Defined Contribution
Institutional Investment Association

Leading the Way: Defined Contribution Solutions Look Beyond Yield for Retirement Income

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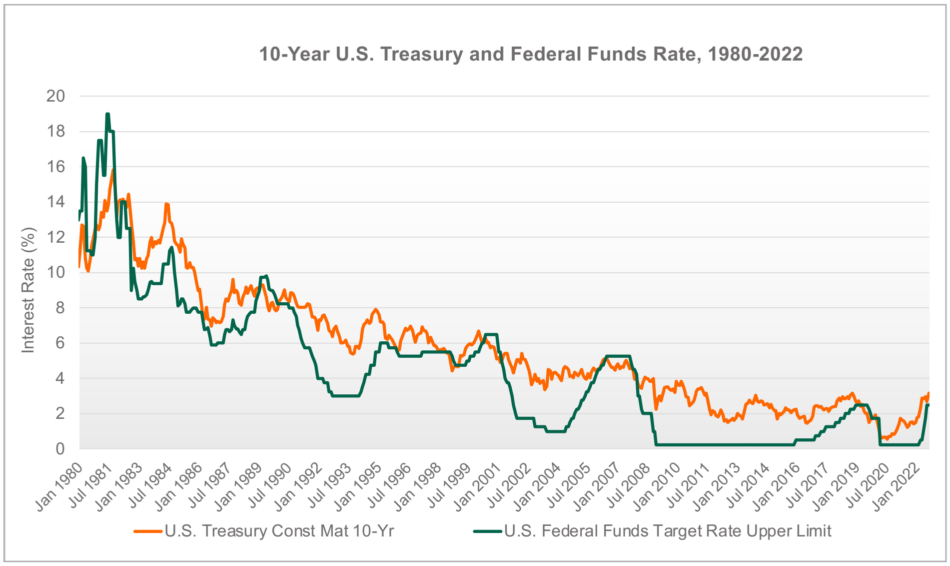
The role of traditional fixed income investments in a retirement portfolio is uncertain after more than a decade of historically low interest rates. (See graph of interest rates in **Exhibit 1** below.) This paper explores how low interest rates and inflation impact retirement plan investing when the goal is income generation, rather than asset growth. We examine the impact to current, prominent income-generating strategies and explore approaches to retirement income generation that have begun gaining the attention of fiduciaries and plan sponsors as new tools to help retirees.

Exhibit 1

Long- and Short-Term Interest Rates Remain Near Historical Lows



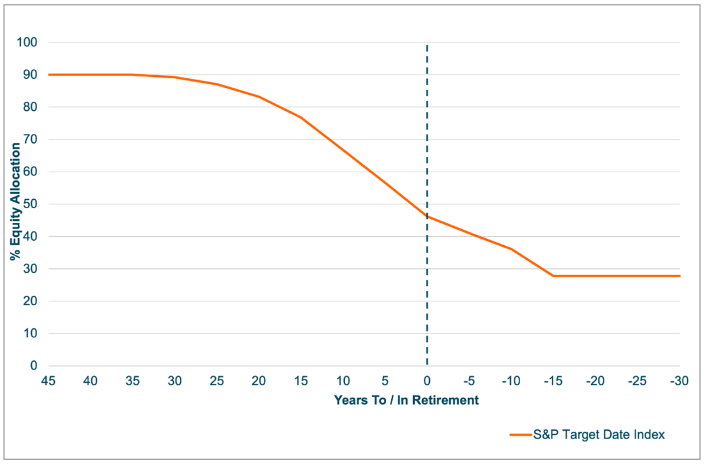
Source: https://fred.stlouisfed.org. Data as of 8/31/22.

CURRENT DC INVESTMENT LANDSCAPE

Target date funds (TDFs) are the dominant investment strategy inside most DC plans today. They are used by 80% of participants and attract 60% of plan contribution dollars.[1] Throughout a participant's lifetime, the target date asset mix in a TDF gradually shifts from predominantly assets that take market risk, such as equities, into more conservative assets. Typically, a TDF for a participant near or in retirement has roughly 50% to 70% of its assets invested in fixed income and money market securities. Fixed income risks differ from equity market risks and are particularly important for those approaching or in retirement. Those risks are explained in the section below.

