

# Improving retirement outcomes: the impact of TIAA Traditional in qualified default portfolios

## Background

Defined contribution (DC) retirement plans are the major source of retirement savings for millions of Americans. While employers have primary responsibility for DC plan design, participants have the ability to choose their contribution amounts, investment allocations, and when and how to take retirement income distributions. Prior research has found that many participants have a hard time making these decisions, especially with regard to determining how to select investment allocations and take retirement income.

The Pension Protection Act (PPA) of 2006 included a provision that helps individuals with asset allocation challenges by allowing employers to offer a qualified default investment alternative (QDIA) in DC plans. A QDIA can be either a target date fund (TDF), lifecycle fund, balanced fund or a managed account. Combined with auto-enrollment, a QDIA offers participants a simple strategy for portfolio diversification. TDFs have emerged as the dominant QDIA offered by plans and used by participants. Investment Company Institute (ICI) data (2021) show that by the end of 2018, TDFs were used by more than half (56%) of plan participants and accounted for more than one-quarter (27%) of plan assets.

TDFs help participants easily diversify their retirement savings by utilizing age-based portfolio allocation rules that automatically adjust participants' equity and fixed-income fund allocations as their investment horizon changes.

While easy to understand and use, most TDFs also have limitations when it comes to helping individuals achieve the ultimate goal of retirement security: accumulating sufficient retirement assets that can be easily converted into income that lasts throughout retirement.

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TIAA Traditional is issued by Teachers Insurance and Annuity Association of America (TIAA), New York, NY.

First, TDFs use a single “glidepath” to reduce equity fund exposure and increase bond fund exposure as a participant ages. This strategy reduces portfolio volatility due to equity risk but increases participants’ exposure to interest-rate risk as they grow older. The market conditions of 2021–2022 highlight the potentially pernicious impact of interest-rate risk, with bond funds losing 14.4%. By comparison, qualified default custom solutions offered through managed accounts can offer a broader range of investment options, including guaranteed products that reduce participant exposure to interest rate risk.

Second, while TDFs address asset allocation issues, participants still face the challenge of how to convert assets into lifetime income that will last through retirement. Annuities are a natural solution, but 401(k) plans by for-profit employers have rarely included this income option. One reason is that many 401(k) plans were designed as a supplementary plan and not viewed as a primary source of retirement income. By contrast, annuities are commonly offered in the nonprofit sector, especially in higher education institutional 403(b) plans. History again explains the trend, as these 403(b) plans were originally intended to be a source for income and were required to be funded with annuities.

The SECURE Act of 2019 addresses some concerns about the failure of 401(k) plans to provide lifetime income options for participants. Two key provisions require income projections to be included in DC plans and providing safe-harbor protections for sponsors to include in-plan annuities. While annuities remain relatively rare in 401(k) plans, they are becoming more prevalent. From 2019 to 2021, the percentage of 401(k) plans offering annuities has increased from 9% to 17%. However, these annuities are an in-plan income option and often not part of the qualified default portfolio.

## The research study: can adding guaranteed products to a qualified default improve retirement security?

This brief highlights findings from a recent independent study<sup>1</sup> that uses nearly 50 years of historical monthly data to examine whether adding TIAA Traditional (hereafter referred to as Traditional), a guaranteed product, to the fixed income allocation of a qualified default portfolio improves:

1. investment performance relative to a basic TDF during working life
2. household financial security (in terms of both income and assets) in retirement.

The study methodology compares two retirement strategies. The first strategy is to invest retirement contributions in a qualified default portfolio that includes allocations to Traditional. At retirement, the participant adopts a partial annuitization strategy by annuitizing only the TIAA Traditional assets, leaving the remainder of the retirement plan intact. The second strategy is to invest in a standard TDF that only has allocations to equity and bond funds. At retirement, the participant annuitizes enough of these assets to generate a level of guaranteed income equivalent to the Traditional annuity, again leaving the rest of the retirement plan intact.

The analysis uses three different glidepaths that reflect conservative, moderate and aggressive risk profiles. For each risk profile, nine different accumulation and distribution scenarios are analyzed, with accumulation dates that start between 1973 and 1980 and retirement dates that start between 1995 and 2010. This results in 27 unique portfolios for each strategy.<sup>2</sup> There are two main sets of findings:

1. Comparison of portfolio performance during accumulation
2. Comparison of retirement security after partial annuitization.

