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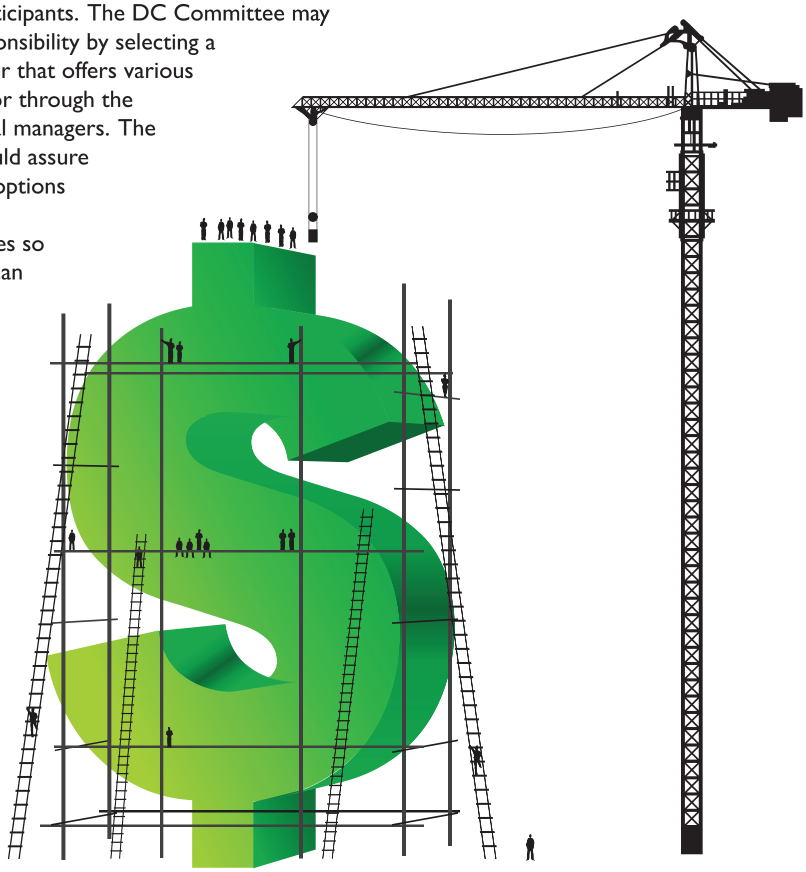
BUILDING A DC INVESTMENT MENU IN A CHANGING RISK ENVIRONMENT

The development of an investment structure, selection of investment managers, and the oversight of those managers is one of the most important and visible responsibilities of a defined contribution or deferred compensation (collectively, "DC") plan oversight committee (the "Committee"). The investment structure and option choices have the greatest potential to significantly impact participant readiness for retirement.

The DC Committee has a much different fiduciary responsibility than committees that oversee defined benefit pension ("DB") plans. The DB committee carries the full fiduciary responsibility for constructing an investment portfolio to meet the cash needs and long-term performance goals of their plans. The DC Committee discharges its fiduciary responsibility through the due diligent process of authorizing an investment menu for use by participants. The DC Committee may accomplish this responsibility by selecting a bundled plan provider that offers various investment options or through the selection of individual managers. The DC Committee should assure that the investment options offered encompass a variety of asset classes so that the participant can construct a well diversified portfolio.



This responsibility is heightened because the DC plan may have ten, hundreds or thousands of participants who theoretically have different risk/return characteristic and time horizons. Participants, therefore, rely on the Committee to provide them with a variety of options that allows each participant to construct an individualized asset allocation and portfolio with fundamentally sound investment alternatives. Each participant will act as her own fiduciary in constructing an asset allocation and portfolio she believes will meet her investment objectives based on the investment alternatives offered through the plan. It is important for a Committee to balance the need for a variety of alternatives with the potential to overwhelm participants with too many decisions. A Committee can relieve some of the pressure of an overwhelming fund selection by ensuring that each alternative has a distinct purpose within the investment menu. Limiting investment options in to core, growth, and value investment styles in each asset class is likely to be a better selection set for participants than several core options in each class. Participants are more likely to be confused by multiple but similar options rather than the single option in each of three different asset classes.