Exhibit 2 illustrates the decreasing equity exposure (and increasing fixed income exposure) of the S&P target date index series, which reflects an average of existing target date glidepaths available in the market.

Exhibit 2
Equity Allocation for a Typical Target Date Glide Path



Source: S&P Dow Jones, Morningstar. Data as of 12/31/2021.

While TDFs have proven to be effective strategies for accumulating assets for DC participants, their success as a decumulation vehicle to generate retirement income has not been tested as a practical matter. The shift into TDFs over the past 15 years, in addition to the enormous growth of DC plans, has led to more fixed income assets being held by participants ages 55 and older *(see Appendix 5)* just as interest payments retirees can expect to receive from fixed income have decreased. To keep pace with the growing clamor for retirement income solutions, asset managers, recordkeepers, and insurers are responding with products that link the accumulation-focused glide path of TDFs with income-focused retirement strategies for near-retirees and retirees. These evolving solutions are discussed in the final section of this paper.

TWO KEY RISKS IN FIXED INCOME INVESTING

Retirees and near-retirees are generally more exposed to interest rate and inflation risks in their portfolios, given higher levels of fixed income holdings and a shorter investment horizon. After an extended period of low interest rates, this demographic today may be more at risk of experiencing income shortfall, price depreciation and purchasing power erosion as explained below.

Interest Rate Risk

Investors with a significant allocation to fixed income face two primary sources of loss during a low interest rate environment.

1. **Income shortfall**. Fixed income investments purchased when interest rates are low typically offer lower coupon payments than similar investments provide when rates are high. Thus, investing in fixed income during a low rate environment increases the probability that retirees would have to spend more heavily from — and potentially outlive — their savings.
2. **Price volatility**. When interest rates rise, the price of existing bonds falls because investors prefer newly issued bonds with higher coupon rates. DC investors typically invest in bond funds that hold hundreds or even thousands of individual bonds, which are generally subject to the same risk of price depreciation during rising rate environments. While the coupons from the underlying bonds remain positive, a sharp rise in yields can usher in a period of negative or near-zero rates of return for bond funds as the underlying bond holdings lose value. Even when bonds are intended to be held to maturity, to the extent they are callable, they are subject to significant reinvestment risk in volatile price environments.

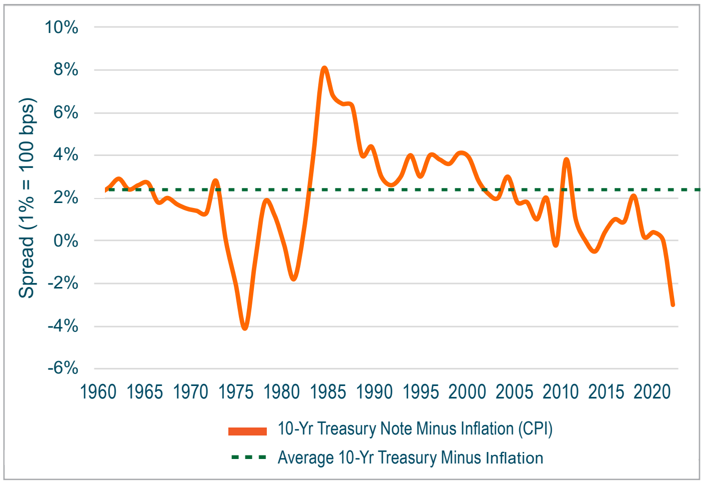
Inflation Risk

Inflation can quickly erode purchasing power for retirees as they typically allocate a significant portion of their retirement savings to bonds. When bond yields are lower than the current level of inflation, the impact is a negative real rate of return for participants. As the Federal Reserve seeks to lower inflation through rate hikes and quantitative tightening, we're seeing longer-term bond yields rise above all-time lows. Reinvestment into higher yielding bonds can help offset some of the erosion to retirees' portfolios. However, if inflation continues to hold at rates higher than prevailing bond yields, retirees may suffer prolonged and possibly permanent loss of purchasing power if they are forced to withdraw larger amounts from their savings to fund their retirement expenses.

During most of the last 70 years, the 10-year Treasury rate was above the inflation rate as depicted in **Exhibit 3**;[2] however, this relationship has not held since 2019.

Exhibit 3

Treasury Note Spread Over Inflation (CPI) 1960 – 2021



Source: Crestmont Research (www.crestmontresearch.com), Copyright 2022. Data as of 12/31/2021.