The overall finding is that adding TIAA Traditional to the fixed income allocation:

1. Improves the risk-return profile of a participant during accumulation.
2. Provides a cost-effective asset that can be readily converted into guaranteed income in retirement.
3. Tends to leave a significantly larger remaining retirement balance both to and through retirement.

## How TIAA Traditional helps build a better fixed-income basket

TIAA Traditional is a fixed annuity backed by the General Account of TIAA. Due to the management of interest-rate risk by TIAA in its General Account, TIAA Traditional has never had a monthly negative return in its history. By comparison, bond mutual funds must mark to market every day, passing any interest-rate risk through to participants.

TIAA Traditional differs from bond mutual funds by containing a “vintage” feature which allocates General Account returns that reflect prevailing interest rates at the time contributions are made. As the assets in TIAA’s General Account are ultimately returned to participants (net of operating expenses, reinvestments and capital reserves), income payout rates on the various vintages in TIAA

Traditional tend to increase over time as excess profits are released, resulting in higher income at retirement for those who accumulate over many years in Traditional. Furthermore, over the past 25 years ending with 2022, TIAA has increased payments 15 times, averaging over 1% per year. This makes TIAA Traditional a retirement product that truly spans the lifecycle of individuals, as it connects saving behavior directly to lifetime income.

In contrast, retirement plans holding only mutual funds leave the plan participant with a sum of money whose potential conversion into a payout stream requires selling assets periodically and/or purchasing a single premium immediate annuity (SPIA). Highly volatile security prices and interest rates make either activity challenging, especially in the context of an uncertain life span and declining decision-making ability in old age.

## Accumulation phase results

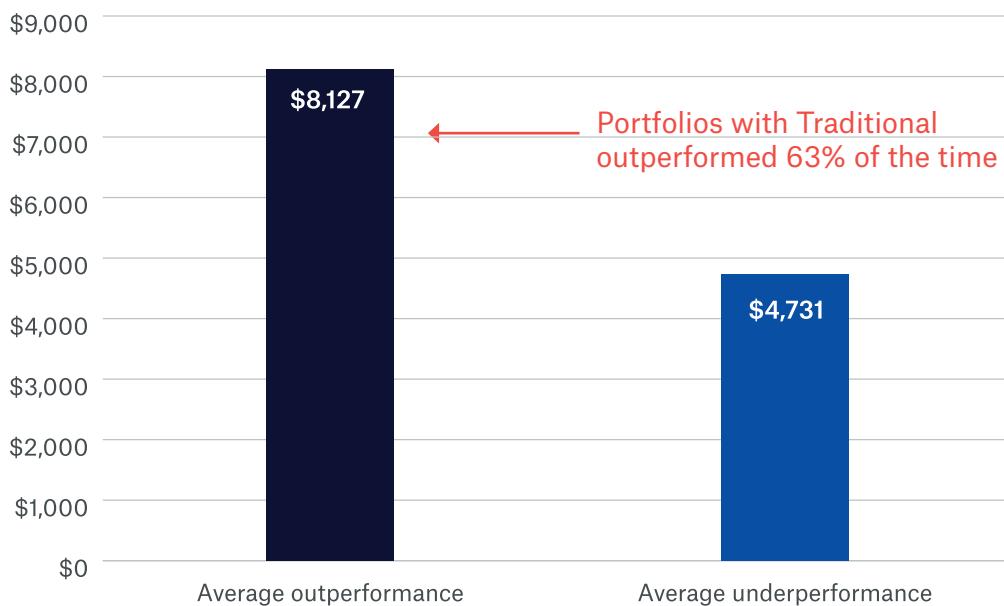
The period that the study encompasses, 1973–2021, includes several episodes of significant bull or bear equity markets, high inflation/interest rate periods, historically low inflation/interest rate periods, and economic booms and crises. The

differing starting dates, accumulation periods and payout phase lengths highlight how the distribution of historical returns for the different asset classes results in different ending balances for both the accumulation and payout phases, as well as differing annuitization amounts and total payouts over the respective payout phase.