The Committee must also evaluate the value and importance of asset allocation funds in its investment line-up. Typical asset allocation options are target-date funds, lifestyle funds, and managed accounts. These investment alternatives offer participants a method for making a single selection that provides a fully diversified portfolio creating a certain ease of use. One or more of these alternatives may be appropriate depending on the DC plan participant characteristics.

It is also important to consider the changing environment of investing when making investment menu decisions. This article will discuss the fact that the inclusion of inflation hedging funds, global asset allocation funds, and other options that have not been standard DC plan offerings may be appropriate. A Committee can add value in a variety of ways when evaluating investment alternatives to develop an investment menu. The size of the plan and sophistication of the participant population will be relevant to the decision to use a fully bundled plan provider that can provide a variety of pre-packaged investment alternatives offering a variety of risk/return characteristics or to select its own investment options. The fully bundled solution may provide a cohesive array of investment options, but likely will not offer as much flexibility to change options or to negotiate price via share class selections. Plans of sufficient size may opt to select their investment options independently of the selection of their administrative plan provider as long as that provider can record keep the selected investment options. This solution offers more investment option flexibility and potential fee negotiation opportunity, but will necessarily require more ongoing care and attention than the comparable bundled alternative. Either alternative may be appropriate and defensible provided the Committee conducts appropriate due diligence including an evaluation of price, service, access, and competitive risk adjusted returns. As such, the evaluation process should drive each DC plan Committee to its own optimal decision.

The final critical phase is in communicating the investment menu to participants. It is in this final stage that the structure of the investment menu and its component parts are described to the participants. This communication process provides a critical conduit between the Committee's due diligence process and the participants' effective use of the investment menu. The communication process has come under particular scrutiny in recent times as fund types and styles have proliferated. The Committee, therefore, should separately evaluate whether a simple list of alternatives, a decision tree format, or a tiered investment menu fits the situation best. The Committee should carefully evaluate this decision, lest their due deliberation relating to investment menu design and fund selection may yield less than optimal results.

Overview of the Tiered Investment Structure in a DC Plan

A plan sponsor should attempt to provide options that allow all participants to comfortably create a diversified portfolio appropriate for their specific retirement savings goals. The options not only have to be of high quality, but they must be structured in such a way as to allow the average participant to make suitable decisions. Many participants are not especially comfortable or qualified to make investment decisions. The retirement plan industry has devised various strategies and structures to help those participants. One common structure is the "three-tiered" menu of options, in which the sponsor offers qualified default investment alternatives (QDIAs) or asset allocation funds in tier one, a core fund menu in tier two, and a self-directed brokerage window in tier three.

Active, Passive, or Both?

Within both tier one and tier two plan menus, the plan sponsor will face a decision about whether to offer actively managed funds, passively managed funds, or both. There are arguments for both options. Actively managed funds strive to provide returns greater than their respective index. Passively managed funds generally provide returns in line with their index and tend to have lower costs.

Currently, many plans offer either passive or active investments in tier one, while offering some combination in tier two. But if the goal of tier one is to provide the best investment solution — not just to minimize decision making — then plan sponsors may want to consider offering both approaches.

