

Liquidity Framework For Inclusion Of Alternative Assets in DC Plans

A Guide for U.S. Plan Sponsors and Industry Stakeholders

October 2023

DCALTA
Defined Contribution
Alternatives Association

 dcalta.org

 admin@dcalta.org

Letter from DCALTA



Jonathan R. Epstein
President, DCALTA

At the end of the first quarter 2023, employer-sponsored U.S. defined contribution (DC) plans contained \$9.8T in assets.¹ In contrast to the rapid growth of alternative investments by institutional investors and broad adoption by defined benefit plans and endowments, DC plans have largely foregone the diversification and return potential of alternatives because of technical and legal uncertainties, arising in part from ERISA² conditions. On June 3, 2020³ and December 21, 2021, the Department of Labor published statements that provide clarity on important ERISA issues for DC plans seeking to offer the benefits of alternative assets to their participants.

With this legal foundation now established, DCALTA has focused on the critical operational topics to be addressed by DC plans seeking to incorporate alternative assets. To assist plan fiduciaries and practitioners, we are releasing a series of whitepapers exploring these issues. Our first whitepaper set out a consensus framework for daily valuation of private assets in DC plans. In this second whitepaper, we put forward a liquidity framework that draws from the deep experience of the DCALTA membership to address real-world considerations of plan sponsors and fiduciaries. As before, we use position statements throughout the paper to create a practical roadmap for sponsors and their consultants.

DCALTA's mission is to enhance and secure participant outcomes through education, research, and advocacy on the benefits of including alternative investments within a defined contribution framework. Our members represent every aspect of the U.S. retirement investment ecosystem, and we seek to be the industry's collective voice on both policy and operational topics. These whitepapers are designed to facilitate plan sponsors' and other constituents' move toward the inclusion of alternatives in DC plans with greater technical certainty.



DCALTA

ENHANCING RETIREMENT OUTCOMES

Acknowledgements

DCALTA gratefully acknowledges the contributions of **Sheridan Porter** of **FEV Analytics** as Head of Research at DCALTA and **Clint Cary** along with the other members of the DCALTA Liquidity Framework Committee:

Avi Turetsky, Ares Management
Brad Scafe, Benefit Trust
Carlin Calcaterra, Ares Management
Chris Flynn, CEM Benchmarking
David Levine, Groom Law Group
Hayden Gallary, Cambridge Associates
James Hannigan, Apollo Global
Jani Venter, JP Morgan Chase
Jeff Eng, Nuveen
Kevin Walsh, Groom Law Group
Massimiliano Saccone, XTAL Strategies
Michelle Rappa, Neuberger Berman
Scott Brooks III, RealBlocks
Serge Boccassini
Stuart Odell
Tom Lauer, Northern Trust

The positions stated in this document are those of DCALTA and may not be the positions of the individuals or organizations listed above.

About DCALTA

DCALTA seeks to enhance the retirement security of DC plan participants by the inclusion of alternative assets:

- As a modest allocation within a long term focused, multi-asset fund option on a DC plan menu.
- Through a well-diversified portfolio of alternative assets.
- Professionally managed within a prudent structure designed for the needs of DC plan participants.

Executive Summary

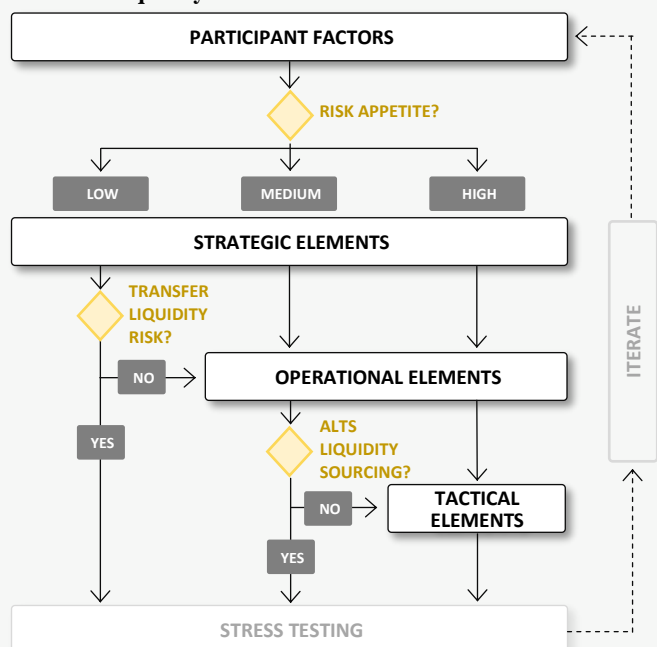
Since 2020, more defined contribution (“DC”) plans in the United States are including privately held alternative assets (“alts”) in their product lineup to improve retirement outcomes for participants. This aligns with the findings of numerous studies showing that the inclusion of a diversified portfolio of alts within a long term focused, multi-asset fund option can materially improve the retirement security of those participants.⁴ DC plans have historically been fully allocated to liquid and highly liquid assets, which in turn has supported the emergence of ‘daily trading’ and ‘next day withdrawals’ as standard plan facilities in a competitive market. The inclusion of alts, which are relatively illiquid assets, can allow DC plans to keep investment performance on par with institutional grade investment portfolios, such as endowments and sovereign wealth funds. But this essentially frames the operational challenge for DC plans today: how to maintain a participant-facing ‘daily’ liquid experience when a portion of the underlying assets are illiquid. Liquidity management is at the center of this challenge. In recognition of this, DCALTA has called on its members – which include plan sponsors, asset managers, professional service providers, and valuation technology specialists – to contribute to a unique, industry-inclusive discussion on liquidity matters relevant to DC plans.

A range of variables – including participant demographics, portfolio construction and fiduciary configuration – give shape to plan liquidity under normal and abnormal circumstances. The potential benefits, trade-offs and consequences of these variables in different combinations can be difficult to navigate for DC plans. The DCALTA Liquidity Framework steps through variables in a logical, telescoping sequence to bring clarity to the process and a qualitative appreciation of key decision points. Risk, as identified by the sponsor, is appropriately positioned in the Framework as a formative decision. Importantly, the DCALTA Liquidity Framework is intended to serve as a helpful precursor to quantitative stress testing and is in no way intended to replace it.

DCALTA has adopted specific positions on liquidity related considerations that are placed throughout the Liquidity Framework discussion to explain that:

- With due consideration of liquidity and other inefficiencies as may be imposed by risk appetite, alts can contribute to performance of DC plans.
- A range of options exist for DC plans to include alts in their plan lineup that align with their risk appetite.

DCALTA Liquidity Framework



The DCALTA Liquidity Framework considers the variables that shape plan liquidity in a logical, telescoping sequence to help plan fiduciaries take a tailored, risk-centric approach to implementing alts.

DCALTA Positions:

- 1 Default pathway products may help cultivate conditions favorable to the liquidity of participant investment options that include alts.
- 2 A maintained data set descriptive of the participant population and their asset transfer and withdrawal activity over time is helpful to determining sponsor risk appetite and optimizing liquidity related decisions.
- 3 Targeted participant education and ongoing communication is helpful to align participant behavior with plan liquidity management.
- 4 Alts products may transfer sources of risk – including liquidity risk – from participant investment options to compensated third parties and still provide net value to participants.
- 5 The alts component is of modest size as defined by the sponsor, consistent with the guidance of the U.S. Dept. of Labor, that optimizes the expected net value added of the alts component against the sponsor's risk appetite.
- 6 A mix of products along the liquidity spectrum can exert a stabilizing effect on liquidity dynamics of the alts component in alignment with a sponsor's risk appetite.
- 7 Moderately liquid asset allocations within a professionally managed multi-asset class portfolio may be used to efficiently source and store alts-related liquidity.
- 8 The fiduciary framework sets the scope (and efficiency) of liquidity pathways, which can be adjusted by the plan as risk appetite evolves.
- 9 Similar to stable value funds, plan driven redemptions from commingled, multi-asset funds with alts (like TDFs) can be carefully managed to minimize any potential liquidation impact on the TDF's continuing investors and the redeeming plan's participants.
- 10 A thoughtful rebalancing strategy that acknowledges the long-term and illiquid nature of alts may further enhance participant outcomes.
- 11 Unitized products (founded to the left of the liquidity spectrum) can provide a ramping alts component exposure to alts within defined timeframes that plans can use to mitigate cash drag.
- 12 The secondaries market is an unsuitable source of liquidity for the day-to-day operational purposes of most plans.
- 13 Tactical responses to liquidity events should involve an alts valuation procedure that is tested and reliable under market volatility.

