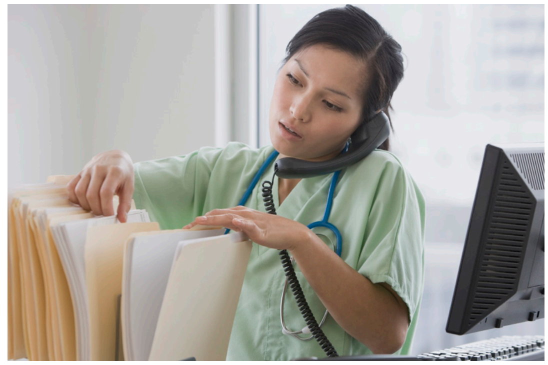

Investing for a Lifetime. Guaranteed.

Providing guaranteed lifetime-income options can improve participants’ retirement readiness.

Financial Services

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Ensure employees will receive income for life.

Research concludes that if retirees elect systematic withdrawals that are equal to the income payments they would receive from a life annuity, there is a greater than 50% chance that they will run out of money.[1] Offering a low-cost, lifetime-income option such as an annuity with a lifetime-income feature allows employees to retire with income that will last a lifetime.

Put employees on a more confident path toward retirement.

For years, many American workers have had a guaranteed income option as the foundation of their retirement plans, providing them with security and confidence. However, the shift from Defined Benefit (DB) to Defined Contribution (DC) plans has resulted in the loss of this reliable source of lifetime income for many employees.[2] It also has placed the decision making and burden of managing retirement assets in their hands, putting their retirement at risk.

"Our goal is to increase public awareness of the need for annuities and encourage employers to offer annuities as an option."

– Hilda Solis, Secretary, U.S. Department of Labor 12/2009

Solution

Offering lifetime-income products such as annuities within a retirement plan can help employees overcome these challenges and improve their retirement readiness. It can also help you meet your fiduciary obligations.

- Enabling employees to contribute to a fixed annuity through their plan during their working years makes the plan more like a pension plan with a defined-contribution structure.
- An annuity is the only financial product that can guarantee lifetime income.[3]
- Offering lifetime-income options can help raise employees' confidence that they will be able to retire comfortably.

Read on to learn more about these and many other benefits of lifetime-income options in retirement plans.

The benefits of annuities in retirement plans:

1 Better investor behaviors

Research indicates that individuals are more than twice as likely to annuitize in retirement if they save through an annuity in a DC plan during their working years.[4]

2 More income in retirement

Employees may receive larger income payments by contributing to an annuity over time compared with purchasing a separate annuity for the same amount at retirement. Our analysis has shown an increase of 20% or more.[5]

3 Lower cost

In-plan annuities often cost less than those purchased outside of a plan.[6] TIAA-CREF annuities are among the lowest cost in the market today.[7]

4 Reassurance for plan sponsors

Consistent with fiduciary duty and safe harbor regulations, offering a lifetime-income option increases confidence that employees can retire more comfortably.

5 Meeting key employee demand for lifetime income

72% of participants surveyed by Brightwork Partners said they wanted an annuity as an investment option in their retirement plans.[8]

Advantages of in-plan annuities

Findings reveal 40% of TIAA-CREF plan participants choose to annuitize part of their savings at retirement versus 4 to 6% of the 401(k) plan market.[9]

1 Better investor behavior

More likely to annuitize at retirement for lifetime income

A challenge many participants face is how to transform retirement assets into a flow of retirement income. TIAA-CREF has found that participants who contribute to a lifetime-income product during their working years often tend to be better prepared, and are more likely to face a potentially smoother transition to retirement. They are also more likely to annuitize for the income they will need in retirement — participants who invest in an annuity in their plan while they are working can avoid psychological barriers to purchasing an annuity after retirement.

Over the decades that TIAA-CREF has been offering annuities in retirement plans, we have found that:

- 40% of employees choose to annuitize part of their savings at retirement versus 4 to 6% of the 401(k) plan market.[9]
- Three out of four retirees receiving benefits from us have annuity income as part of their overall retirement distribution.