In December 2021, the Social Security Administration announced that the Social Security cost-of-living adjustment (COLA) would increase retiree benefits by 5.9% for 2022.[3] This COLA increase will partially offset the recent spikes in inflation affecting retirees. However, if inflation continues to remain at such elevated levels, retirees' wealth will continue to be eroded. Inflation in the United States (as measured by the CPI-U) reached 9.1% in June 2022, one of the highest numbers in decades.[4]

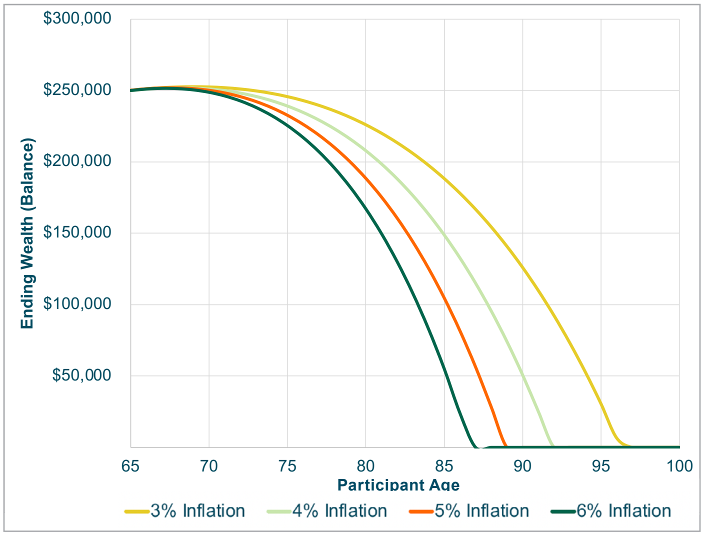
Exhibit 4, top right, illustrates the impact inflation can have on the longevity of a participant's portfolio during their retirement years when they are taking annual withdrawals. In this example, we assume the following:

- Participant with $250,000 in their DC plan at retirement
- Portfolio invested in a simple 60/40 portfolio (60% U.S. equity, 40% U.S. bonds)
- Returns assumed to be 6% for equity and 2.5% for bonds
- Participant withdraws $10,000 in first year of retirement, and each year thereafter the withdrawal increases by the noted inflation level (reflecting a consistent level of purchasing power for the individual)
- Inflation of 3%, 4%, 5%, and 6%

Exhibit 4

Hypothetical Portfolio Drawdown Under Various Inflation Scenarios

$250,000 beginning balance, $10,000 annual withdrawal, adjusted upwards annually by stated inflation rate



Source: PGIM

As the graph shows, there is a 10-year difference between when a participant would run out of money during periods of low inflation (i.e., 3%) and high inflation (i.e., 6%). This sizeable 10-year gap based only on inflation rates clearly demonstrates how impactful inflation can be for retirees. This situation also highlights the sequence of return risk, which is the timing of withdrawals from the plan. Sequence risk can also negatively impact outcomes for participants if they lock in losses by withdrawing money when markets are down.

RETIREMENT INCOME STRATEGIES FOR DC PARTICIPANTS TODAY

Retirement income products historically have not been held within DC plans. With an aging population and more regulatory support, we are seeing more plans add solutions to address retirement years, sometimes referred to as the retirement tier. And sponsors are increasingly concluding that they want to keep retirees in plan (Invesco cites an increase from 24% of plan sponsor respondents in 2015 to 83% in 2020[5]) and believe it may be in participants' best interests. Plans have a range of services they can provide, such as retirement planning tools, warm introductions to financial firms, or retirement income solutions integrated within the DC plan. Please refer to the DCIIA's **white papers** about retirement tier investments and products/services to learn about additional approaches.

DCIIA believes that the retirement tier approach can benefit plan participants and plan sponsors and can reasonably support retirement income strategies within the DC plan. In the interest of being as inclusive as possible, the remainder of this paper describes in-plan and out-of-plan strategies.

COMMON RETIREMENT INCOME SOLUTIONS FOR DC PARTICIPANTS

To start, we describe three commonly used retirement income solutions/strategies and explain how low interest rates, combined with the impact of near-term inflation, impacts each one. Note: Although the following options have been available for years, plan adoption has generally been modest, and they may not be optimal for retirees as stand-alone strategies considering the current environment.

