

October 2025

Private assets in defined contribution plans: Benefits, risks, and implications

Takeaways

We evaluate the prospect of expanding access to private assets in defined contribution plans through three lenses: investment merit for everyday investors, plan sponsor considerations, and potential tradeoffs policymakers may wish to consider.

- The investment case for private assets hinges on identifying and accessing highly skilled managers, committing to a long holding period, and accepting the risk of unfavorable returns. Under these conditions, a 10%–20% allocation to private assets within a target-date fund (TDF) could, over 40 years, boost retirement wealth by 7%–22% and retirement income by 5%–15% after fees.
- Employers should consider whether their workers are a good fit for private assets. The benefits of investing in private assets are most likely to be realized by participants who can commit to longer holding periods.
- Conversely, in two-thirds of plans, the typical TDF holding period is less than five years, often even shorter in plans with lower-income participants and greater worker turnover.
- Implementation choices could influence the level of adoption and the risks and benefits to workers. Introducing private assets as a component of the default TDF would likely ensure greater participation, professionally managed allocations, and enhanced access to liquidity. Alternatively, offering private assets as a stand-alone investment option would place the burden on participants to evaluate and manage the risks of private assets, including the potential for limited liquidity.

7%–22%

Potential increase in retirement wealth when incorporating a 10%–20% allocation to private assets over 40 years within a TDF.

Well above median

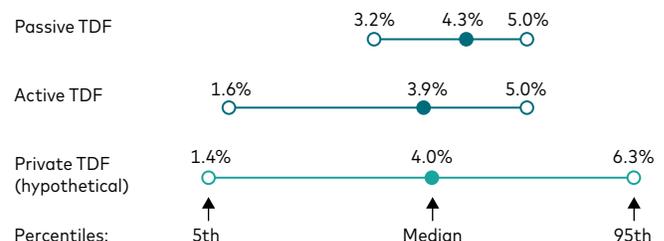
Net-of-fee manager performance needed to generate a case for investment.

4 years

Median TDF holding period within 401(k) plans administered by Vanguard.

A hypothetical private TDF shows much wider dispersion in returns than traditional TDFs

Annualized net return



Notes: Dispersion of passive and active TDF annualized net returns reflects dispersion across TDFs over the last 10 years of performance using the retirement income vintage of the TDF series from Morningstar, as of December 31, 2024. The dispersion of private TDFs is a weighted average of 80% passive-index-based implementation combined with the return dispersions from MSCI data, assuming a 10% allocation to private equity and 10% allocation to private debt. The dispersion of private TDFs is based on Vanguard calculations using private asset dispersions for private equity and private debt.

Sources: Vanguard calculations, using data from Morningstar and MSCI.

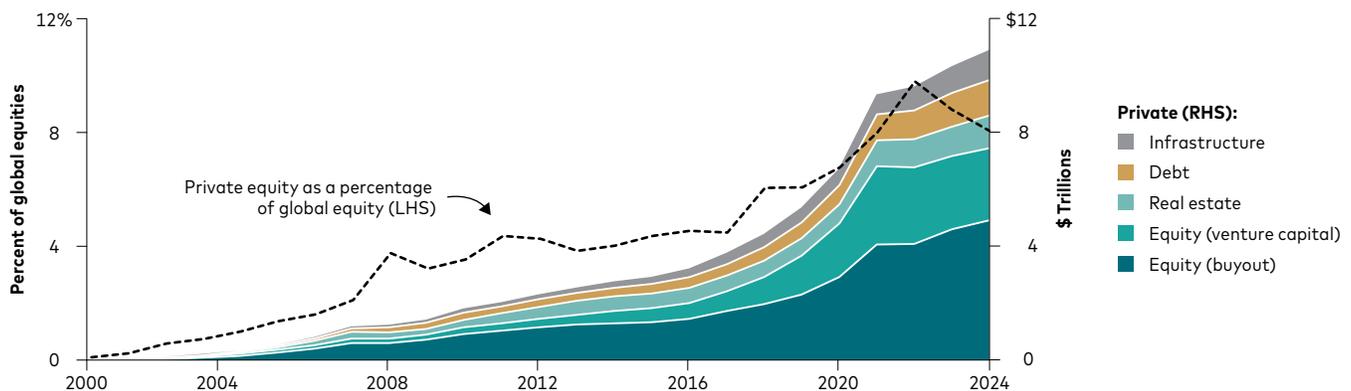
The prospect of expanding access to private assets

The private asset market has grown substantially over the last two decades. For example, private equity has risen from 1% to roughly 8% of total investable global equity, which combines public and private assets (see **Figure 1**).¹ Indeed, most U.S. and international companies are private (HarbourVest, 2025). Expanding access to this market means that investors can broaden their exposure to a more diversified mix of investments by integrating private assets into their portfolio.

Historically, access to private markets has been limited to those with the means to invest substantial resources over long time horizons, a high tolerance for risk, and a willingness to accept low transparency and high complexity.² Recently, there has been a growing number of

opportunities to invest in private asset funds structured with more accessible standards, more transparency, and better liquidity terms than traditional private asset vehicles. Public policy guidance and debates have contemplated expanding access to private markets to the general public through retirement savings plans.³ Additionally, pension regulators in the U.K. and Australia now allow, and provide guidance for, investment in private assets in defined contribution plans; in Australia, private assets now account for roughly 19% of defined contribution assets (The Pensions Regulator, 2024, and Australian Prudential Regulation Authority, 2024). In the U.S., private asset integration into employer-sponsored defined contribution retirement plans is still nascent despite having entered defined benefit plans in the 1980s (Samuels, 2025).