“Liquidity” is among the foremost operational considerations of American DC retirement plans when contemplating the inclusion of alternative assets (alts) in plan lineups. While the motivation behind their inclusion is to improve participant outcomes, the characteristically illiquid nature of the asset class can be seemingly at odds with participant expectations of flexible, fast, daily access to their retirement savings. Fortunately, there are a range of product and management options – for even the smallest DC plans – to alleviate liquidity management challenges.

Introduction

Participation in American DC retirement plans has grown steadily since the 1970s,⁵ supporting decades of relatively stable net capital inflows i.e., overall participant deposits have exceeded overall participant withdrawals. Over the same period, U.S. markets have maintained sufficient depth that funds held by plans could trade portfolio assets (stocks, bonds, and derivatives) in required timeframes and without the sale significantly changing the market value of the asset. These two factors create conditions favorable to plan liquidity, which the industry has relied upon to establish certain operating norms (Fig. 1) attractive to participants.

Figure 1: American DC Plan Operating Norms

- Participant directed allocations within a menu of multiple **Participant Investment Options (PIOs)**.
- Next-day settlement (“T+1”) on participant deposit, withdrawal, and switching activity (collectively, “trading”).
- Daily trading by participants across PIOs.
- Asset allocations maintained within policy bands for multi-asset PIOs.
- No strategic allocations to cash.

In pursuit of better retirement outcomes for participants, plan sponsors may now contemplate an allocation to alternative assets. In times past, “alts” meant assets other than conventional stocks and bonds, but which may have nonetheless been publicly traded securities (e.g., high yield bonds, exchange-traded real estate investment trusts, commodity derivatives). More recently, however, the term has shifted away from security type or investment strategy to mean assets that are privately held and therefore

relatively *illiquid*. Due to the importance of liquidity on the operating norms listed previously, the addition of alts to a plan naturally raises liquidity-related questions.

Liquidity questions tend to focus on scenarios (e.g., impact of alts on a plan’s liquidity during a market drawdown), that are best answered by quantitative means such as stress testing. However, before stress testing can commence, it is helpful for the structure and other properties of the alts implementation – *what* is being stressed – to be defined. Plan fiduciaries may therefore find it helpful to review the theoretical effect of certain elements or variables on plan liquidity, along with any trade-off implications, as a key step in their process. The goal of this discussion and framework is to provide sponsors with that resource.

The Liquidity Framework follows a logical sequence of choices to help sponsors define an alts implementation that maximizes return opportunity within their liquidity risk appetite. ‘Risk appetite’ correlates with a sponsor’s position relative to four conditions (Fig. 3) identified by the Framework as being conducive to PIO liquidity. Referencing risk appetite in key strategic, operational, and tactical decisions puts a risk perspective appropriately at the center of the Liquidity Framework.

Within the Liquidity Framework, risk appetite informs portfolio construction in terms of product type. Alts products are grouped along a liquidity ‘spectrum’ by their capacity to mitigate different sources of **liquidity risk** for investors. Using the Framework, plan fiduciaries can approach product selection and other strategic decisions in terms of a contribution to liquidity that is *specific to their needs*.

Figure 2: DCALTA Liquidity Framework for Inclusion of Alts

The framework is presented as factors that affect liquidity, to be considered in sequence, then stress tested and tweaked iteratively to maximize the opportunity for return given the risk appetite of the plan. Participant factors are both the logical starting point and overarching consideration of the framework because they inform all elements of the process. Within the sequence are three key decision points:

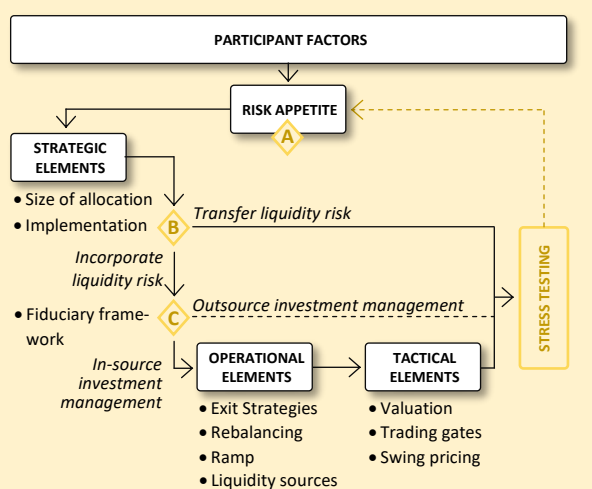
[A] Considers four plan conditions (see Fig. 3) to establish a baseline qualitative understanding of its risk appetite (related to alts liquidity management).

[B] Considers how liquidity risk of the alts component is delegated. A fully outsourced solution would remove consideration of operational and tactical elements (as identified herein) for the plan fiduciaries.

[C] Considers the fiduciary framework – whether responsibility is distributed to external managers or fully in-house.

NOTE:

Stress testing examines the effect of market, corporate, and product lifecycle events on PIO liquidity. It is a well-researched quantitative component of risk management and is outside the scope of this framework. The framework is *not* intended to replace or limit quantitative testing in any form.



Participant Factors

Participant deposits that predictably outpace withdrawals contribute substantively to liquidity management, regardless of whether alts are included in the plan or not. The addition of illiquid assets to the plan, at least in theory, increases the importance of cultivating these conditions. Participant factors are therefore a critical overarching consideration of the framework, although the inclusion of alts does not introduce any novel factors.

Figure 3: Participant Factors

- Default pathway products
- Demographic factors, such as proximity to retirement age, earnings, job tenure, etc.
- Known links between demographic factors and observed behavior (net flow seasonality, past response to market and economic events).
- Sponsor's capacity for ongoing participant education

Default Pathway (QDIA) Products

Research from as early as 2001⁶ suggests that default pathway products, where participants are enrolled automatically and without active engagement, cultivate stable deposits in two ways. First, plan participation is significantly increased under automatic enrollment. Second, a substantial portion of auto-enrolled plan participants continue with both the contribution rate and the fund allocation to the default option. Given this observation, QDIA products that also adjust risk according to a calculated 'glide path' [to retirement] such as a target date fund (TDF)⁷, may facilitate more stable and predictable 'set-and-forget' participant behavior so conducive to PIO liquidity.

To this point, TDF trading activity in response to market events has remained stable since the early 2000s (which coincided with the early days of TDFs and prior to the 2006 Pension Protection Act). Notably, during the 2008 global financial crisis, 2015 European debt crisis, 2018 quantitative tightening, 2020 pandemic, and 2022 inflation, net redemptions by participants of large plan sponsors were less than five percent of TDF account balances⁸ (see Fig. 4).

When including participant contributions, net flows were positive for TDF options in all years (available data goes back to 2000).

DCALTA Position 1:

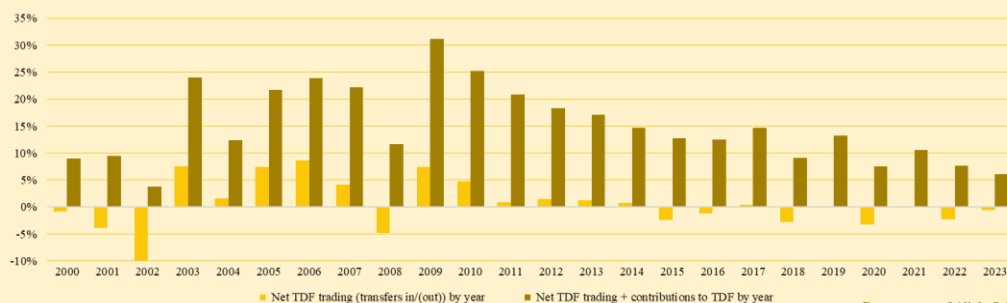
Default pathway products may help cultivate conditions favorable to the liquidity of PIOs that include alts.

Demographic Drivers of Participant Behavior

Participants generally act individually. However, certain conditions⁹ may cause multiple participants to make similar moves in a short time frame, thereby influencing plan liquidity. Participant populations have various sub-groupings ("demographics") that can be linked to certain behavior via statistical analysis. For example, in the Australian setting during the Covid Pandemic, participants with larger accounts closer to retirement age were more likely to transfer assets (to cash¹⁰) and those in certain industries (e.g., hospitality) were more likely to withdraw savings.¹¹ Plan demographics therefore might include participant proximity to retirement, income level, account size, industry, job, education and so on, as well as other population-specific factors, like benefits and loan facilities. Since the extent, speed, and cadence of participant-initiated asset transfers and withdrawals can be observed to have demographic drivers, the DCALTA Liquidity Framework considers demographic data to be critical inputs to determining risk appetite and key liquidity-related decisions.