Fixed Income Annuities

A fixed annuity is a type of insurance contract that promises to pay the buyer a specific, guaranteed interest rate on contributions to an account. Annuity payments can be immediate or deferred to a future date. Annuity interest rates tend to mirror bond interest rates because insurers invest approximately 70% of their capital in fixed income securities — typically corporate bonds. Thus, in a low interest rate environment, the insurer will only commit to pay out a rate that aligns with the assets supporting the insurance contract. This means annuity rates align with the underlying bond rates and in a low rate environment will be lower than their historical average.

Bond Laddering Strategies

Bond laddering involves buying bonds with differing maturities within an investor's portfolio, where the investor spends the interest payments but not the principal of the underlying bond. Buying bonds at different stages within the market cycle diversifies and spreads the risk that interest rates may be low when bonds need to be purchased to generate interest income. By staggering both purchase and maturity dates, investors are not locked into a single interest rate at a point in time or for an extended period. A persistent low rate environment eventually causes the investor to experience lower interest payments on their newly purchased fixed income investments, as higher rate bonds mature and proceeds are reinvested. This strategy is difficult to implement in a DC plan because DC plans do not invest in individual bonds, they buy funds composed of many bonds not customized to an individual investor. So, for any individual investor, a bond laddering strategy attempted in a DC plan could not be an exact match to that individual's preferences.

Systematic Withdrawal Strategies

Systematic withdrawal strategies focus on withdrawing a specified amount of money each year of retirement, adjusted over time for inflation. Systematic withdrawal strategies can be structured in different ways. The most common approach is to withdraw 4% of the starting balance (e.g., $40,000 from a $1,000,000 portfolio), increasing that amount for inflation no matter how the portfolio performs in the interim. Recent research suggests that in a low rate environment, a 4% withdrawal may be too high to preserve savings balances, even when investing in a balanced portfolio. Several other products, including ones designed to accommodate a low rate environment, exist. Examples include fixed indexed annuities, fixed annuities with a COLA and living benefit variable annuities. We do not detail them here, as many of these products have unique complexities that make them challenging to provide within a DC plan. As always, plan sponsors with their advisors or consultants should explore the available products to find those best suited for their participants.

EVOLVING RETIREMENT INCOME SOLUTIONS FOR DC PARTICIPANTS

The convergence of a persistent low rate environment, a nascent inflationary environment, and the growing appeal of retirement income solutions in DC plans has kicked off an innovation phase. The DC industry's ability to offer institutional products to plan participants at low costs provides an opportunity to deliver affordable retirement security to more Americans. Recent improvements to technology and operations are allowing exciting new elements of personalization to be integrated into plan solutions.

The following list describes some retirement income strategies that have been gaining traction and may help mitigate the effects of low interest rates and rising inflation.

- **Maximizing government-provided income; Social Security optimization through a DC bridge strategy** – DC plans may offer advice platforms that help participants strategize when to begin receiving Social Security benefits. If a person delays Social Security, payments will increase by about 8% for each year delayed. Participants can use their DC assets to "bridge" their income until they begin receiving Social Security benefits later. Using this type of bridge strategy is similar to purchasing a deferred income annuity. Note that deferring Social Security generally results in more favorable payout rates than what an insurer would offer for an annuity issued to a person of the same age. This bridging strategy is particularly advantageous when interest rates are low because the delayed credits received from higher Social Security payments are not dependent on interest rates. Additionally, Social Security payments increase with an annual cost-of-living adjustment. Logically, this COLA increase is lower when inflation is tame and higher when inflation is elevated, which enables participants to stay ahead of inflation and deteriorating purchasing power.[6]