FIGURE 1
Private assets are a growing segment of the investment universe



Notes: The sizes of the private asset categories are based on reported year-end unrealized values from funds and co-investments. Fund-of-funds data is excluded to avoid double-counting. The size of the public equity market is proxied by the total market capitalization of the MSCI ACWI Investable Market Index.

Sources: Vanguard calculations, based on data from Preqin Ltd. and FactSet.

- 1 An estimate using MSCI for private equity and total global market capitalization for public equity suggests that private equity accounted for approximately 6% of total global equity as of December 31, 2024.
- 2 The Securities and Exchange Commission restricts the sale of private investments in most fund types to “accredited investors” with \$1 million in household assets (excluding home equity) and annual incomes over \$200,000 for individuals and \$300,000 for couples (U.S. Securities and Exchange Commission, 2025).
- 3 In June 2020, the U.S. Department of Labor issued [Information Letter 06-03-2020](#), also referred to as the “Pantheon Letter,” to provide guidance on the inclusion of private equity investments in defined contribution plans under the Employee Retirement Income Security Act of 1974 (ERISA). In December 2021, the U.S. Department of Labor issued a [Supplemental Statement](#) to clarify the Pantheon Letter, reinforcing the fiduciary responsibilities of plan sponsors in providing access to private assets. Recent [news articles](#) cite growing federal interest in exploring ways to integrate private assets in 401(k) plans. A recent [executive order](#) encourages federal agencies to explore ways to expand access to private assets within defined contribution plans. While the order does not change existing law, it signals a policy direction that could further reduce regulatory barriers and broaden investment opportunities for retirement savers when plan sponsors determine such exposure is appropriate for participants.

We consider the prospect of expanding access to private assets in defined contribution plans through three perspectives:

1. Investment merit for everyday investors.

Could integrating private assets into a 401(k) plan give everyday savers better investment opportunities, or would it just expose them to more risk, cost, and complexity?

2. Plan sponsor considerations. Can the plan sponsor identify and access highly skilled private asset managers? Is the plan population patient enough to realize the investment benefits of private assets? Should private assets be offered as a component of a well-diversified default investment or as a stand-alone investment option?

3. Aggregate market effects. What potential market-wide impacts of extending access to private assets at scale through defined contribution plans should policymakers consider?

Investment merit for everyday investors

The rationale for expanding access to private assets is that private assets can potentially improve long-term investment outcomes for everyday investors. Private assets have the same basic foundations as public assets. This means that private assets can have similar long-term return drivers, albeit with different risk exposures, greater liquidity risk, and higher costs. The return premium delivered by private assets over public markets is not a new phenomenon, and most categories have a strong history of generating positive net-of-fee excess returns (Brown, Lundblad, and Volckmann, 2025; Brown et al., 2024).

Private assets are not a unique set of asset classes, so deciding whether to include them in a 401(k) plan is fundamentally a decision to add active management capability. Since there is no investable index fund that provides broad-based exposure to private markets, investing in private assets requires selecting specific active funds that own a small slice of the private market, effectively making an active bet that those choices will outperform the market. Even adding a private asset sleeve to a TDF or a balanced fund requires conviction that the added complexity, risk, and cost will be rewarded by outperformance. As a result, it is crucial to recognize that introducing private assets into defined contribution plans requires accepting the risks of active management, often at greater scale and higher cost than active management in traditional mutual funds and ETFs.

The rationale for potential inclusion of private assets in a portfolio stem from three primary factors:

- **Diversification.** Allocating to private assets broadens the investor's opportunity set within certain asset classes, increasing market coverage.
- **Private liquidity risk premium.** Private assets are more difficult to trade than public assets, so investors typically demand an expected return premium as compensation for this reduced liquidity.
- **Manager excess returns.** Private asset managers can add value by selecting attractive investments and by improving the operations, strategy, or governance of portfolio companies through direct involvement.

As with any investment, returns are never guaranteed. Private asset returns depend heavily on manager skill in sourcing attractive deals, adding value to portfolio companies, and timing sales, so outcomes vary widely across managers. **Figure 2** compares historical net-of-fee excess returns for a sample of private asset funds and typical costs for private asset funds versus active and passive TDFs.⁴

Two clear takeaways emerge. First, private asset returns exhibit very wide dispersion, and only a subset of funds delivered positive excess returns (**Figure 2a**). As a result, manager selection is critical to success in private markets. Many 401(k) plan participants already experience some level of active manager risk, insofar as almost half of TDF assets are in funds that involve active underlying strategies (Morningstar, 2025). However, the dispersion in active performance for public assets is considerably less than for private assets. For example, the performance spread between the median top- and bottom-quartile large-capitalization U.S. public equity funds is around 4 percentage points, compared with 13 percentage points for private equity funds.⁵

The second takeaway is that private assets have much higher costs than typical active or index TDFs (**Figure 2b**). All-in fees for private assets can range from 1.50% to 5.00%, compared with 0.34% to 0.60% for actively managed TDFs and 0.06% to 0.16% for passive TDFs, with some institutionally priced TDFs and collective investment trusts at even lower price points.⁶ The higher cost of private assets raises the return threshold required for managers to outperform public assets.