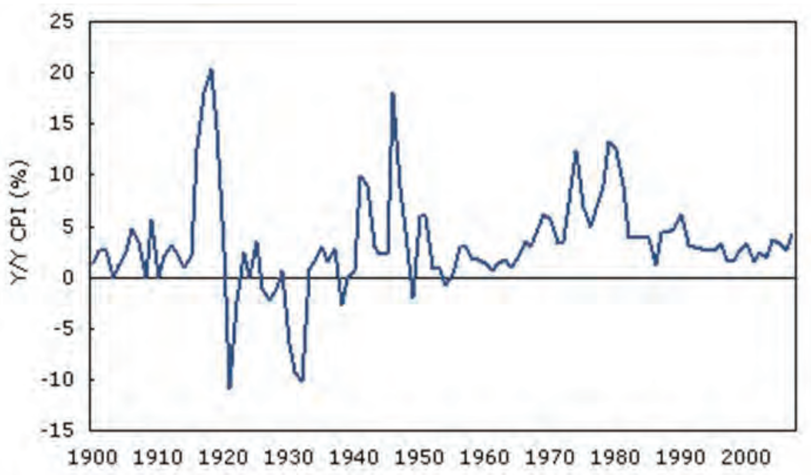
Tier One: QDIAs/Asset Allocation Funds

The Pension Protection Act of 2006 sought to address the challenges of low plan participation and poor investment decision making by permitting plan sponsors to automatically enroll employees in DC plans and then to direct their savings into qualified default investment alternatives (QDIAs). There are three categories of QDIAs: lifecycle or target-date funds, balanced funds, and professionally managed accounts. These products are generally thought to be more diversified and more likely to provide sufficient retirement income than stable value and money market default options. Capital-preservation products like stable value funds may be used as QDIAs, but only for the first 120 days after the first elective contribution is made in an eligible automatic contribution arrangement. For plans that do not offer QDIAs, tier one often consists of a selection of asset allocation funds.

Tier Two: Core Fund Menu

In today's structure, plan participants who utilize tier two could be of many stripes. They might have significant assets outside the plan and find that the tier one options are not customized enough for their asset allocation

FIGURE 1: U.S. Inflation (Year-Over-Year, 1900-2007)



Source: U.S. Bureau of Labor Statistics

needs. Or they may simply be "do-it-yourself" types who prefer to take a more active approach to investing or have other personal circumstances that create a need for a particular investment approach. Regardless of who they are, it is important to structure a strong core menu to satisfy their needs.

Traditionally, this tier has been made up of a number of investment options, either mutual funds, commingled accounts, or separate accounts, that ranges from conservative to aggressive. It is consensus that an option designed to maintain a constant share price, such as a money market or stable value fund, must be offered for those who desire safety of principal. From there, most plans offer one or two bond funds that provide for higher income, but with the "cost" of a fluctuating share price. Finally, the basic core menu offers multiple equity funds, typically covering the large cap U.S. market, small cap U.S. market, value style, growth style and international funds. The following is one example of how an investment menu might be structured.

Option	Typical Benchmark
Money Market Fund	T-Bills
US Core Bond Fund	Barclays US Aggregate Index
Inflation-Protected Bond Fund	Barclays US TIPS Index
S&P Index Fund	S&P 500 Index
Large Cap Growth Fund	Russell 1000 Growth Index
Large Cap Value Fund	Russell 1000 Value Index
Mid Cap Fund	S&P 400 Index
Small Cap Fund	Russell 2000 Index
International Fund	MSCI EAFE Index

Tier Three: Self-Directed Brokerage Windows

The third tier is often an extended list of options for the most demanding participants and generally in its most simple format provides access to a large number of mutual funds. Some plan sponsors permit access to ETF and individual securities like stocks or bonds. Brokerage windows enable plan sponsors to provide participants with a greater range of investment choices without the costs required to add options to the tier one or tier two menus and the investment oversight responsibility. On the negative side, they may encourage riskier behavior by participants, including frequent trading, while providing participants with a variety of investment options they might not understand.

Where Do Non-Core Asset Classes Fit?

Increasingly, best practices in retirement investing suggest that portfolios should include allocations to non-traditional or non-core asset classes, which can act as diversifiers, hedge inflation, and improve returns over time. In fact, studies conducted by the Center for Retirement Research at Boston College, John Hancock, CEM Benchmarking and others have found that DC plans have underperformed DB plans in large part because certain asset classes used in DB plans are not always made available in DC plans. High-yield bonds, emerging market equity and debt, commodities, TIPS and REITs are examples of non-traditional or non-core asset classes.

But where do these non-core assets belong within the three-tier plan menu? Embedding them in the multi-asset QDIA products is an obvious solution, as it reduces the need to educate participants about the role of these investments before they can be prepared to make effective decisions about how to use them. But should they also be included in the tier two core menu? The complexity and volatility of the respective asset classes are two factors to consider, as is the objective of the tier two core menu. Is the core menu meant to provide simple building blocks for the moderately sophisticated participant or is it intended to offer full asset class representation?