It may be generally helpful to decision-making and even stress testing to use the observed behavior of participants in other plan/s, such as may be found in whitepapers or other research, as targeted reference points (e.g., during Covid Pandemic). Participant behavior nonetheless remains idiosyncratic to the plan population. Plans without data descriptive of their own participants' behavior may have lower risk appetites as a result. For this reason, the DCALTA Liquidity Framework emphasizes the importance of demographic data collection, particularly in the context of adding an alts allocation. Consistent with liquidity management protocols (general across all asset classes), plan fiduciaries should ensure that the necessary data collection is in place to inform ongoing risk appetite and to enable timely, up-to-date stress testing during rapidly changing conditions.

Figure 4: TDF Trading and Contribution Activity as a Percentage of Beginning of Year (BOY) Balance



Data courtesy of Alight Solutions 401(k) Index.

DCALTA Position 2:

A maintained data set descriptive of the participant population and their asset transfer and withdrawal activity over time is helpful to determining ‘risk appetite’ and optimizing liquidity related decisions.

Sponsor Capacity for Ongoing Participant Education

Research suggests that, while participant demographics may not be changed to suit plan liquidity, participant response to an economic or other event may be positively influenced by education. Using the same data as described above, plan fiduciaries may target information to specific demographic groups for greater effect. For instance, younger participants and participants closer to retirement may exhibit different responses during periods of general economic stress (e.g., unemployment, inflation, interest rates, etc.). Education materials and programs that reflect the different priorities, opportunities, and risk-aversion of participant sub-groups may be potentially more persuasive in their effect. Therefore, sponsors that have the capacity to use participant data for more targeted communications and education programs may have or develop a relatively higher risk appetite as a result.

DCALTA Position 3:

Targeted participant education and ongoing communication are helpful to align participant behavior with plan liquidity management.

Risk Appetite

While there can be instances where illiquid assets also carry higher levels of investment risk, it is not an inherent relationship. Illiquidity itself does not necessarily imply higher risk. Through the lens of the Liquidity Framework and as discussed herein, risk appetite pertains to the degree to which a sponsor is willing or able to manage ongoing liquidity risk of an alts portfolio. For plan sponsors, there are numerous considerations that impact risk appetite. As a starting point and by means of example, sponsors might consider their comfort level with each component in Fig. 5.

**Figure 5:
Conditions Contributing to Enhanced Risk Appetite**

- Economies of scale, achieved either through size (assets under management) or a related DB pension with an existing alts portfolio¹²
- Level of dedicated in-house alts investing expertise for necessary governance, specialized skill, and (generally) enhanced access to top tier managers
- Favorable participant factors
- Existing non-distributed fiduciary framework.

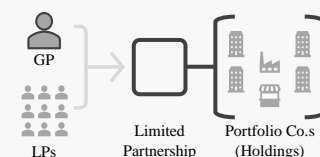
Positive responses to the foregoing indicate a plan ideally positioned to include an alts component, and sponsors may have a higher risk appetite as a result. Negative responses

SIDE BAR A**BASE LIQUIDITY DYNAMICS OF ALTS INVESTMENTS**

Investing in private companies and real assets is done through privately brokered deals between buyer and seller, rather than through a stock exchange. Cultivating deal flow, structuring transactions, and growing the value of the investment requires specialized legal and managerial expertise that become more cost effective when spread over multiple investments (i.e., a fund) managed by a specialist investment intermediary such as a private equity firm. A fund is a legal entity, typically structured as a limited partnership wherein investors are limited partners (“LPs”), and the specialist intermediary is the general partner (“GP”).

THE REFERENCE LIMITED PARTNERSHIP INVESTMENT MODEL:

The private market’s near-ubiquitous limited partnership, where LPs (pensions, endowments, other asset managers, etc.) commit capital to the partnership, pooled on a pro-rata basis, for drawdown by the GP to acquire, manage, and sell private companies or real assets for profit.



Common implementation characteristics of the Reference Limited Partnership (described above) tend to create liquidity pressure or *risk* for LPs, chiefly: (i) the capital drawdown mechanism; (ii) lumpy cash flows; and (iii) a long investment horizon. These characteristics are beneficial to understand as the asset management industry has created products explicitly intended to mitigate their impact on investors, creating a cushion against liquidity risk.

Capital Drawdown Mechanism

At inception, each LP contractually commits to providing a defined amount of capital to the partnership for investment. The drawdown mechanism allows the GP to receive portions of the committed capital, via a ‘capital call’, for financing investing activities *as they occur*. LPs are obligated to supply capital, usually within 10 business days of it being called. The drawdown mechanism thereby creates a financial obligation equal to each LP’s undrawn committed capital, and for which the LP must maintain a relatively short-term source of liquidity.

Lumpy Cash Flows

Reference Limited Partnerships tend to have uneven and unpredictable cash flows because the size and timing of dealmaking (entry and exit) may not be specified in advance. Transaction cash flows also tend to happen as a single event (rather than as an accretion of shares over time through an exchange) and are thus relatively lumpy. If holdings provide any income to the partnership during the investment period, this too may be irregular and unpredictable. For LPs, management of lumpy cash flows means simultaneously maintaining a ready liquidity source (to meet capital calls) and active re-investment pathways (to efficiently re-invest distributed capital).

Long Investment Horizon

Reference Limited Partnerships typically have a 10-year lifetime, with investment returns being distributed to LPs (generally) over the second half. Pursuant to limitation of liability within the partnership, LPs may not specify any aspect of the partnership’s investing activity – including the timing and size of holdings liquidation.

Expert portfolio construction that paces and diversifies alts holdings and strategies can help manage liquidity pressures characteristic of the Reference Limited Partnership. However, various forms of intermediation have also evolved to alleviate liquidity pressures by adapting or building upon the Reference Partnership. These include evergreen, secondaries, and fund of funds products. In Figure 6, we position these products along a theoretical “liquidity spectrum” to explain their contribution to liquidity relative to each other.

would suggest a lower risk appetite, while a mixed response might indicate areas for improvement e.g., building more favorable participant factors. Importantly, the lower the risk appetite, the more value from transferring liquidity risk to a third party.

Sponsors are encouraged to develop a means of grading their comfort level of each ‘comfort’ factor in Fig. 5 (and any relevant additional factors) for reference in making key strategic decisions about the initial and ongoing form of alts allocation.

Liquidity Spectrum

Alts investments have liquidity dynamics distinct from publicly traded assets, ranging from uncertain holding periods to “lumpy” cash flows (see Side Bar A for explanation). These dynamics tend to build liquidity risk. The asset management industry has created a range of products designed to absorb various drivers of liquidity risk to meet the risk appetite of plan sponsors. For example, some products may be designed to provide periodic investment entry and exit options, mitigating liquidity challenges related to lumpy cash flows and obligatory long holding periods.

Risk transfer is compensated, which in theory lowers a product’s overall performance consistent with a trade-off between risk and return. Using this concept, different products can be arranged along a notional ‘liquidity

spectrum’ (see Fig. 6) according to their relative risk transfer. This approach allows sponsors to compare products by their ability to provide value given their risk appetite.

DCALTA Position 4:

Products may transfer sources of risk – including liquidity risk – from PIOs to compensated third parties and still provide net value to participants.

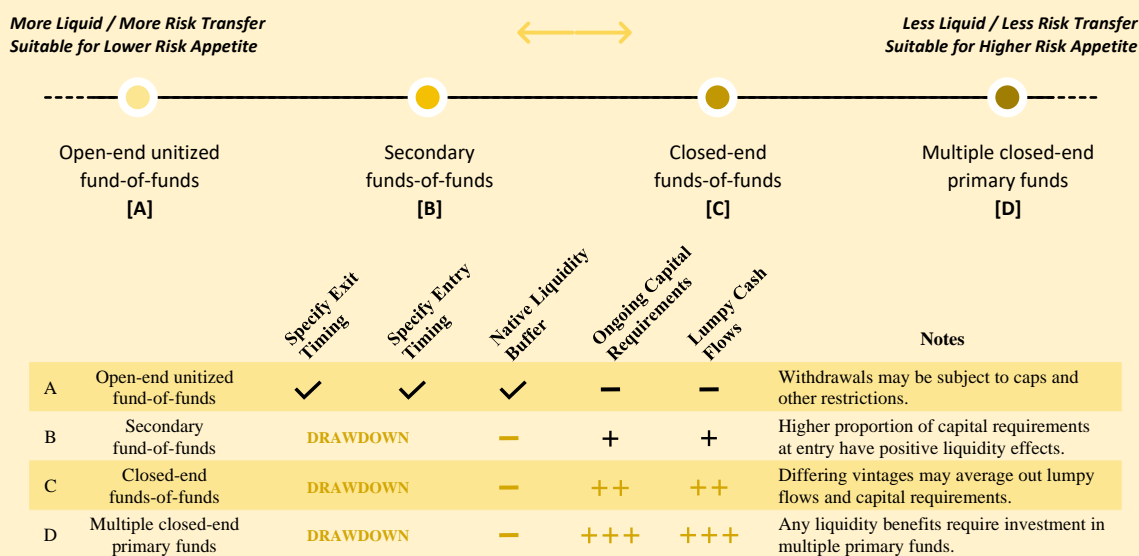
Strategic Elements

Strategic elements describe the broader aspects of *how* alts are incorporated into the plan, guided explicitly by the investment objectives and risk appetite of the plan sponsor. Strategic elements are presented in Fig. 2 as being sequential in nature primarily for simplicity; sponsors may choose to reorder to better suit their situation or planning approach.