⁴ When we refer to passive TDFs, we mean TDFs whose underlying holdings consist of index funds, even if the TDF's objective is not to track a specific index.

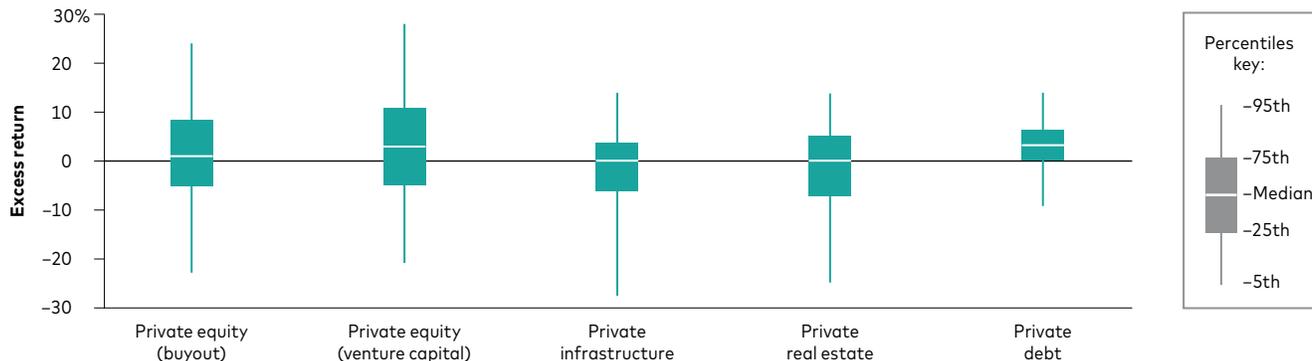
⁵ This public equity fund analysis compares the median performance of U.S. large-cap active equity funds in the first and fourth quartiles, based on Morningstar data for funds with 10 years of performance data as of December 31, 2024.

⁶ Fee ranges for private assets include both performance and management fees. TDF expense ratios are based on a June 2025 analysis of Morningstar data for the retail share classes of the 10 largest 2050 passive and active TDFs with investment minimums of \$10,000 or less.

FIGURE 2

Private asset fund return dispersion and associated fees are high

a. Private asset returns exhibit wide dispersion



b. Private assets have much higher costs than typical TDFs

Assets	Typical fees (basis points, retail price)
Private equity (buyout)	200 — 400
Private equity (venture capital)	300 — 500
Private infrastructure	200 — 400
Private real estate	150 — 350
Private debt	150 — 350
TDF (passive)	6 — 16
TDF (active)	34 — 60

Notes: Calculations use net-of-fee data for private asset funds. Excess returns are annualized and represented by "Direct Alpha." Direct Alpha is an annualized measure of excess return that compares the performance of a private investment to the hypothetical return of a public market index, assuming an identical cash flow pattern. Direct Alpha for private equity (buyout) is computed against the Russell 3000 Index; private equity (venture capital) against the Russell Microcap Index; private infrastructure against the MSCI World Core Infrastructure Index; private real estate against the MSCI World Real Estate Investment Trusts (REIT) Index; and private debt against the MSCI USD High Yield Corporate Bond Index in U.S. dollars across all available vintages. TDF expense ratios are based on a June 2025 analysis of Morningstar data for the retail share classes of the top 10 largest 2050 passive and active TDFs with investment minimums of \$10,000 or less. For details on the methodology used to calculate Direct Alpha, see Gredil, Griffiths, and Stucke (2023). A basis point is one-hundredth of a percentage point.

Sources: Vanguard calculations, using data from Morningstar; MSCI; Kahn (2024); Quach (2024); and Block et al. (2024).

Based on this, designing an appropriate retirement portfolio that includes private assets requires the ability to identify highly skilled private asset managers. We consider a hypothetical TDF with private assets (such as private debt, infrastructure, real estate, and equity; hereafter "private TDF"), assuming the inclusion of highly skilled private asset managers. Even with such managers, we limit the allocation to private assets due to the active risk and the liquidity risk introduced by these investments.

To evaluate the investment case for private assets in 401(k) plans, we compare this private TDF to two benchmark TDFs composed of only public assets: those built with passive index funds ("passive TDF") versus those built with actively managed funds of public assets ("active TDF").

We consider two hypothetical private TDF designs: a low private allocation (10% private assets) and a high private allocation (20% private assets).⁷ In reality, plan sponsors could start with a smaller private allocation or phase out private assets for older participants entirely.

A central question for fiduciaries is whether adding private assets to a 401(k) portfolio truly improves participant outcomes after accounting for fees and risks. It's important to evaluate both the upside potential and the extra risks and costs.