Inflation is a sustained rise in price levels. It usually refers to a measured rise in a broad price index representing the overall level of prices of goods and services or a set of assets. (See Figure 1)

While economists often disagree on the causes of inflation and recognize different types of inflation (demand-pull, cost-push, built-in), it is undisputable that inflation in goods and services erodes the purchasing power and investment returns. Even with 3% inflation $209 nominal are needed in 25 years to support the spending equivalent to $100 today. 8-12% inflation for 4 years decreases purchasing power by approximately 1/3. Participants who encounter unexpected inflation when they are already retired can do nothing except go back to work or reduce their standard of living unless their portfolio is already constructed to favorably respond to inflation.

DC plan participants spend real (vs. nominal) dollars and they need real income to support their spending in retirement. Therefore, the design of DC plans should allow participants to accumulate and preserve real value.

The Federal Reserve (and other central banks) attempts to affect the economic activity and inflation in two following ways:

1. Monetary policy – managing the money supply by the Fed (or other countries' central banks) most commonly accomplished by either of the following:
    a. raising and lowering of interest rates
    b. tightening or relaxing banks' reserve requirements

2. Fiscal policy
    a. Cutting or raising taxes
    b. Increasing or reducing government spending

The approach to solve the economic crises has been easy monetary policy and deficit spending. The Fed's approach is to purchase government debt (quantitative easing with newly created dollars). The government goes deeper in debt and then prints money to purchase the debt, thereby keeping rates lower and injecting more money into the economy.

While this policy has restored a degree of confidence in the financial markets and lessened the severity of the crisis, it does not correct the mistakes that occurred and introduces the following risks:

1. The assets backing the debt must appreciate to continue this process. The drive to spend and reflate is likely to put great pressure to inflate and devalue the currency.
2. Consumers cannot carry the heavy debt burden, nor can real estate and other assets appreciate at high levels indefinitely.
3. The U.S. cannot engage in unrestrained borrowing without higher costs resulting from either inflation or dollar devaluation. The interest on government debt today consumes $380 billion of taxpayers' money, or 40% of individual income tax receipts. Any rate hike may stress our payment ability.

It is unpredictable when and how exactly inflationary pressures will come to the forefront. In addition to inflation measures included in the CPI or PPI we can get inflation or deflation in financial assets, real estate, and commodities. While deflation in consumer prices is less concerning for DC participants as reduction in prices of goods allows people to purchase more products, deflation in assets is worrisome as it decreases net worth. The consequences of the devastating deflation in investments, homes, real estate and business values have been seen during this recent crisis.

The biggest unknown is how and when the U.S. government will formulate an exit strategy from its current expansionary monetary policy. Historically, the Fed's ability to correctly time the end of its balance sheet expansion and its quantitative easing has been imperfect. It is extremely difficult for the Fed to direct all flows and thus some unintended consequences cannot be ruled out.

While the excess U.S. and global capacity and underemployment need to be absorbed before inflation kicks in, an argument for inflation is based on three premises:

1. It's not just the actions taken so far in this crisis that are likely to be inflationary, but also the actions that may happen in the future. It is possible that the Fed may be too slow to act, due to concerns about persistently high unemployment and keeping banks alive with a steep yield curve.

2. The fiscal response appears to continue to be, "spend and borrow." Ultimately, the debt build-up will need to be addressed. The most politically acceptable way to do so is likely to be with some inflation to reduce the real debt burden and dollar devaluation globally.

3. The level of output potential in this economy is going to be difficult to measure. Companies are restructuring for lower output levels and have already made some significant reductions, while bankruptcy rates and business closures will continue to climb. In the end, measuring the output gap may be difficult at best.

In summary, the forces governing the markets, capital and incentives are likely to be changing along the way, contributing to continued longer-term uncertainty. In this uncertain situation, investing strategy accounting for uncertainty and risk as well as investing discipline are even more important to DC participants.