- **Deferred fixed annuities attached to a TDF series** – Some TDF managers have partnered with insurance companies to create products that combine an accumulation-based series with a guaranteed income stream during retirement. Instead of simply transitioning from equity to fixed income investments, these TDF products slowly allocate to fixed deferred annuities and deferred income annuities. The allocation to annuities typically begins 10 to 15 years before retirement. Like traditional TDFs, these TDF glidepaths shift toward fixed income instruments as retirement approaches. In some instances, the fixed annuity allocation replaces all or a material portion of a traditional fixed income allocation in a TDF. This strategy of allocating to fixed annuities within the TDF gives participants the advantages of dollar cost averaging into the guaranteed income product over many different economic and interest rate cycles. Individuals usually are not "locked" into the annuity until they retire and elect to activate the payment stream from this feature.
- **Guaranteed lifetime withdrawal benefit attached to a TDF series** – Similar to the option above, but less dependent on interest rates, many insurers offer a guaranteed lifetime withdrawal benefit (GLWB) as part of a variable annuity integrated into a TDF series. These solutions give participants upside growth when markets rise, protection on their income when markets correct, and guaranteed income for life upon their retirement. These solutions typically maintain higher equity exposure and provide liquidity if needed even after income payouts have commenced. They also offer a guaranteed floor if either the equity or fixed income markets experience losses. Although their guarantee depends on the insurer's creditworthiness, GLWBs offer participants and sponsors an alternative that provides income security during persistent periods of low interest rates.

CONCLUSION

DC plan participants nearing retirement may need their employers' help to achieve financial security during an era of persistently low interest rates and increased inflation. Plan sponsors that serve retirees in-plan are in a unique position to potentially offer a higher level of retirement security than counterparts that offer only accumulation-oriented, pre-retirement solutions in-plan. Plan sponsors who offer retirement income products and investment solutions may be able to help improve participants' security in a low rate environment. Participants look to their DC plans for reliable investment options, including innovative, cost effective ways to lock in a secure retirement income stream. Plan sponsors may want to consider helping them mitigate challenges posed by persistently low interest rates and rising inflation.

Endnotes

[1] Vanguard, How America Saves 2021

[2] See i-rate-10-yr-yield.pdf (crestmontresearch.com)

[3] https://www.ssa.gov/oact/cola/latestCOLA.html

[4] https://www.cnbc.com/2021/10/29/inflation-notches-a-fresh-30-year-high-as-measured-by-the-feds-favorite-gauge.html

[5] Invesco: Shifting DC Times, Fall 2021

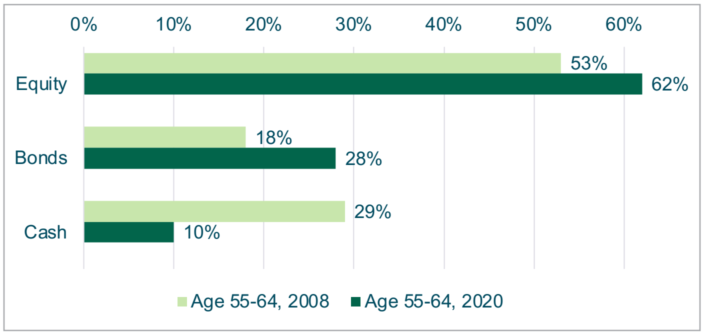
[6] For more information on this, see Steve Vernon's Spend Safely in Retirement

APPENDIX

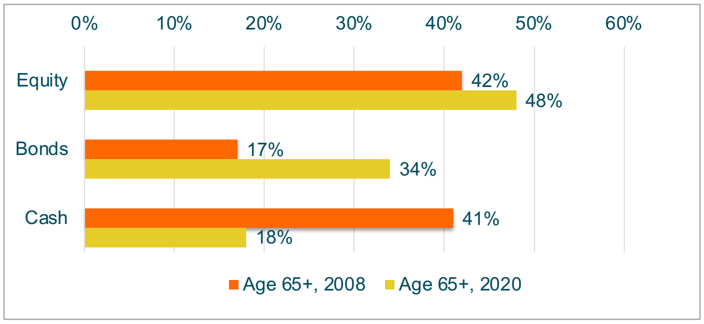
Exhibit 5

Target-Date Fund Adoption Has Changed the Asset Mix for Near-Retirees

Age 55 — 64



Age 65+



Source: Vanguard, How America Saves, 2009 & 2021.

ABOUT DCIIA

The Defined Contribution Institutional Investment Association (DCIIA) is a nonprofit association dedicated to enhancing the retirement security of America's workers. To do this, DCIIA fosters a dialogue among the leaders of the defined contribution community who are passionate about improving defined contribution outcomes. DCIIA's diverse group of members include investment managers, consultants and advisors, law firms, recordkeepers, insurance companies, plan sponsors and other thought leaders who are collectively committed to the best interests of plan participants. For more information, visit: www.dciia.org.

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