Size of the Alts Allocation

Within the PIO’s portfolio, an asset’s liquidity generally refers to the ease with which it may be liquidated i.e., sold for cash at or close to the PIO’s asking price within a specified timeframe. PIO component portfolios may be characterized accordingly as **highly liquid**, **moderately liquid**, and relatively illiquid assets. Highly liquid assets, which include cash, provide a buffer for everyday

Figure 6: Alts Products along a Liquidity Spectrum

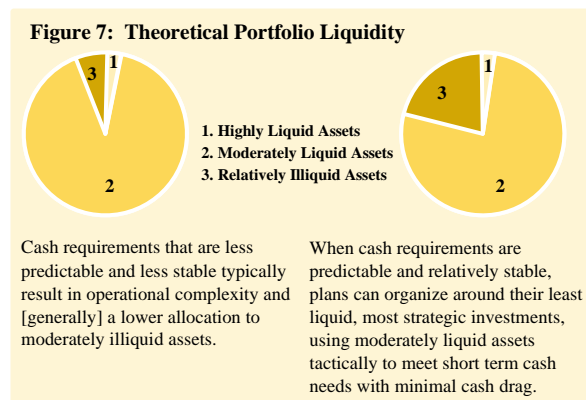


Through third party intermediation, various sources of risk (including liquidity) may be actively transferred and/or abstracted away from PIOs. For example, the diversification within funds-of-funds or multiple primary funds [collectively A, B, C above] also means that cash flows tend to average out, resulting in lower capital requirements and less lumpiness for plans. Open-end unitized funds [A] typically maintain an allocation of highly liquid assets within the portfolio, usually between 20 and 40% of assets under management, to meet the liquidity needs of new investments and investor redemptions.

While intermediation may offer benefits, such as access to top tier GPs and smaller investment sizes, it is likely to add to cost. However, such products can still outperform on a net basis while meeting the risk appetite of investors such as DC plans. Therefore, **value is achievable along the entire liquidity spectrum.**

The various risk and performance drivers of different product types along the liquidity spectrum also explain how a mix of products can help even mature alts portfolios manage liquidity needs.

operational needs, while moderately liquid (publicly traded) and relatively illiquid assets (alts) can be thought of as tactical and strategic investments respectively (see Fig. 7). Plans with stable, predictable cash requirements with long horizons, as would likely characterize a higher risk appetite, can therefore ‘afford’ to be less liquid by design.



This is true for many pensions; U.S. DB pensions have for over a decade allocated on average ~8% to illiquid assets,¹³ and in 2021 larger public DB plans allocated an average of ~20% to alts.¹⁴ This correlates with Australian industry superannuation funds (a type of DC plan), where the average allocation is 23%.¹⁵

U.S. DC plan fiduciaries understandably have questions over optimal allocation size for each of their PIOs. It needs to be large enough to bring financial benefit to participants on a net of fees basis, and small enough to comfortably satisfy stress testing. As a reference, the SEC limits private investments within mutual funds to 15% of total fund assets.¹⁶ Given the wide range of asset types, structures, and underlying liquidity observed in DC multi-asset class portfolios, 15% can probably be viewed as a conservative limit from an overall liquidity perspective. Consistent with the DCALTA Liquidity Framework, allocation size is a foremost strategic element to be reviewed periodically as participant factors and risk appetite evolve.

DCALTA Position 5:

The alts component is of modest size as defined by the sponsor, consistent with the guidance of the U.S. Dept. of Labor, that optimizes the expected net value added of the alts component against the plan’s risk appetite.

Implementation

The main implementation focus within the Framework is the delegation of liquidity risk. Catering to a lower risk appetite, the asset management industry has created ‘plug-and-play’ products positioned to minimize alts-related liquidity risk for clients. Generally, these products offer access to an open-end alts portfolio that has been unitized. Units are issued to subscribing investors (such as a DC plan) and redeemed by the asset manager during periodic liquidity windows (usually monthly or quarterly), subject to terms that may include caps on the number of units an

investor can sell back to the asset manager in any one window. A relatively liquid allocation within the product – usually between 20 and 40 percent of the total portfolio value – is typical to maintain this liquidity feature and to meet any ongoing capital requirements of the alts investments. There may be opportunity costs associated with the liquid allocation, however these may not outweigh overall benefits, particularly for investors with a lower risk appetite.

Three prominent benefits of sourcing liquidity via a ‘plug-and-play’ alts implementation are:

- Removal of ongoing capital requirements into which the plan fiduciary may have little advance visibility;
- An established method of liquidation if needed; and
- Capped excess liquidity within the alts allocation.

B Product Sourced (Alts) Liquidity

Consistent with a lower risk appetite, plan fiduciaries may choose an alts implementation where a third-party product absorbs liquidity risk by – most notably – maintaining its own liquidity reserve (see [A] in Fig. 6). Also termed a ‘plug-and-play’ alts solution, these products usually offer other features attractive to plan fiduciaries such as expert manager selection and daily valuation.

Within the DCALTA Liquidity Framework, choice of a plug-and-play solution removes consideration of alts-specific daily operational and tactical elements for plan fiduciaries, who may proceed directly to stress testing.

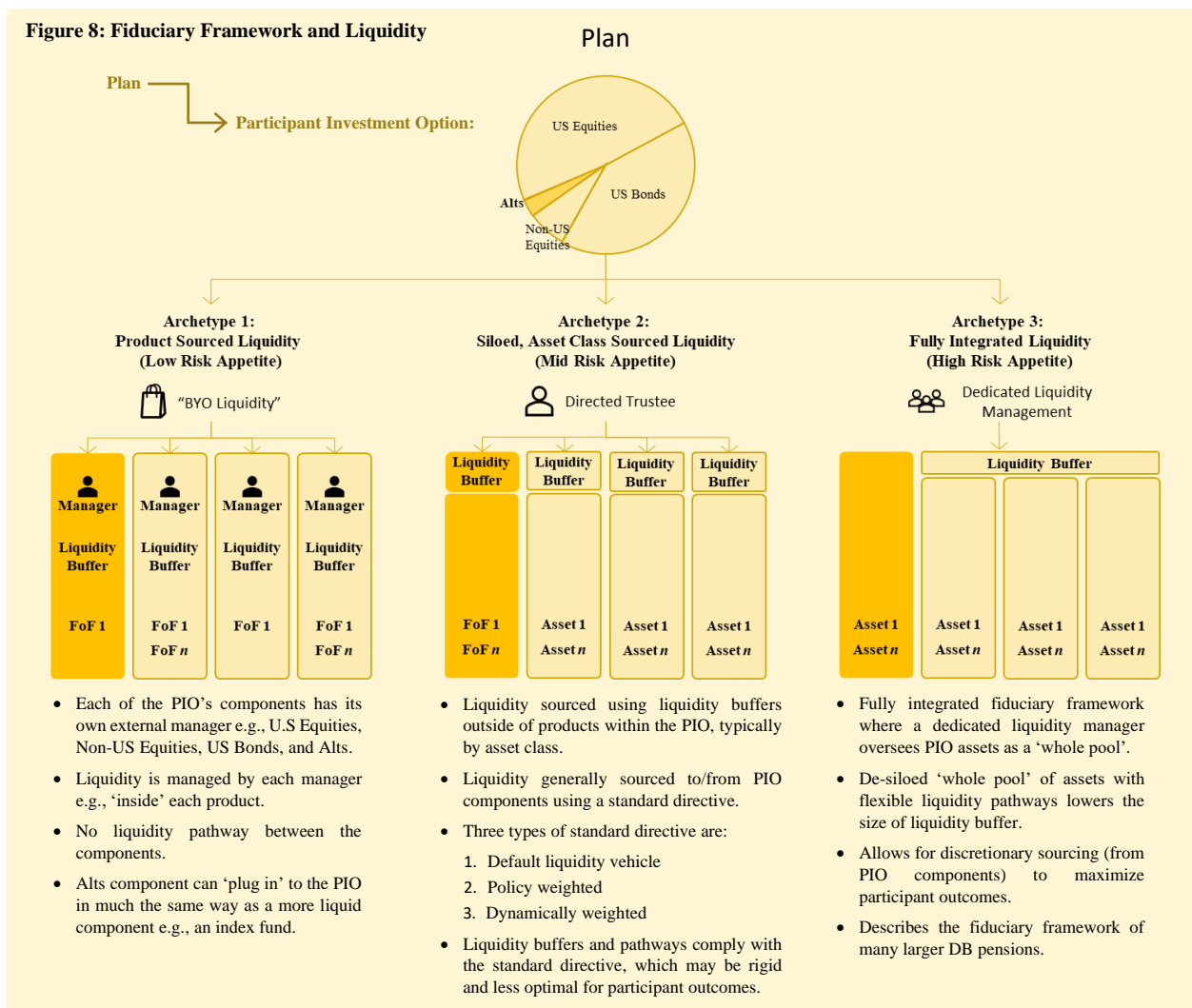
Fiduciaries with a higher liquidity risk appetite can generally do so via products with a drawdown mechanism i.e., ongoing capital requirements. The drawdown mechanism, elucidated in Side Bar A, introduces some uncertainty in a plan’s short term capital requirements that may be accommodated by its existing or slightly expanded liquid asset allocation.