Figure 3 summarizes portfolio returns and retirement success metrics of the different TDFs using the Vanguard Life-Cycle Investing Model (VLCM).^{8,9} All scenarios use the same underlying worker profile and investment glide path and presume excess return net-of-fees associated with a 67th-percentile private asset manager (based on historical performance).¹⁰

7 For simplicity, we assume that we integrate private assets into an otherwise all-passive TDF glidepath that follows the typical de-risking pattern of shifting portfolio weights from equity to fixed income with age.

8 We have assumed a net information ratio of 0.3 for both equity and bonds in the active TDF. The information ratio measures how much excess return an investment generates over its benchmark, relative to the consistency (or volatility) of that excess return. Vanguard calculations are based on forward-looking projections from the Vanguard Capital Markets Model (VCMM). IMPORTANT: The projections and other information generated by the VCMM regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Distribution of return outcomes from the VCMM are derived from 10,000 simulations for each modeled asset class. Simulations are as of September 30, 2024. Results from the model may vary with each use and over time. For more information, please see "Vanguard Capital Markets Model" on page 17.

9 For more information on the VLCM, see Aliaga-Díaz, et al. (2024).

10 401(k) balances are estimated based on a worker starting to save at age 25 with \$52,000 in earnings, which grow based on the average wage index published by the Social Security Administration, and retiring at age 65 (Vanguard, 2025). We assume a saving rate of 8.8% at age 25 that increases to 12% by age 65.

Figure 3 shows that private assets with an excess return matching that of the 67th-percentile manager can boost retirement outcomes. Compared with the passive and active TDF benchmarks, the “low private” scenario (10% private) achieves about 0.3 percentage points to 0.5 percentage points higher annual returns during the accumulation years, resulting in a 7% to 11% larger 401(k) balance by age 65, which could deliver a 5% to 7% higher annual income in retirement.¹¹ The “high private” scenario (20% private) adds between 0.7 percentage points and 0.9 percentage points to annual returns, yielding a 18% to 22% larger 401(k) ending balance and 13% to 15% higher retirement income. For a

worker earning \$52,000 a year, this could mean an additional \$108,000 to \$325,000 in retirement wealth or an additional \$500 to \$1,500 per month in retirement income.

For comparison, relative to a passive TDF, an active TDF using 80th-percentile managers with 100% invested in active public strategies adds 0.2 percentage points to returns and increases the 401(k) balance by 4%.¹² These projections underscore that even a modest private allocation of 10% to 20% executed with highly skilled managers can materially improve long-term outcomes, even more so than a fully active TDF with top-quintile managers.

FIGURE 3
Private assets with highly skilled managers may boost expected retirement wealth

Participant outcomes	Passive TDF benchmark (100% passive)	Active TDF benchmark (100% active)	Low private (10%)	High private (20%)
Projected annual return net of fees	6.9%	7.1%	7.4% (0.3 ppt–0.5 ppt increase)	7.8% (0.7 ppt–0.9 ppt increase)
Fees* (bps)	6–16	34–60	20–50	30–75
Manager performance (percentile)	N/A	80th	67th	67th
401(k) balance by age 65	\$1,487,000	\$1,541,000	\$1,649,000 (7%–11% increase)	\$1,812,000 (18%–22% increase)
Income in retirement**	\$122,000	\$125,000	\$131,000 (5%–7% increase)	\$140,000 (13%–15% increase)

* Fee figures are based on interquartile ranges for institutional share classes charging fees at the 25th and 75th percentiles in the Morningstar universe of passive and active TDFs, as of December 31, 2024.

**Retirement figures are calculated at age 66, including Social Security of \$43,333 per year.

Notes: Returns assume active manager excess returns consistent with the manager performance percentile listed. Projected annual return is the median from the distribution of 10,000 simulations. 401(k) balances are estimated based on a worker starting to save at age 25 with \$52,000 in earnings, which grow based on the average wage index published by the Social Security Administration, and retiring at age 65 (Vanguard, 2025). We assume a saving rate of 8.8% at age 25 that increases to 12% by age 65. Fees for institutional share class TDFs are shown as a range.

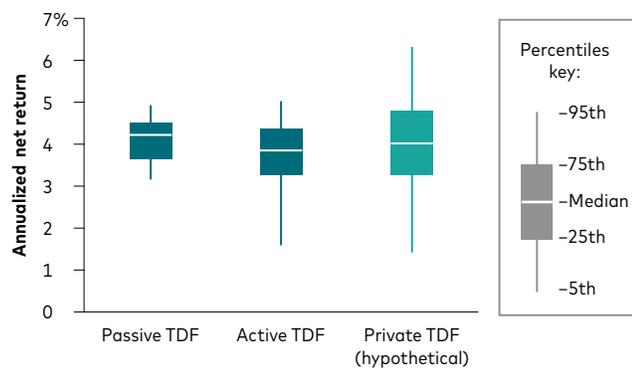
Source: Vanguard.

11 The retirement income result is based on spending 5% of the balance annually starting at age 66 and includes \$43,333 per year in Social Security income.

12 This is based on the last 10 years of performance using the retirement income vintage of the TDF series from Morningstar, as of December 2024.

Private assets come with greater risk. The estimates above, which rely on selecting highly skilled managers, obscure the possible return dispersion even with those managers. **Figure 4** illustrates the difference in potential return outcomes. The range of possible results is broad, emphasizing that manager selection, prudent allocation sizing, and robust risk management are crucial. Put simply, even with highly skilled managers, a TDF with private assets can underperform relative to passive and active TDFs. This highlights the importance of holding the investments for long durations, particularly when private assets are in the mix.