DC plan sponsors either set up directly (through default auto-enrollment options) or facilitate (by providing certain options in the investment line up) strategies which participants may be setting up for period as long as potentially 35-70 years. Nobody knows for sure where inflation is going to be in 10 years. It is uncertain. There is even less certainty about it for the period of such vast length.

DC plan participants spend real dollars and need to create real incomes for their retirement. Even if inflation averages 3% in the next 25 years, it means that an individual needs to double his/her nominal assets to provide today's purchasing power.

The following paragraph discusses inflation hedging benefits/properties of various types of assets:

1. Treasury Inflation-Protected Securities (TIPS) are government bonds whose principal is adjusted by changes in the Consumer Price Index.
   a. TIPS portfolio (TIPS funds, individual TIPS) provide inflation hedging because the principal of the individual bonds is adjusted by CPI changes.
      1. Passive TIPS index fund
      2. Active TIPS fund

2. Real Estate and Commodities provide some inflation hedging. They represent the ownership of real assets which prices tend to raise with inflation. However, there are other factors (such as supply and demand for a particular commodity) that are affecting their prices.

3. Stocks represent ownership in companies that themselves own real assets which value goes up with inflation and therefore, the value of the stock goes up with inflation. Over the long term, as inflation rises companies can raise their prices and increase earnings. However, over short periods of time stocks are often negatively impacted by unexpected inflation.

4. Fixed income securities and stable value funds which are usually purchased for their stable returns are negatively impacted by inflation. In a rising inflation environment the real value of the fixed coupon and the bond principal is deteriorating. When inflation increases, the interest rates often rise. Total return on bonds further decreases due to the fact that their prices decrease in a rising interest environment.

Plan sponsors should consider building investment line ups that allow participants to hedge the inflation risk since unexpected inflation has a significantly negative impact on participants' savings and future purchasing power.

Tier 1

Several investment managers offer bundled target date products focusing on real return and incorporating inflation hedging as one of their philosophical foundations. Sponsors creating customized target date solutions can include TIPS, real estate (direct or via REITs), and commodities into their custom strategies and model results in real (as opposite to nominal) terms.

Tier 2

TIPS funds, whether passive or active, are accepted as a stand-alone option. Including such funds in the investment line up provides the participants with basic ways of hedging unexpected inflation.

Because of the daily valuation and withdrawal needs, DC plan sponsors typically offer real estate exposure to plan participants through the use of REIT funds, which invest in publicly-traded commercial real estate companies that own and operate income producing commercial property such as malls, office buildings, hotels and apartment buildings. This is because these funds offer the same liquidity as is made available through other funds in their line ups.

Plan sponsors considering stand alone REIT and commodities funds are often concerned with participants placing 100% or a large portion of their savings into such funds and then suffering losses due to downside volatility. Some plan sponsors consider limiting the percentage of savings that participants can place into those vehicles. Placing such limits on one type of assets while not placing similar limits on other volatile investments such as equities, may imply that the plan sponsor endorses a 100% stock portfolio. For those reasons, these assets are usually incorporated in DC plans through professionally managed multi-asset funds such as target date funds, relative risk funds, or managed accounts.

The role of equity in a diversified portfolio is usually that of a return enhancer. To some extent, as discussed above, stocks also offer certain inflation-hedging benefits.

Over the past 100 years, per capita income expanded at a rate of well over 11,000% (from $390 in 1907 to $46,040 in 2007), while GDP soared more than 2,200% (from $489 billion to $11,524 billion) during the same period. The U.S. economy has proven resilient in the face of world wars, terrorism, natural disasters, banks crises, double-digit inflation, and other problems. The stock market is fraught with price swings driven by fear and greed but over the long run, the stock market reflects the strength of the economy.

During this past decade, long duration U.S. Treasuries witnessed strong performance providing an annualized return of 7.59%, as measured by the Citigroup Treasury 10+ Years Index. During the same period, equities struggled, returning annualized -0.95% (measured by S&P 500 Index).