However, a larger liquidity buffer is likely to produce an undesirable drag on plan returns, and plans may seek to mitigate uncertainty using alts investment products from the center of the liquidity spectrum. For example, research indicates that entry of secondary funds later in underlying funds’ investment cycles has a stabilizing effect on cash flows and ongoing capital requirements (i.e., distributions are more likely to offset calls). Similarly, the vintage diversification of many funds of funds creates more opportunities for distributions to offset capital calls, also enhancing cash flow stability for investors. While these products have associated fees, their contribution to improved liquidity dynamics is designed to add value for investors such as retirement plans on a net basis.

DCALTA Position 6:

A mix of products along the liquidity spectrum can exert a stabilizing effect on liquidity dynamics of the alts component in alignment with a sponsor’s risk appetite.

Figure 8: Fiduciary Framework and Liquidity



Even with improved liquidity dynamics, alts funds with drawdown authority will invariably call capital from time to time to meet investment obligations. Fiduciaries may seek to modify their plan’s existing liquidity algorithm so that intermittent sourcing and storing of liquidity (related to the alts allocation) can make strategic use of the PIO’s *moderately* liquid asset allocations. Most drawdown mechanisms provide a two-week notice period, making the PIO’s moderately liquid asset allocations an efficient source of liquidity (and temporary store of excess liquidity) *most of the time*.

DCALTA Position 7:

Moderately liquid asset allocations within a professionally managed multi-asset class PIO may be used to efficiently source and store alts-related liquidity.

Fiduciary Framework

Multi-asset PIOs require a fiduciary decision framework that includes asset class allocation and liquidity management. When the fiduciary framework allows capital to be sourced dynamically, its overall efficiency is improved. Dynamic sourcing is a function of liquidity pathways

established between asset classes and PIO components, the scope of which is partly dependent on the fiduciary framework.

Plug-and-play alts components (discussed previously) are an example of an investment product sourced liquidity approach; the product has its own liquid assets and does not directly source liquidity from other products within the PIO to meet its investment obligations.

At the other end of the spectrum, a fully integrated approach uses centralized liquidity management to source and distribute liquidity among PIO components such that performance of the PIO overall is maximized. The fiduciary framework is important because achieving a materially smaller PIO-wide liquidity buffer that can still support the liquidity characteristics of the Reference Limited Partnership Model (Side Bar A) requires operational expertise with discretionary authority over *all* PIO assets. While the scale of the plan informs risk appetite, scale can also dictate what is economically feasible, and it is perhaps for this reason that larger plans tend toward a fully integrated approach.

Plans with a risk appetite 'in between' a product sourced and a fully integrated investment manager might delegate to multiple third parties. Siloes may be by asset class or component using passive investment products. With this approach a plan can access alts operational efficiency and enhanced operating scale while maintaining a certain level of control over investment decision-making.

The theoretical trade-off is likely less dynamic liquidity pathways, as each PIO component has limited scope of coordination. However, this model represents the underlying framework employed by many TDFs since the early 2000s. In practice, less dynamic liquidity pathways may be more than offset by the relative simplicity of adjusting the relative size of a PIO's components (including alts) to maintain a risk glidepath. Daily operations can be automated via the participant recordkeeping and/or other administrator platforms, effectively delegating the daily liquidity management of the TDF down to its underlying asset class managers.

DCALTA Position 8:

The fiduciary framework sets the scope (and efficiency) of liquidity pathways, which can be adjusted by the plan as its risk appetite evolves.

The decision at this point in the Liquidity Framework is therefore between a fully integrated or a siloed investment management authority.

C

Fiduciary Framework

The fiduciary framework can shape liquidity buffers and pathways across a PIO, which in turn can impact overall PIO performance. A lower risk appetite may tend toward a product sourced liquidity framework, which may or may not include a more distributed liquidity buffer and less dynamic liquidity pathways. However, a product sourcing of liquidity may remove or simplify many of the alts daily operational elements for plan fiduciaries while adding expertise at relatively lower cost (economies of scale).

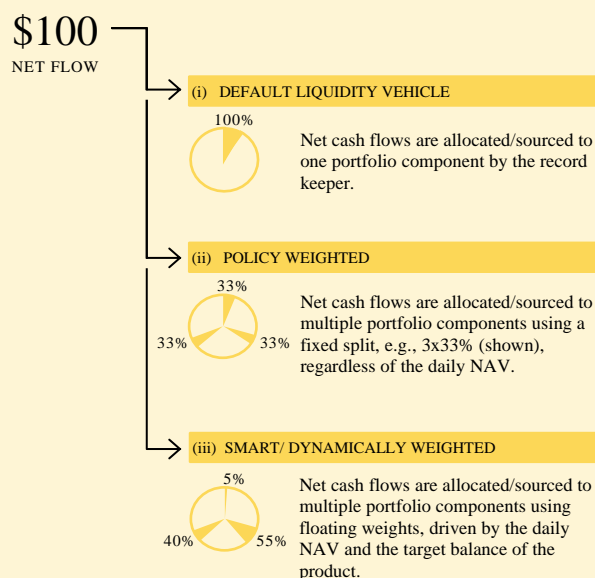
Exit Strategy

Many plans invest in multi-asset PIOs, like a target date fund series (TDF), through commingled vehicles such as mutual funds and collective investment trusts (CITs). Prior to investing in a TDF series containing alts, plan fiduciaries and sponsors may want to understand any constraints they might have if they want to exit those TDFs entirely (i.e., corporate event, switching products/platforms, other reasons). Any plan driven redemptions of a TDF – with or without alts – are typically subject to additional requirements that do not apply to participant driven redemptions. Liquidity considerations for plan fiduciaries when evaluating an exit strategy from a TDF with alts include: (i) Concentration, (ii) Timeframe, (iii) Gates, (iv) Payment In Kind, (v) Anti-Dilution Levy, (vi) Liquidity Allocation, and (vii) Fiduciary Role.

Figure 9: Illustrative Liquidity Pathways

UNDER STANDARD DIRECTIVE

Standard directives allow daily net flows to be 'settled' according to a procedure chosen by the plan fiduciary. For example, record keepers may follow standard directives to settle external flows each day. There are three main 'categories' of directive, shown below, progressing from less to more operationally complex for the record keeper. Standard directives require the PIO to periodically rebalance, which is done by the plan's designated fiduciary.

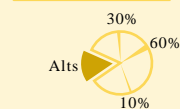


UNDER DIRECTION OF THE PLAN'S DESIGNATED FIDUCIARY

When executed under the direction of the plan's designated fiduciary, cash distribution and sourcing activity can prioritize the liquidity and strategic nature of PIO assets (rather than maintaining PIO components in balance).

For example, and as conceptualized in Fig. 7 earlier, excess flows are neither allocated to nor stored by the alts component. Rather, components holding moderately liquid assets are used to meet short term cash needs. This minimizes cash drag on the PIO. At the same time, long-only alts assets are protected from forced actions that may not serve the interest of participants (including those that may be caused by market dislocations).

DISCRETIONARY



Cash is sourced/allocated at manager discretion to optimize participant outcomes within plan's risk appetite. The alts component is effectively separated from day-to-day cash flow netting.

(i) Exit Strategy / Concentration

Plans lacking sufficient assets to create a custom solution typically select a third party TDF product (with or without alts). Each plan that is participating in a TDF with alts may likely be a small fraction of the total investor base. Plan fiduciaries should monitor their portion of the TDF's total assets i.e., percent of total TDF assets under management (AUM) for each vintage, perhaps including a maximum concentration level. Most plans will be an immaterial percentage of the total AUM, allowing the TDF to utilize liquidity buffers to satisfy a plan's redemption request.