FIGURE 4
A hypothetical private TDF exhibits a wider dispersion in returns than traditional TDFs



Notes: Dispersion of passive and active TDF annualized net returns reflects dispersion across TDFs over the last 10 years of performance using the retirement income vintage of the TDF series from Morningstar, as of December 31, 2024. The dispersion of private TDFs is a weighted average of 80% passive-index-based implementation combined with the return dispersions from MSCI data, assuming a 10% allocation to private equity and 10% allocation to private debt. The dispersion of private TDFs is based on Vanguard calculations using private asset dispersions for private equity and private debt.

Sources: Vanguard calculations, using data from Morningstar and MSCI.

In summary, for an end investor who can access highly skilled managers with reasonable fees, investing in private assets over long durations could deliver 5% to 15% more income in retirement.¹³ How meaningful is this as a boost to retirement security? Consider that most American workers are not on track for retirement—the typical U.S. worker could face a 13% shortfall in retirement income relative to spending needs (Greig et al., 2025b). Private asset investing could help close this gap. In fact, this potential improvement is similar in size to what other interventions could deliver in retirement wealth. For example, many retirement savers hold considerable IRA assets in cash-like instruments (Reed et al., 2024). Positioning TDFs as a default investment alternative for IRA accounts could generate a comparable boost to retirement wealth simply by ensuring that more Americans can benefit from investing in public assets.¹⁴

13 While there is substantial evidence of a negative association between management fees and excess returns in public active funds (as shown in Patterson, Lawrence, and Ertl, 2024), this relationship has not been well-studied with private asset funds. Given the evidence that fees have a negative association with net returns, all else equal, we believe a similarly negative relationship holds with respect to private asset funds. Therefore, high net-of-fee performance can be achieved either by accessing a manager with top-tier talent and a reasonable fee structure, or by securing a high-quality manager at a very competitive fee.

14 In Figure 3 we show that allocating 10% to 20% of a TDF portfolio to private assets could generate an estimated \$108,000 to \$325,000 in retirement wealth relative to the benchmarks. In comparison, for investors under age 55, Reed et al. (2024) estimate that the long-term benefit of investing in a TDF (versus staying in cash) upon rollover is equivalent to, on average, an increase of at least \$130,000 in retirement wealth at age 65. Investing IRA contributions and subsequent rollovers into a TDF rather than cash would increase retirement wealth even more.

Plan sponsor considerations

Workers can only access private investment options in their 401(k) plans if their employers choose to offer them. As fiduciaries, plan sponsors need to consider their ability to identify and access highly skilled managers with reasonable fees, whether private assets are appropriate for their plan population, and if they should offer private assets as a stand-alone investment choice or as a component of a well-diversified default fund.

Consideration: Can I identify and access highly skilled managers?

The investment case for private assets in 401(k) plans described above is predicated on identifying and accessing highly skilled managers with reasonable fees. Plan sponsors must have this capability for private assets to improve retirement outcomes.

ERISA demands that fiduciaries continually prove that the expected benefits of private assets outweigh the costs and downsides. This means that the plan sponsor needs to consider whether it has adequate in-house expertise to perform due diligence and determine whether the particular investment arrangement complies with applicable requirements under securities, banking, or other relevant laws and regulations. If not, they must secure assistance from a qualified advisor to do so, and the plan sponsor must validate that the inclusion of private assets can improve investor outcomes with reasonable costs, transparency, and liquidity.

Active manager selection is even more important in private markets than public markets because of the significantly wider dispersion of fund

manager returns and the absence of private market index strategies.¹⁵ The investment case above presumes access to highly skilled managers. Statistically, however, should access to private assets expand, it may become increasingly difficult for new investors to continually access such managers. The rigor required for this manager due diligence is significant and would likely demand more time and resources than is typically needed to evaluate active managers of public assets.¹⁶ In addition, for some highly skilled managers, demand exceeds their fund capacity, which allows them to be selective about their investor base and dictate their fee structure. Thus, not all plan sponsors can presume that they can access highly skilled managers at reasonable costs.

Finally, the manager chosen must be able to clearly identify and effectively communicate investment merits, risks, and fees to plan participants. Insufficient due diligence or poor participant communication could increase litigation exposure and undermine the potential benefits of private assets for plan participants.

Consideration: Are private assets appropriate for my plan population?

Investing in private assets requires a significant tolerance for the liquidity constraints inherent to these investments and the ability to endure potential periods of underperformance while pursuing long-term outperformance. Plan participants must be willing to tolerate interim volatility to realize potential gains, and plan sponsors should assess whether their plan participants have the necessary patience for investing in private assets.

¹⁵ Plan sponsors don't always select managers directly; instead, they tend to select the investment options available to their participants. In the case of TDFs, they are effectively selecting a fund manager who would be responsible for private asset manager selection.

¹⁶ Greenwich Roundtable (2010) provides examples of private manager due diligence standards.

We use investment holding periods as our measure of investor patience. A short investment holding period may be relevant when considering private assets for two reasons. First, participants with shorter investment holding periods run the risk that the asset will be held during a temporary period of active manager underperformance.