FIGURE 2: GDP Growth and S&P 500 Index Performance

Source: FactSet

For some participants wary of equities' lagging performance and higher volatility amid the current economic unease, increasing allocations to fixed income appears as an attractive option. While fixed income is an essential part of any well diversified plan, uncertainty itself should not drive an increase of debt holdings at the expense of equity allocations. It is important to consider the long-term relationship between equities and fixed income, as well as to evaluate how the current fundamentals, such as the future direction of inflation and the growth in earnings per share, will affect these asset classes.

The recent crisis was only the third time in the past 80 years when the trailing 20-year return on 10-year U.S. notes had outpaced equities. It was the first time such a performance disparity had occurred in the past 60 years. But while noteworthy, on the few occasions when equities have lagged government bonds, the period of underperformance was brief and, more importantly, led to extended periods of equity out-performance.

It is also likely that the current economic backdrop will provide an uphill battle for bond investors. The current high debt levels of the U.S. government and the tremendous growth in the monetary base suggest an environment of rising yields. As future yields rise, today's bonds, which offer rates below the long-term average, are likely to lose value. These factors coupled with a federal funds rate near zero are concerning for today's fixed income investor.

Significant increase of the money supply, which in the short term is likely to continue bolstering the economy and helping reflate assets such as real estate and commodities create another factor likely to increase yields. Longer term, the effect can be inflationary, which would devalue the U.S. dollar. For long-term bond holders, coupon and principal repayments of recently issued debt with low yields may see negative real returns. Whether or not we see a period of sustained, above-average inflation may be irrelevant to investors. Fear of negative real returns can push yields to higher levels.

Extended periods of negative equity returns are rare. Prior to this past decade, the S&P 500 Index had not posted a negative 10-year return since 1941—a return period that includes much of the Great Depression. As can be seen on the chart below, equity performance following low-return periods was positive and often rose to levels far above normal returns.

A look at equity returns after bear markets provides additional context. Rallies following bear markets have normally been much stronger than what we have experienced, often recouping more than the initial downturn. As of December 31, 2009, the S&P 500 had advanced nearly 70% from its lows, or about 51% of what was lost from peak to trough during the downturn. Rallies following bear markets since the Great Depression have recouped a median of 186% of their losses.

The magnitude of international markets' return in dollars depends both on the strength of those markets and on the strength or the weakness of the dollar. At any given level of return, weaker dollar increases the dollar return of that market. Historically, when the dollar was strong, the international equity returns in dollars were weaker than during the recent time when the dollar was relatively weak. Since participants often "chase returns," the currency fluctuations have impacted their asset allocation between domestic and international equities.

Over the years U.S. stocks contributed between 30% and 70% of the global stock market. Presently, the proportion of U.S. and international equities is approximately 50-50.

International investments provide diversification to a U.S.-centric portfolio. While the correlations between the U.S. and international markets have been increasing, they are still less than perfectly correlated. Combining U.S. and international stocks generally results in a portfolio with a lower average volatility and higher risk adjusted returns. However, recommended proportions of international to domestic allocation vary.

By providing separate international/domestic funds, DC plan sponsors give participants a way to make decisions about the regional allocations. While some studies show that significantly less than 50% of the international equity is sufficient to provide a maximum benefit of diversification, others point out to the following advantages of global funds/allocations over the domestic/international combination:

1. Globalization blurs country boundaries – 75% of Coca Cola's revenues come from overseas markets. Most of Taiwan Semiconductors revenue comes from the U.S. It is hard to distinguish between U.S. and non-U.S. equities anymore and definition of U.S. vs. international becomes subjective and differs from fund to fund.

2. Global portfolios provide diversification and incorporate benefits of short-term raises of regional markets and allow participants to avoid making uninformed bets on regional economies.

3. Global active managers are able to look across the globe for best opportunities to find the best return opportunities to maximize return potential.

Coming out of this decade, most investors have a new appreciation for risk. The rules of the global economy are changing. However, the global economy is always evolving presenting both challenges and opportunities.