(ii) Exit Strategy / Timeframe

Exit planning should be organized for compliance with required participant notice periods and for ensuring

optimal outcomes. As much advance notice as possible is beneficial for TDFs to generate sufficient liquidity for the exiting plan without unduly impacting participant outcomes. For reference, satisfying both these obligations means transitions, particularly for larger plans, may potentially take twelve months or longer.

(iii) Exit Strategy / Gates

Many DC plans have investments in stable value funds that have redemption gates. For example, a plan-driven redemption request may be subject to a redemption gate of 12 months or longer. TDF providers or custom solutions may want to consider a similar redemption requirement to minimize liquidity constraints. One advantage a TDF has relative to stable value is that market conditions e.g., a rising interest rate environment, are less likely to be a major factor regarding whether to impose a gate.

(iv) Exit Strategy / In Kind

In some cases, assets from the TDF may be distributed in a combination of cash and securities, including alts, reducing the need to liquidate otherwise less liquid positions.

(v) Exit Strategy / Anti-Dilution Levy

When a single plan accounts for a large proportion of a TDF's assets under management, redemption of its assets may impact performance of the whole TDF. In such cases, TDFs may levy a charge on the redeeming plan to limit impact of the costs of liquidation (trading costs, haircuts from a secondary transaction, etc.) on the other investors in the TDF, subject to materiality thresholds.

(vi) Exit Strategy / Liquidity Allocation

If multiple plans are redeeming from a TDF simultaneously, plan fiduciaries may want to monitor how the TDF manager allocates liquidity to each plan according to a fiduciary process that treats each plan equitably. For custom solutions, the plan is the sole investor in the TDF and (by definition) does not have this concern. Fiduciaries of custom solutions have more direct control over the disposition of the TDF and may focus on the liquidity profile of the alts.

(vii) Exit Strategy / Fiduciary Role

TDF products have various business models that define the fiduciary role of both the TDF and the participating plans. Prior to making a commitment to any TDF, plan fiduciaries may want to understand these roles not just for the initial and ongoing investments, but also for any potential plan driven redemptions.

DCALTA Position 9:

Similar to stable value funds, plan driven redemptions from commingled, multi-asset funds with alts (like TDFs) can be carefully managed to minimize any potential liquidation impact on the TDF's continuing investors and the redeeming plan's participants.

Operational Elements

Within the DCALTA Liquidity Framework, operational elements describe liquidity-related aspects of normal daily operations of an alts-inclusive plan. In contrast, tactical elements describe actions taken by the fiduciary in response to non-standard operating conditions. The basic challenge of both operational and tactical elements is to preserve operating norms, including minimizing cash drag and enabling daily trading with T+1 settlement.

Rebalancing

PIOs typically rebalance to manage risk, crystalize gains, and achieve returns aligned with their stated strategy. With a 'product sourced' fiduciary framework and corresponding low risk appetite, fiduciaries may take a 'strict' approach to rebalancing, including daily maintenance of tight allocation bands. However, this approach relies on low-cost transactions which precludes alts.

In addition, a fiduciary's approach to rebalancing usually reflects the properties of traditional liquid PIO components, where capital is fully invested in each component as soon as it is received. However, investing and harvesting capital from alts strategies and structures (particularly those to the right of the liquidity spectrum) takes time to accomplish. The pacing of making future commitments to these assets versus when the capital is called, invested, and later returned can only be estimated approximately. It is therefore impossible for those types of investments to be maintained at a strictly fixed target allocation. Many fiduciaries may therefore wish to consider a more flexible and thoughtful rebalancing approach to avoid forced transactions or trade-offs that are not in the best interests of participants.

DCALTA Position 10:

A thoughtful rebalancing strategy that acknowledges the long-term and illiquid nature of alts may further enhance participant outcomes.

Some examples include:

- Less frequent and component-specific rebalancing e.g., alts subject to rebalancing no more frequently than annually and public assets monthly or quarterly.
- Broader asset class definitions e.g., public and private equities in one asset class.
- Wider asset allocation ranges e.g., alts have material leeway from target before triggering a transaction.
- Smaller transaction sizes requiring alts to only get back into the range rather than all the way to a target allocation.
- More time to execute alts transactions e.g., up to a year to achieve new position.
- Relaxed requirements e.g., alts are guided to transact provided that the transaction is in the best interest of participant outcomes.

- Manager discretion to determine the appropriate alts transactions to achieve fund goals without regard to rebalancing strategy e.g., alts can take a material amount of time to build to the desired allocation, where flexible policies give the portfolio the room to make prudent decisions regarding new opportunities and commitments.

Ramp, Pacing, and Diversification

While much of liquidity management is concerned with ensuring sufficient liquidity, fiduciaries building an alts component may find *excess* liquidity to be a more prevalent operational issue. The alts ‘reference limited partnership’ cannot specify timing of capital deployment in advance, creating a potential gap between a plan’s capital inflow and the time it takes to be invested by the alts component. Therefore, when PIO components are siloed with rigid liquidity pathways, net inflows allocated to alts (that are unable to be invested right away) may create a cash drag on investment performance. A widely used strategy to minimize holding excess cash is to allow the alts component to hold liquid securities (e.g., liquid daily index funds, ETFs, and their derivatives) with a high correlation to the alts portfolio. This form of completion “equitizes” the excess liquidity and provides immediate market beta exposure for the alts component while reducing or eliminating uninvested cash altogether.

The liquidity features of unitized products (to the left of the liquidity spectrum) may also be applied to the problem of excess liquidity. A subscription agreement that effectively allows monthly cash deposits and quarterly cash withdrawals provides a way for plans to manage excess liquidity within defined timeframes while gaining exposure to ‘market beta’ and ‘alts alpha’. Should it be needed, the scheduled liquidity of this strategy also allows a PIO to draw from its ramping alts component to meet known cyclical participant needs (e.g., participant loan windows and/or seasonal withdrawals).

DCALTA Position 11:

Unitized products (found to the left of the liquidity spectrum) can provide a ramping alts component exposure to alts within defined timeframes that sponsors can use to mitigate cash drag.

Sourcing Liquidity / Liquidity Pathways

Cash flows occur between the PIO and its participants, and between the PIO and its alts investments. They are usually managed such that inflows and outflows balance or net out over short timeframes e.g., a week or in some cases each day. When cash flows do not net out in the required timeframe, the PIO must either source or distribute cash according to its operational setup.

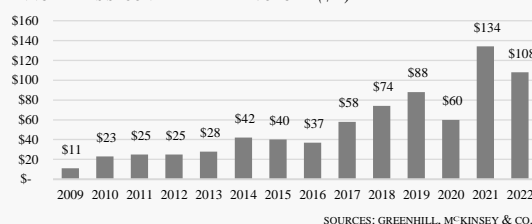
When a PIO records net inflows at the end of the designated period, the excess cash is distributed among the PIO’s components. The form of distribution follows a directive

SIDE BAR B

ALTS SECONDARY MARKET

A *secondary transaction* is where an investor sells their interest in a private asset (either a fund or a fund’s underlying holding) to a qualified buyer. The buyer thus ‘provides liquidity’ to the seller. Buyers may be fellow LPs in the fund or an external party, such as a specialist secondary fund manager. The size of the secondary market generally refers to the total amount of liquidity provided in a trailing 12-month period.

ANNUAL ALTS SECONDARY MARKET VOLUME (\$B)



Sellers

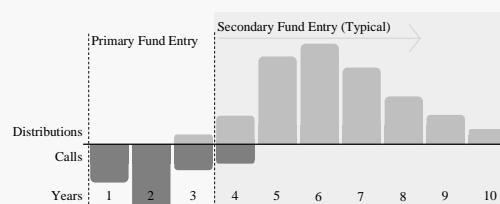
The bulk of secondary transactions were historically LP-led (i.e., an investor selling a portion of fund interests) and usually perceived to involve a degree of distress. However, as alts allocations have increased in size and strategic importance, secondary transactions have become accepted as more strategic i.e., a means to tune portfolio design (allocations, exposures, etc.).

GP-led sales (i.e., sales of company interests by private equity firms themselves) have grown in total share, accounting for about half of deal volume in 2022.¹⁷ These [often single asset] deals allow LPs in the selling funds to gain liquidity or re-commit on select high upside assets (through a new ‘continuation’ vehicle).