TDF rebalancing is rather simple, as equities and bonds are bought and sold to hit the glidepath allocations at the beginning of each year. In the case of the qualified default portfolio with TIAA Traditional, in order to preserve the Loyalty Bonus, Traditional is never sold. Therefore, if equity markets decline, it is the bond account that is used as a buffer to get equities back to their target allocation according to the glidepath. When equity markets climb and equities are sold to rebalance, the amount of the inflow brings the allocation to Traditional as close as possible to its prescribed glidepath share, with the remainder of the positive rebalancing going into the bond account.

As seen in Figure 1, the portfolios with Traditional outperformed the portfolios without Traditional 63% of the time (17 out of 27 scenarios), and, importantly, the average outperformance was more than 1.7 times larger than the average underperformance.

**Figure 1. Average outperformance and underperformance of portfolios with Traditional, at the end of the accumulation phase**



The allocation to Traditional varies depending on the portfolio selected: conservative, moderate or aggressive. For initial contributions, the conservative portfolio has the largest allocation to Traditional (18%), followed by moderate (9%) and aggressive (3%). At retirement, the allocations to Traditional are 30%, 27% and 23%, respectively.

At the end of the accumulation phase, the qualified default portfolio with Traditional had more assets than the standard TDF without Traditional in two-thirds (6 of 9) of scenarios for the conservative and moderate portfolios, and 55% (5 of 9) of scenarios for the aggressive portfolio.

The ending asset differences highlight the better risk/return performance that comes from having Traditional in the investment portfolio.<sup>3</sup> The average asset outperformance for the conservative portfolio is nearly 3.5 times larger than the average underperformance. This difference falls to 1.4 times and 1.2 times for the moderate and aggressive portfolios (which have lower allocations to Traditional), respectively.

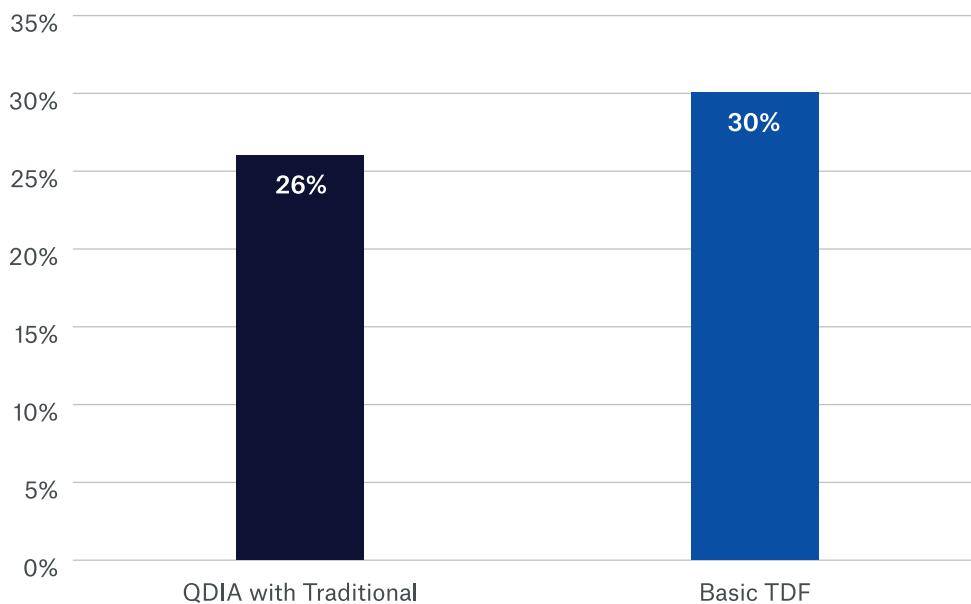
One implication of these results is that increasing the share of allocations to Traditional within a qualified default custom solution not only improves the risk/return profile of the investment portfolio, it also tends to increase both the likelihood and magnitude of improving end-of-accumulation asset balances.

## Distribution phase results

The distribution phase scenarios examine comparable partial annuitization strategies between the two qualified portfolios, assuming an age 65 participant taking a single-life annuity with a 10-year guarantee period. For the qualified solution with Traditional, a retiree only converts the Traditional balance into guaranteed annuity income. For the standard TDF, the retiree converts enough assets into an SPIA to generate the same level of income as the TIAA Traditional annuity.