Figure 5 and **Figure 6** show evidence that this should be the primary concern for plan sponsors. Second, private assets tend not to be very liquid, so an investor may not be able to sell their assets when they would like to. Our analysis suggests that when private assets are embedded within a TDF, fund managers are likely to be able to meet redemption requests most of the time.

Many factors can shorten an investment holding period. In any given year, many workers leave their jobs and cash out their retirement savings (29%) or roll their assets into another retirement account (35%). Some participants make a trade in their portfolio (12%) or take out a loan (13%) or withdrawal (5%) (Vanguard, 2025). In addition, roughly 5% to 10% of plan sponsors change their recordkeeper in a given year, which likely results in a trade for all participants.¹⁷

In some of these cases, like withdrawals and cash outs, the participant sells their position altogether, running the risk of selling during a period of underperformance. In other cases, like trades or rollovers, the participant exchanges their asset holdings while often maintaining similar underlying investment exposures (for example, a different TDF). Should an investor with private assets attempt to move their assets to a different retirement plan or account, they may be unable to access those same private assets. Thus, all liquidation cases that involve selling private assets can introduce the risk of underperformance.

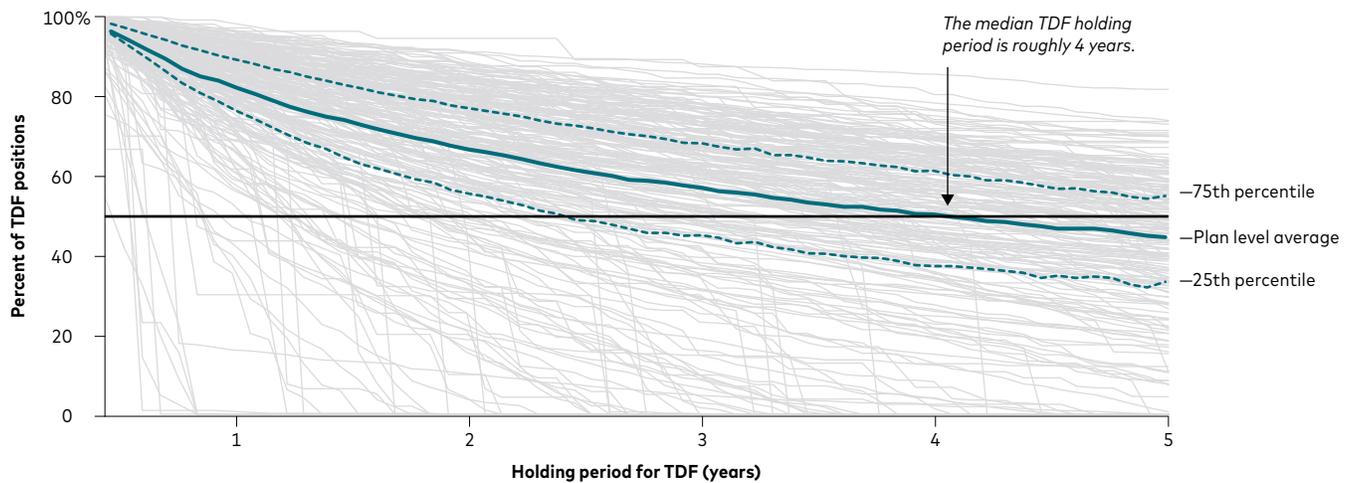
Our analysis of 401(k) administrative data examines the wide distribution of TDF holding periods across plans (Figure 5) and the plan population characteristics linked to longer TDF holding periods (Figure 6).¹⁸ In 33% of plans, participants maintain their investments for over five years. Most have shorter holding periods, however, and the median holding period across all plans (asset weighted) is roughly four years.¹⁹

¹⁷ Based on a survey of plan sponsors, 16.3% of plan sponsors reported doing a request for proposal (RFP) or request for information (RFI) in 2023; 67% changed their recordkeeper as a result of the RFP/RFI; 7.7% changed or added providers, advisors, or recordkeepers; and 7.3% put out a request for an RFP for the plan (Plan Sponsor Council of America, 2024).

¹⁸ We restrict our sample to plans with at least 100 participants invested in the TDF over a 10-year period between April 2015 and April 2025. We also restrict our sample to TDF positions initiated before April 2020 to allow for a full five-year window.

¹⁹ When we weight participants equally regardless of balance, we find similar holding periods.

FIGURE 5
Significant variation in TDF holding periods exists across retirement plans



Notes: We restrict our sample to plans with at least 100 participants over a 10-year period between April 2015 and April 2025. We keep all TDF holdings initiated in or before April 2020. Each lighter, gray line represents the Kaplan-Meier estimator of the survivor probability of a TDF position in a plan over time. The solid green line represents the average survivor probability across plans, weighted by total TDF assets in a plan.

Source: Vanguard calculations, based on recordkeeping data.