Specialist Secondary Buyers

Specialist secondary asset managers acquire interests in other existing funds partway through their lifecycle i.e., at the end of or after the investment/drawdown period. The resulting fund-of-funds is generally attractive from a liquidity perspective due to:

- The diversified nature of its holdings; and,
- Shortened holding period (time to distribution) of its constituent assets. *See diagram below:*



Transactions

As the industry has expanded, experienced intermediation has infused greater certainty into transaction pricing, procedural standards, and deal structure. Nevertheless, the secondary market remains an inefficient source of tactical or quick liquidity. There are numerous reasons for this. For instance, to preserve fund stability, prospective buyers in LP-led transactions usually need GP approval before the deal can close. GPs may be selective in their transfer policy, adding time and complexity to a transaction. LP-led transactions are therefore likely to price at a discount to NAV. Very fast deals can still be expected to take several weeks to close.

from the designated fiduciary manager (Fig. 9). Alternatively, when a PIO records net outflows, the cash shortfall must be sourced from within the PIO. This usually involves the sale of highly liquid assets drawn from one or several PIO components according to the same or a different directive as in place for distribution of excess liquidity. In some situations, and under the direction of the PIO's fiduciary manager, sourcing liquidity may include the sale of alts assets.

LP-led secondary transactions are increasingly viewed as a strategic part of the liquidity arsenal of institutional investors, as evidenced by year-over-year growth of the secondaries market (see Side Bar B). Despite this, sourcing liquidity by selling strategic positions into the secondary market remains inefficient in terms of timing, related costs, and deal pricing. The situations under which seasoned institutional investors resort to secondary 'fire sales' are therefore well outside of normal operations and have been the culmination of abnormally risky investments and incentives rather than the illiquid nature of the assets.

DCALTA Position 12:

The secondaries market is an unsuitable source of liquidity for the day-to-day operational purposes of most plans.

In comparison, the sale of highly and even moderately liquid assets can be calibrated within each PIO to quickly meet its cash needs without unnecessarily moving the fair value of the assets being sold. While this may require fiduciaries to implement a more flexible approach to their liquidity pathways and rebalancing, the guiding principle is to better meet participant needs within the plan's risk appetite.

Tactical Elements

Plan fiduciaries can use tactical elements to affect outcomes or stabilize PIOs during events that usually cause a degree of liquidity stress e.g., a large market drawdown as occurred at the onset of the Covid Pandemic in 2020. These elements include:

- Gates on trading and settlement i.e., the sponsor temporarily ceases providing liquidity to participants or stretches settlement from T+1 to T+1+n.
- Redemption queues (similar to above).
- Transaction costs may be levied onto participant withdrawals (according to a plan defined function) to offset the cost of liquidity otherwise borne by the remaining PIO investors.

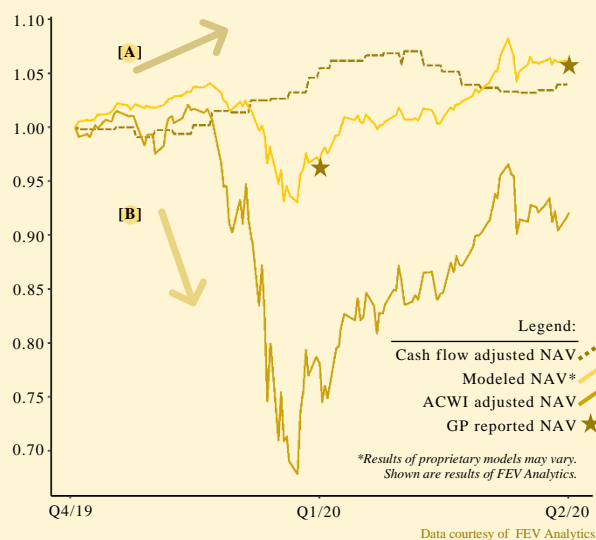
It should be noted that these tactical elements are already included in the liquidity management toolkit of plan fiduciaries regardless of asset allocations. Market stress is characterized by public assets becoming less liquid, and plan sponsors already have the mechanisms, procedures, and legal provisions in place to protect value of PIOs during extreme events.

However, the valuation of alts during market volatility introduces a new dynamic to liquidity management that is important for fiduciaries and managers to appreciate. Liquidity management procedures rely on valuation approaches that accurately reflect the valuation methods of private market managers to avoid generating too much or too little liquidity.

Under fair value reporting guidelines, alts managers are required to reflect market conditions, project realistic transaction pricing, and be conservative in their estimates.

Figure 10: Alts Portfolio Valuation in Market Drawdown

DAILY VALUATION OF A WELL-DIVERSIFIED ALTS PORTFOLIO THROUGH PANDEMIC



A widely accepted daily valuation approach is the accounting roll forward, where the GP's last reported fund NAV is adjusted for fund cash flows and market movement in between reporting periods. (Please see the *DCALTA Daily Valuation Framework*¹⁸ for detailed discussion).

In its basic form, the roll forward procedure has some well-known limitations that, without appropriate technical enhancements, result in naive replication of public market volatility within the alts portfolio.

In the chart above, a widening between the [A] cash flow adjusted NAV, and [B] market proxy (ACWI) adjusted value can be observed. This is because:

- Cash flow adjusted NAV can be expected to *increase* in a market drawdown due to accelerating capital calls
- The naive market adjusted NAV (the ACWI in our example) simply follows the selected proxy drawdown.

In a drawdown, the two guide values have become uninformative, with no reliable interpretation of the market's volatility on the alts portfolio. Following either of the conventional guides might:

- unfairly influence participant behavior,
- exacerbate a denominator effect, and/or
- trigger dilutive corrective action while failing to reflect the GP's reported fair value (stars on the chart).

To avoid problems stemming from mis-estimation, plan fiduciaries may want to consider procedural enhancements that accurately model the conservative nature of valuations across the asset class. Predictive models by third party providers are in use by asset managers and asset owners and may be an attractive option for plan fiduciaries and their record keepers. In the chart above, *Modeled NAV* shows the results of the FEV Analytics (third party provider) model, which predicted GP NAVs to within 1% during the pandemic.

The emergence of valuation technology and specialist service providers is symbolic of a maturing ecosystem catering to the operational needs of plan fiduciaries.

The result of these parameters is observable across the alts asset class; alts valuations are typically less ‘volatile’ than their public asset counterparts. During market drawdowns, when values of public assets drop, it is also observable that the reported value of alts do not track public proxies.

This is potentially problematic for plan fiduciaries because the usual guides of market proxies and cash flows widen in their spread and become relatively uninformative. As shown in Fig. 10, an alts valuation that is held relatively steady while public asset valuations drop can give rise to one or more of the following situations:

1. A **denominator effect** that triggers the PIO’s rebalancing thresholds.
2. A rising NAV as constituent funds accelerate capital calls.
3. Potentially over-priced units that may encourage plan participants to make previously unplanned withdrawals.

It is therefore important for the plan’s fiduciaries to be informed by a valuation procedure that:

- Steps through the impact of cash flows, market proxy movement, and alts valuation estimates;
- Uses market proxies that are specific to the alts holdings; and
- Has undergone testing for its accuracy during market volatility.

As discussed in the *DCALTA Daily Valuation Framework*¹⁸, the **accounting roll forward** is a widely adopted valuation procedure capable of meeting these requirements while keeping existing audit pathways intact. As shown in Figure 10, methodological enhancements to the procedure’s market adjustment component are necessary to accurately reflect the valuation marks of alts managers particularly through periods of market volatility. While these valuation models, enhanced for daily valuation purposes, may be run using in-house personnel, most PIOs may choose to use specialist third party providers for their established expertise, scalability, and service continuity.

DCALTA Position 13:

Tactical responses to liquidity events should involve an alts valuation procedure that is tested and reliable under market volatility.

Conclusion

Due to underlying structural characteristics of the asset class, alts can introduce an element of liquidity risk to PIOs. However, exposure to this risk can be purposefully walked back by plan fiduciaries through actions and choices outlined in this paper. The central premise of the DCALTA Liquidity Framework is that the nature and degree of liquidity risk introduced by alts to any one PIO is *highly configurable* by the plan fiduciary to meet their risk appetite. Configurability therefore means plans of different size, experience, or expertise can prudently include alts.

Most DC plans seeking to include alts also need to preserve operating norms like daily trading and T+1 liquidity. It is necessary then for liquidity risk posed by alts to be contemplated in detail beyond size of the alts component, and for risk mitigation to be sought from ‘everyday’ means like the fiduciary framework, the alts valuation method, and the alts investment products. The DCALTA Liquidity Framework provides this context, and in so doing fills an important information gap for US DC plans.

The inclusion of illiquid alts in a daily-traded PIO presents liquidity challenges that are novel in the U.S. retirement and asset management industry. The conclusion that can be drawn from this discussion is that innovative products and services can help DC plans include alts within the parameters of their risk appetite, and in such a way as to be ‘worth it’ to plan participants.