Figure 2 shows the percentage of assets annuitized for each strategy. The analysis finds that, on average, the SPIA strategy needs to annuitize about 16% more assets to generate the same level of guaranteed income as the TIAA Traditional strategy. As a result, retirees using the TIAA Traditional qualified default tend to have significantly more assets remaining in their retirement account compared to retirees in the basic TDF.<sup>4</sup>

**Figure 2. Percent of assets annuitized to achieve equivalent income in each portfolio**

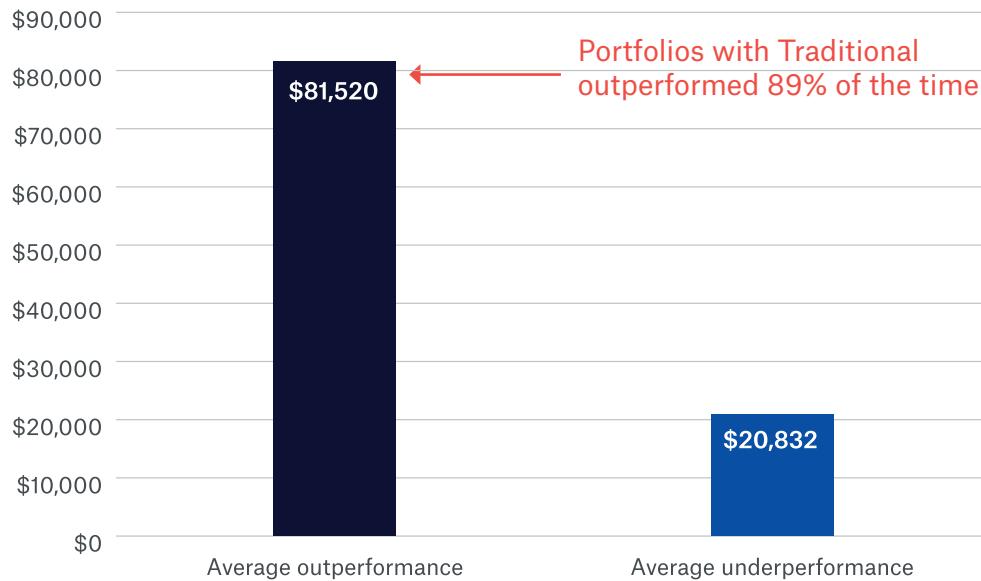


There are two reasons for this large difference. First, the Traditional vintage system means, at retirement, a career contributor receives a higher payout per dollar of assets compared to the retiree purchasing an SPIA. Second, because TIAA continually increases the size of payouts, the SPIA retiree must continue to purchase additional annuities to match the growing TIAA Traditional payouts.

The differences in annuity costs affect the ending asset balances, which were measured in 2021. As seen in Figure

3, the portfolios with Traditional outperformed in 89% (8 of 9) of scenarios for each risk profile. As with the end of the accumulation phase, the largest relative average gains were in the portfolios with larger allocations to Traditional. The conservative portfolio gain was, on average, 7.6 times larger than the one portfolio loss. The moderate and aggressive gains were about 3.7 and 2.4 times larger than the one portfolio loss, respectively. In aggregate, the average outperformance of the portfolios with Traditional is 3.9 times larger than the average asset loss.

**Figure 3. Average outperformance and underperformance at the end of the distribution phase**



## Looking ahead

TDFs have made it easier for millions of Americans to diversify their retirement portfolios. However, market and demographic challenges have made it increasingly clear that qualified default innovations are still needed to help individuals to and through retirement. TDFs without guaranteed products expose participants to increasing interest-rate risk as they approach retirement, and TDFs only address the accumulation phase of retirement savings, leaving retirees to fend for themselves when it comes to generating sufficient retirement income.

Our research shows that a qualified default custom solution that replaces a portion of a TDF's allocation to bond mutual funds with an allocation to a TIAA Traditional can be a highly effective tool for addressing both of these limitations.

Because qualified default portfolios with TIAA annuities exhibit superior accumulation-period performance and extend that superior performance throughout the distribution phase, they provide better outcomes for retirement plan participants, both to and through their retirement journeys.

## Improving outcomes by harvesting the illiquidity premium

The results highlighted in this study clearly show that replacing a portion of the fixed income allocation with an allocation to fully liquid and portable QDIA-approved TIAA Traditional offers significant benefits: higher balances at the end of both the accumulation and distribution phases, and additional dollars to spend during retirement.