There are two key sources of variation in patience across plans, as shown in Figure 6. First, plans in which participants hold the TDF for longer tend to have higher paid workers, who save more and have higher 401(k) balances. This highlights that, although allowing private assets to enter 401(k) plans would dramatically expand access to this investment class (beyond those earning \$200,000 and \$1 million in assets), participants for whom private assets may be a good fit are those likely to be in the top half of the income spectrum.²⁰

Second, worker turnover may also be a key source of variation in patience. In plans with holding periods of greater than five years, participants stay with the company for almost two years longer and are 7 percentage points more likely to leave their assets in the plan after they leave. Trading behavior and withdrawals are not correlated with holding periods.

Although automatic enrollment and immediate eligibility were not significantly correlated with longer holding periods, plan design may be able to nudge plan participants to stay invested even as they switch jobs or retire.²¹ To encourage longer investment holding periods, plan sponsors might consider allowing terminated workers to stay in the plan regardless of their age or account balance, roll funds into the plan after termination, or take partial withdrawals during retirement.²² These steps may help boost investment holding periods and help participants realize the benefits of longer investment horizons and strategies that require more patience, such as making allocations to private assets.

²⁰ In 2025, the median eligible income among retirement plans administered by Vanguard was \$81,000 (Vanguard, 2025).

²¹ We know that plan design can shape how participants save and invest. Statistics for participant behaviors by plan design features can be found in Vanguard's *How America Saves 2025*. See Greig et al. (2025a) for evidence that plan design is correlated with withdrawal behaviors during retirement.

²² Greig et al. (2025a) shows that retirees leave more assets in the plan when the plan allows for partial withdrawals.

FIGURE 6

Plan populations with longer holding periods earn more, save more, and have less turnover

Plan attributes		Median TDF holding period of participants in the plan		Statistical significance
		< 5 years	≥ 5 years	p-value (difference)
Percent of plans		67%	33%	—
Demographics	Median income	~\$64,000	~\$89,000	<0.001***
	Median balance	~\$29,000	~\$53,000	<0.001***
	Median age	46	45	0.027*
	Tenure before termination	4.7 years	6.3 years	<0.001***
Participant behaviors	Median contribution rate (actively contributing participants)	5.9%	7.2%	<0.001***
	Percent of workers who leave assets in the plan two years after termination	42%	49%	<0.001***
	Hardship withdrawal rate (annual)	0.7%	0.8%	0.103
	Share of participants who trade (annual)	9%	10%	0.47
Plan design	Share of plans with immediate eligibility	45%	48%	0.25
	Share of plans with automatic enrollment	78%	75%	0.25

† p < 0.1

* p < 0.05

** p < 0.01

*** p < 0.001

Notes: We restrict our sample to plans with at least 100 participants over a 10-year period between April 2015 and April 2025. The statistical significance column presents the results from pairwise tests. A logit regression of the holding period indicator on plan attributes yields similar directional results.

Source: Vanguard calculations, based on recordkeeping data.

Consideration: Should I offer private assets as part of the diversified default or as a stand-alone investment option?

Although our investment case contemplates private assets as an element of TDFs, plan sponsors have several options for how to offer private assets to their participants. As outlined in **Figure 7**, plan sponsors could introduce private assets as part of the default investment alternative—usually a TDF—or as an investment class that is available to participants through an optional managed account program or as a stand-alone investment option.

Each approach comes with its own important considerations. If private assets are offered as part of a default TDF investment portfolio, participants will access private assets without making an active choice, and participation will be high. This option places the responsibility of managing active and portfolio risk with the professional fund manager.

In contrast, if private assets are made available as a stand-alone investment class within a managed account or investment option, participants must take an active role in choosing to invest. Managed accounts and stand-alone options typically see less engagement: While 59% of participants held a single TDF, just 7% had managed accounts (Vanguard, 2025). Additionally, with stand-alone investment options, participants, rather than professional asset managers, are responsible for managing their own investment risks.

FIGURE 7
Implementation choices could influence adoption, risks, and benefits

Feature	The default investment (e.g., TDF)	An optional managed account	A stand-alone investment option
Participant active choice	Not required	Required	Required
Share of participants likely to hold private assets	Most (59%)	Some (7%)*	Few
Manager of active and portfolio-level risk	Professional fund manager	Professional advisor	Participant
Liquidity constraints	Lower	Lower	Higher

* See Vanguard's *How America Saves 2025*.

Source: Vanguard.

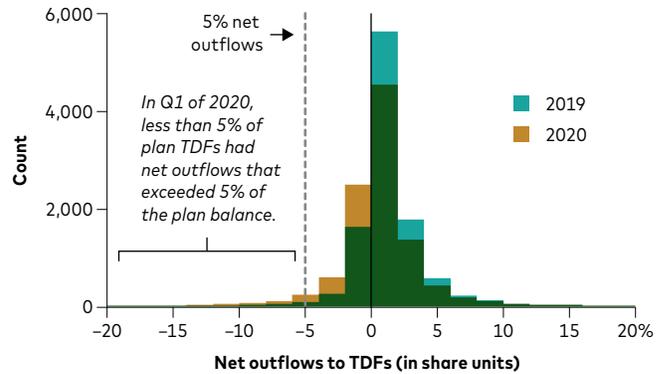
Another key consideration in offering private assets is the management of liquidity needs, which arise both from individual participant actions and broader plan-level events. TDFs can help meet liquidity demands by pooling assets across retirement plans, which allows for more efficient cash management. However, large-scale economic shocks could still lead to clusters of participant withdrawals, challenging fund managers' ability to provide timely access to capital. In such scenarios, managers may need to borrow or allow portfolio allocations to drift from target weights, potentially exceeding risk tolerance thresholds. For stand-alone options, the ability to redeem the preferred amount may be delayed. Although restricted liquidity can discourage hasty selling during downturns, it may also harm workers who need access to their savings during periods of financial hardship.