Trying to predict the future is hazardous. Plan sponsors should focus on providing their participants with options that will allow them to create well-diversified portfolios with solid asset allocation approach for their desired risk level and avoid trying to time the market. For the participants to have the highest probability of success, they need to establish a financial plan that addresses their investment objectives and risk tolerance and then stand by it avoiding emotions and overreactions.

Since most of the investment strategies are risky (even stable value funds carry inflation risk), risk cannot be avoided in a DC portfolio and it needs to be managed. Plan sponsors should consider stressing the following aspect of retirement saving plans to their participants:

1. Importance of asset allocation appropriate for the individual risk level which considers the impact of downside volatility on the participants' portfolios

2. Disclosure of risk in terms that are understood by participants not familiar with financial terminology

3. Higher savings rates

4. Low volatility strategies and their role in the tiered DC structure

High downside volatility observed during the market drop of 2008 is not unprecedented. Dow Jones Industrial Average dropped more than 30% in 1907, 1914, 1930, 1931, 1932, and 1937. The market dropped by 23% in the month of October 1987 and by 15% in August 1998.

It is worth noting that after the 1929 crash it took 25 years for the DJIA to return to its level prior to the crash. Periodic market declines should be expected going forward.

If the portfolio value drops by 50%, it takes a subsequent 100% return to bring this value to its original level. Therefore, avoiding drawdown helps cumulative return of the portfolio. Since it is difficult to time the downturns, DC plan sponsors may benefit from incorporating low volatility equity strategies into their plans by either including them in custom target date strategies or offering them as stand-alone options.

Low volatility equity strategies are portfolios of equity and equity-sensitive securities designed specifically with the goal of outperforming the stock market or at least delivering significant portion of the upside with lower downside risk over the market cycle. Achieving such objectives allows the cumulative portfolio return to grow with the lesser drawdown and smaller risk that the participant abandons the strategy at its bottom, therefore, forfeiting the opportunity of the investment value recovering.

Such strategies incorporate risk management techniques different than those of style-box focused managers. They may also incorporate securities only sporadically used by traditional managers such as equity sensitive convertible bonds.

While fund databases don't list those strategies as a separate category, plan sponsors can find them by incorporating separate downside and upside risk analysis. Instead of looking at risk as standard deviation which represents both the desirable upside and the undesirable downside risk, sponsors can analyze the trade-off between upside (measured by up-side semi-variance) and downside risk (measured by down-side semi-variance) and look for strategies delivering risk/reward characteristics better than those of their benchmark's.

As the objective of those strategies is to preserve the assets when the markets drop and to take advantage of the upside, they offer attractive risk/return profile that warrants consideration by DC plan sponsors for inclusion in customized tier 1 or as a stand-alone option in tier 2.

The term "alternative strategy" refers to a wide range of investment strategies that are outside of long-only stock and bond portfolios. Alternative strategies derive their return from the active management of other recognized asset classes. They are an extension of active management, or a different form of portfolio construction. While for a long time, the real distinctions between them and other asset classes was mostly business structure, illiquidity, the ability to sell short, leverage, and potentially different levels of manager risk, several managers have started offering alternative strategies in a mutual form format without leverage and with fees lower than those of traditional hedge funds. Examples of alternative strategies include long/short, market neutral income, and global macro funds.

While there are more alternative strategies being offered in this format, their desired outcomes, and their risks vary significantly. Some of those strategies are less correlated to traditional asset classes than others and therefore, participants could benefit from those incorporating them into their portfolios.

As it is the case with active management of traditional strategies, one's ability to select good managers and to properly measure investment performance is critical. DC plan sponsors with their sophisticated resources to evaluate such strategies could potentially add value to their plans by considering such additions to their investment line ups.

Asset allocation solutions such as target date and relative risk funds which offer professional investment management are a good place to incorporate alternative assets. The suitability of those strategies for a stand-alone option in tier 2 has to be evaluated on an individual basis because the goals and risks of those strategies vary.

Because of the complexities involved in the set up of DC line up, plan sponsors need to seek expert advice, to complete their due diligence, and to carefully document their decision-making process and criteria when constructing investment menu to both provide the best possible solution for the participants and to ensure meeting their fiduciary obligations.