The same study also examined the effects of allocating contributions to a less-liquid version of TIAA Traditional. Less-liquid guaranteed products can provide an illiquidity premium by investing in longer term and higher-yielding fixed-income and alternative assets.

The portfolios with the less-liquid version of Traditional further improved participant outcomes relative to the fully liquid portfolios and to standard TDFs. Specifically, across all scenarios in the study, portfolios using the less-liquid version of Traditional outperformed a standard TDF in 93% (25 of 27) of accumulation scenarios and 96% (26 of 27) of end-of-retirement scenarios.

At the end of the accumulation phase, portfolios with less-liquid Traditional had average gains ranging from \$7,152 to \$11,535. On average, portfolios with less-liquid Traditional had an end-of-accumulation balance that was 0.8% (\$5,174) higher than portfolios with the QDIA approved Traditional, and an end-of-distribution balance that was 0.4% (\$7,333) higher. Moreover, participants in the less-liquid Traditional portfolio didn't have to annuitize as much money as participants using the qualified default Traditional portfolio to receive an equivalent payout, leaving them with an additional \$3,663 to spend during retirement.

**Disclosure:** There are substantial differences between bond funds and the TIAA Traditional guaranteed product, including differing investment objectives, costs and expenses, liquidity, safety, guarantees or insurance, and fluctuation of principal or return. Past performance is no guarantee of future results. There is no assurance that additional amounts above the TIAA Traditional Annuity's guaranteed minimum rate will be declared in the future. TIAA Traditional performance was calculated based on actual interest crediting rates in effect. These rates included a guaranteed minimum interest rate of 3.00% plus discretionary additional interest that may be declared each year and, if declared, is not guaranteed for periods other than the period for which it is declared. TIAA's newer contracts, Retirement Choice and Retirement Choice Plus, provide for a guaranteed minimum interest rate of between 1% and 3%. TIAA Traditional is not a security and does not have any explicit expense charges, but may impose surrender charges on certain withdrawals. Choices of where to allocate retirement savings shouldn't be made solely upon historical performance. Rather, all elements of each product under consideration should be evaluated.

Annuity contracts and certificates are issued by Teachers Insurance and Annuity Association of America (TIAA), New York, N.Y.

Any guarantees under annuities by TIAA are subject to TIAA's claims-paying ability.

TIAA may establish additional amounts of interest and income benefits above contractually guaranteed levels. Additional amounts are not guaranteed beyond the period for which they are declared.

## Endnotes

- 1 “A Lifecycle Analysis of the Performance of TIAA’s Traditional Annuity in a Target Date Fund,” (2023) by Conrad Ciccotello (University of Denver), Miguel Herce (Charles Rivers Associates), and Mark Meyer (Charles River Associates).
- 2 While the research paper analyzes both illiquid (non-cashable) and liquid (cashable) versions of Traditional, this brief focuses on comparing results using only the liquid annuity because that is the type approved for use by the Department of Labor.
- 3 For a full analysis of the relative performance of TIAA Traditional annuities in a portfolio, see: Babbel, D., Herce, M., & Meyer, M. (2015). *The performance of TIAA’s Traditional Retirement Annuity for selected investment cohorts, 1970–2005 through 2013*. TIAA-CREF Institute Research Dialogue No. 116, [tiaa.org/content/dam/tiaa-institute/pdf/full-report/2017-02/babbel-06.pdf](https://tiaa.org/content/dam/tiaa-institute/pdf/full-report/2017-02/babbel-06.pdf); and Babbel, D., Ciccotello, C., Herce, M., & Meyer, M. (2022). *A cohort analysis of the investment performance of TIAA Traditional during working life*. TIAA Institute Research Dialogue No. 184, [tiaa.org/public/institute/publication/2022/cohort-analysis-investment-performance-tiaa-traditional](https://tiaa.org/public/institute/publication/2022/cohort-analysis-investment-performance-tiaa-traditional).
- 4 Assumes equal income from both portfolios funded by ongoing annuity purchases for the TDF without Traditional.

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Annuity contracts may contain terms for keeping them in force. TIAA can provide you with costs and complete details.

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