We assess TDF managers' ability to meet liquidity needs during economic shocks by analyzing liquidation events that occurred during the onset of the COVID-19 pandemic. **Figure 8** shows that in the first quarter of 2020, less than 5% of liquidation events at the TDF plan level exceeded 5% of the total balance of a TDF in a plan, and no TDF at the vintage level across all plans saw liquidations above this threshold. This suggests that if private assets are accessed through TDFs, liquidity concerns may be less pronounced compared with stand-alone investment options. Greater investment pooling provides a stronger liquidity buffer during major market shocks, as inflows from other participants and plans help offset outflows.

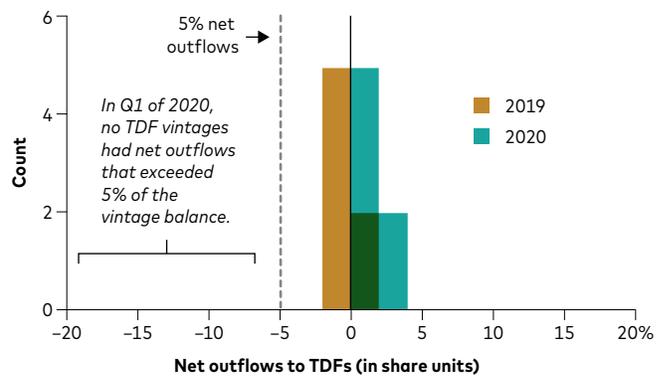
In summary, if plan sponsors were to make private assets available to their plan participants, introducing private assets through a TDF would likely result in greater participation, ensure professionally managed allocations, and provide greater access to liquidity. Introducing private assets as stand-alone investment options gives participants the opportunity to invest in private assets should they want to, but at their own risk and with potentially greater liquidity restrictions. Thus, the choice to introduce private assets as part of the default TDF versus a stand-alone investment option will likely impact the level of adoption, the participant experience, and retirement outcomes.

FIGURE 8
Net outflows in fund shares rarely exceed 5% during large stock market drops

a. COVID-19-driven net outflows to TDFs (plan level): Q1 2019 versus Q1 2020



b. COVID-19-driven net outflows to TDFs (vintage level): Q1 2019 versus Q1 2020



Notes: We examined the net outflows to TDFs (vintages 2025 to 2055) in share units at two levels. The first figure presents the distribution of the net outflows to TDFs at the plan level in Q1 2019 and Q1 2020. The second figure presents the distribution of the net outflows to TDFs at the vintage level aggregated across all plans in Q1 2019 and Q1 2020.

Source: Vanguard calculations, based on recordkeeping data.

Aggregate market effects

At the end of 2024, defined contribution plan assets totaled roughly \$12 trillion (Investment Company Institute, 2025). If private assets were to displace 10% to 20% of public assets in these plans, this could translate into the addition of \$1.2 trillion to \$2.4 trillion in capital to private markets. Given that private assets under management currently total around \$11 trillion, this shift could represent an 11%–22% increase in the size of the private market.

Increasing access to private assets could potentially influence the long-term structure of capital markets. If capital constraints no longer drive companies to go public, some may choose to remain private, which may further reduce the breadth and depth of the public markets.²³ At the same time, a growing share of investor portfolios could be allocated to assets with reduced transparency and liquidity that are more difficult to price and require greater reliance on active manager skill.

A mitigating factor is that, even if access to private assets is further expanded, the pace of adoption within defined contribution plans is likely to be gradual. Plan sponsors are likely to be cautious about incorporating investment strategies that require enhanced oversight and education and may expose them to additional fiduciary risk, especially because regulatory clarity and industry standards are still evolving.

Conclusion

Private assets have investment merit and can strengthen retirement outcomes for end investors if plan sponsors can identify and access highly skilled managers with reasonable fees. That said, even for such managers, private assets come with greater variation in returns and expose participants to the risk of underperformance. Private assets may not be appropriate for all plan populations, particularly those with shorter investment holding periods, lower incomes, and higher worker turnover. Plan sponsors can potentially extend the investment holding periods by using plan design to nudge workers to stay invested even as they switch jobs or retire.

Introducing private assets into TDFs could garner greater participation with professional risk management and greater access to liquidity, all without an active choice on the part of the worker. However, a natural byproduct of expanding access to private assets through retirement plans is that everyday investors may increasingly hold investments that are less liquid and transparent and more expensive, risky, and dependent on active manager selection. Through careful implementation and oversight, employers can play a critical role in helping their workers appreciate the risk—but also the benefit—of private asset investments.

²³ Despite what some suggest to the contrary, the number of U.S. companies in the most investable part of the public equity market (that is, nonmicrocaps) has remained stable over the past two decades (Rowley, 2025). That could change if capital invested in private markets grows significantly, but whether it would and to what extent is difficult to predict.

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