Glossary of Terms

3(38) Investment Manager refers to an entity that is given plan investment discretion and that satisfies certain rules such that the plan's fiduciary is not responsible for day-to-day investment management. Section 3(38) describes an advisor who renders discretionary investment advice to an employee benefit plan, with the power to manage, acquire, or dispose of any asset of the plan. Under ERISA, an entity cannot act as a 3(38) investment manager unless the entity is a registered investment adviser under federal or state law, a bank, or an insurance company.

Alts, Alternatives, and Alternative Assets, used interchangeably throughout this writing, mean private investments, including but not limited to private equity, real estate, infrastructure, hedge funds, and private credit.

Denominator Effect occurs when the reported valuation of a private asset allocation (herein referred to as "alts") within a portfolio moves at a materially different velocity than the reported valuation of public assets. This causes the relative size of the private asset allocation to shift suddenly and potentially exceed risk management policy, which in turn may trigger portfolio rebalancing.

Highly Liquid Assets are cash or assets that may be traded for cash at or close to ask value within two days.

Liquidity Buffer: For DC plans, participants expect each PIO to deliver next day trade settlement (generally referred to as trade-plus-one or "T+1") which is a material demand for or source of liquidity. In simple terms, any imbalance of daily flows into or out of a PIO is absorbed T+1 by a liquidity buffer, which in turn is absorbed next day and beyond by the remaining PIO portfolio components.

Liquidity Risk: In terms of the alts allocation, liquidity risk refers to the risk that the limited partner asset owner will have to sell off liquid assets in short time frames at potentially unattractive prices in order to meet capital calls made to it by a private partnership. Liquidity risk may therefore be considered a function of (i) the sum of uncalled capital commitments and (ii) the pace of capital calls relative to the pace of distributions. Since capital calls are observed to accelerate during times of market stress or dislocation, other factors such as investment pacing, strategy, and the availability of subscription lines of credit may also inform estimated liquidity risk.

Liquidity Spectrum: A DCALTA tool that groups various alts investment products by their liquidity characteristics and potential contribution to PIO liquidity, relative to each other.

PIO, Participant Investment Option: Where participants direct the allocation of their balance and contributions to a menu of multiple PIOs. A PIO may be a single manager, asset class, or strategy, or may be a multi-asset approach such as a balanced fund or a target date fund (TDF). Each PIO is separately managed solely in the best interest of

participant investments in that PIO, including for liquidity purposes. PIOs may have multiple components (i.e., asset classes) and multiple managers/funds within each component.

Note: The Department of Labor refers to a PIO as a Designated Investment Alternative.

Moderately Liquid Assets are assets that can be traded for cash at or close to ask value within 3 – 30 days, generally descriptive of most listed stocks and bonds.

QDIA: Stands for 'Qualified Default Investment Alternative' and is the investment option that plan sponsors have chosen to automatically enroll participants into if they do not make an affirmative investment choice. The QDIA concept was established under the Pension Protection Act of 2006 (PPA) to help overcome participant inertia and improve retirement plan participation. To qualify as a QDIA, an investment option must meet specific Department of Labor criteria including diversification, professional management, and appropriately managed risk. TDFs, which gradually shift to more conservative investments as the target date approaches, are therefore commonly used as QDIAs.

Endnotes

1. Investment Company Institute
https://www.ici.org/statistical-report/ret_23_q1
2. Employee Retirement Income Security Act of 1974, as amended.
3. On June 3, 2020, the DOL sent a public response letter that evaluates whether a proposed investment structure by Pantheon Ventures (U.S.) L.P. and Partners Group (USA), Inc., which allows the inclusion of private equity investments in individual account plans, would be compliant under ERISA. The letter was not a simple question of yes or no on the inclusion, but rather provided a detailed outline of how to create such an investment. First, plans must offer the PE investment as part of a multi-asset class vehicle with the structure of a custom target date, target risk, or balanced fund. The target date was proposed as the most likely structure and would be created in a separately managed account with an investment committee that would maintain responsibility. Available at: <https://www.dol.gov/sites/dolgov/files/EBSA/about-ebsa/our-activities/resource-center/information-letters/06-03-2020.pdf>
4. "Why Defined Contribution Plans Need Private Investments", a 2019 study by the Institute of Private Capital and DCALTA found that inclusion of private investment funds in balanced and target date funds always increases average portfolio returns. Available at: <https://dcalta.org/research>
"The Evolution of Target Date Funds: Using Alternatives to Improve Retirement Plan Outcomes", a 2018 study from the Center for Retirement Initiatives at Georgetown University found that allocations to alternative investments could potentially improve DC plan participants' investment outcomes in a TDF by 11% to 17% - Policy Report 18-01 (June 2018).
5. U.S. Department of Labor, Employee Benefits Security Administration (EBSA), Private Pension Plan Bulletin Historical Tables and Graphs: 1975-2020; available at

- <https://www.dol.gov/sites/dolgov/files/EBSA/researchers/statistics/retirement-bulletins/private-pension-plan-bulletin-historical-tables-and-graphs.pdf>
6. *"The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior"*, a 2001 National Bureau of Economic Research working paper 7682 by Madrian, B. and Shea, D. found that automatic enrollment led to a substantial increase in plan participation, with participation rates exceeding 90% in some cases.
 7. *"2020 Defined Contribution Plan Sponsor Survey"* from WTW found that 90% of DC plans offer Target Date Funds as their qualified default pathway product.
 8. *Alight Solutions 401k Index* which tracks participant trading activity for more than two million people and more than \$200 billion in assets; data as of July 15, 2023.
 9. Conditions that cause participant behavior to become more correlated or group-like can be external or internal in origin. Example external drivers include market dislocation, where public markets drop in value, high levels of unemployment, high inflation, and industry disruption. Internal drivers include company layoffs, benefits schemes, and corporate actions such as mergers.
 10. The percentage of superannuation assets held in cash increased from 10% at the close of 2019 to 14% during the March 2020 quarter: Australian Prudential Regulatory Authority (2022); <https://www.apra.gov.au/managing-superfund-liquidity-midst-of-covid-19>
 11. Reserve Bank of Australia Financial Stability Review (April 2021): *"Box C: What Did 2020 Reveal About Liquidity Challenges Facing Superannuation Funds?"* found that a number of large superannuation funds paid out more than five percent of AUM to early participant withdrawals. Funds with a greater proportion of young participants working in industries most affected by the pandemic had the highest withdrawals.
<https://www.rba.gov.au/publications/fsr/2021/apr/box-c-what-did-2020-reveal-about-liquidity-challenges-facing-superannuation-funds.html>
 12. 2019 research by WTW found that the use of alternative investments (hedge funds, private equity and real estate) has a high correlation with the plan's size. While larger DB plans allocated 10.3% to alternative investments, smaller DB plans only held ~3.6% of their portfolio in alts. Available at <https://www.wtwco.com/en-us/insights/2021/01/2019-asset-allocations-in-fortune-1000-pension-plans>
 13. <https://www.wtwco.com/en-us/insights/2021/01/2019-asset-allocations-in-fortune-1000-pension-plans>
 14. According to fiscal year 2021 data collected in the *Public Fund Survey* provided by the National Association of State Retirement Plans [NASRA] and compiled by the Center for Retirement Research at Boston College, responding (usually larger) larger U.S. defined benefit plans allocated 23% on average to alts (including hedge funds). See: <https://www.nasra.org/publicfundsurvey> for summary.
 15. Quarterly allocations data from Australian public superannuation funds published by the Australian Prudential Regulatory Authority [APRA], available at: <https://www.apra.gov.au/quarterly-superannuation-statistics>
 16. The longstanding guidance from SEC staff has been that mutual funds should not exceed a 15% limitation on illiquid investments, including private funds (codified in 2016 as Investment Company Act Rule 22e-4(b)(1)(iv)).
 17. McKinsey Global Private Markets Review 2022; available at <https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/mckinseys-private-markets-annual-review#/>
 18. In 2021, DCALTA published its groundbreaking position paper *"Daily Valuation of Alternative Assets in DC Plans: A framework for plan sponsors and industry stakeholders."* The paper is available for download from <https://dcalta.org/research>

Copyright © 2023 DCALTA. All rights reserved.

This report is not investment advice and should not be relied on for such advice or as a substitute for consultation with professional accountants, tax, legal or financial advisers. DCALTA has made best efforts to use reliable, up to date and comprehensive information and analysis, but all information is provided without warranty of any kind, express or implied. DCALTA disclaims any responsibility to update the information or conclusions in this position paper. DCALTA accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this paper or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages. This report may not be sold. DCALTA members that contributed to this report are not FINRA registered. DCALTA is not authorized by, nor a member of, the Financial Accounting Standards Board (FASB) or the American Institute of Certified Public Accountants (AICPA). DCALTA is not authorized or regulated by the U.S. Dept of Labor or the SEC.

Please refer to dcalta.org for information.