and opportunistic private credit. While 30% in privates may seem rather large, extensive asset/liability modeling shows that, for this particular plan, the weight is justifiable. Using the capital market assumptions in Figure 1, the expected annualized ten-year return for this strategy is 7.0%, still slightly below the long-term expected return.

For the red zone plan, two potential "bookend" options are 85% and 55% in growth assets. Because liquidity is so important for this plan, PIs here must be more conservative: There is no allocation to venture capital, and private credit is composed entirely of a diversified portfolio of senior loans with set maturities. This reduces volatility and drawdown risks and provides larger and more predictable cash flows. Using the capital market assumptions in Figure 1, the expected annualized ten-year return for these strategies are 7.5% and 5.7%, respectively.

FIGURE

Potential Asset Allocations for the Red Zone and Green Zone Plans



Source: Cambridge Associates LLC.

vate credit. In the sidebar, we incorporate PIs in two sample plans.

Manager Selection and Monitoring Are Crucial

Unlike in public markets, there is simply no way to invest passively in privates. Moreover, returns can vary widely among managers, strategies are diverse and often complex, and access to investments is limited. As a result, careful manager selection is essential.

The difference between top (or bottom) quartile and median manager returns can be four to five times higher in PIs than in public market equivalents (Figure 4), meaning that a "good" manager far outperforms a mediocre—or even an average—one. For example, Cambridge Associates research shows that, in private equity, a top-quartile manager is expected to outperform a median manager by 6.4% per year over ten years, while a top-quartile global equity manager is expected to outperform the median global equity manager by only 1.5%; the results are similar for distressed debt vs. high yield. The differences are even starker for the top 5% of managers, where outperformance relative to median can be in the double digits in PIs but is typically less than 5% in high-yield and global equities. Unfortunately, the same is true on the downside as well.

The data illustrate that manager *due diligence* (a review of the organizational structure, the investment process, the people and business risk management) is extremely important. Another critical aspect of due diligence is legal document review and, potentially, negotiation of fees and terms. Finally, as noted earlier, certain funds may be difficult to source, and certain strategies may be oversubscribed, so extensive experience in PIs as well as a network of relationships in the space is important.

Manager selection on its own, while critical, will not guarantee program success. Manager monitoring, risk management and efficient cash flow management also are fundamentally important. Because most private equity funds don't have a well-defined timetable for contributing cash, trustees (or their advisors) should pay close attention to these capital calls and ensure that they can bio

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source the cash quickly and efficiently from the rest of the portfolio. Likewise, once funds begin to produce income and/or return capital, there should be a plan for recycling that cash, likely into the remaining portfolio. At the same time, as funds return capital, the PI weight in the portfolio may decline, and new PI funds may need to be considered.

Conclusion

A defined benefit plan's ability to meet its future obligations depends on many factors, not least of which are the investment strategy and the returns it is expected to deliver. Given low projected returns for the next decade, private investments could play a pivotal role in helping plans become more solvent and fund benefits for current and future retirees. Because of the complexity and heightened risk that come along with these strategies, careful structuring of the PI program, expert manager selection, timely execution, continued monitoring and cash flow management are crucial for success.