More likely to stay the course during volatile markets

Investing in annuities during their accumulation (working) years can discourage employees from trying to time the market. According to Dalbar, the Boston-based research group that has analyzed investor behavior over two decades, the average investor tends to sell after a market decline and buy during an up market, effectively selling low and buying high. This behavior contradicts best investment practices.[10] “Guaranteed” annuities can help correct this behavior as participants may be more likely to stay invested in them during the markets’ ups and downs — resulting in potentially better returns over the long term.[10]

Annuities held long term in plans may provide higher retirement income.

A plan participant age 65 retiring 7/1/2013 who accumulated $100,000 in TIAA Traditional Single Life Annuity, following 25 years of making level monthly contributions without making withdrawals, would receive more than $600 in monthly income for the first year of retirement. Someone who initially purchased the annuity with $100,000 at retirement would receive only $500 per month (see accompanying data).

2 More income in retirement

TIAA Traditional can help maximize income at retirement.

Individuals who have invested in TIAA Traditional over their working years have historically received more income at retirement than individuals who invested the same amount in an annuity at retirement.[11]

We have found that providing annuities as an option during the accumulation phase (when participants are building savings) correlates with employees having higher income and a higher average balance at retirement. Contributing to the TIAA Traditional Annuity in a DC plan for 30 years has historically resulted in a monthly income payment 5 to 25% higher than if the participant had not contributed over their working years but instead purchased an annuity at retirement.

TIAA-CREF has been providing annuities in retirement plans for almost 100 years and has the highest average retirement account balances out of 29 companies surveyed.[12] (Please note average retirement account balances are not a measure of performance of TIAA-CREF retirement offerings.)

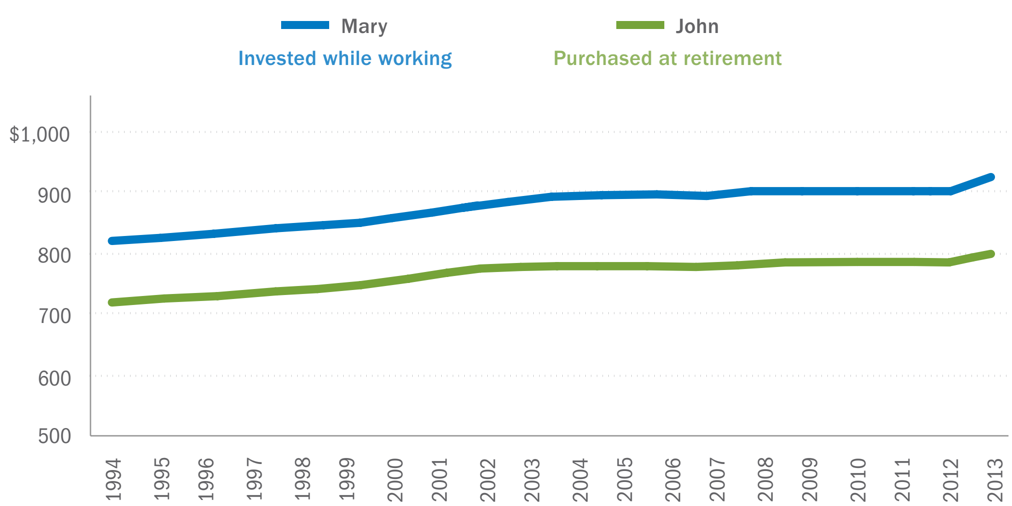
A history of higher income

Plan participants who have invested in TIAA Traditional over their working lives consistently received more income every month and every year of their retirement (see chart below).[11]

Investing in TIAA Traditional over time resulted in higher lifetime income than purchasing an annuity at retirement.*

Historical monthly income per $100,000: 1994 retiree

The chart below illustrates the actual income received by two people who both retired on the same day in 1994 and annuitized with TIAA Traditional. Mary invested in TIAA Traditional over the course of her working life. John purchased TIAA Traditional at retirement. Mary had consistently higher income in retirement than John for the past 20 years, which resulted in $34,000 more retirement income for Mary.



* TIAA Actuarial, based on actual historical data of the TIAA Standard payout annuity

TIAA-CREF annuities, especially TIAA Traditional, are the lowest cost annuities in the market today — and have been for 50 years.[7]

3 Lower cost

Employees choosing an annuity through a DC plan generally enjoy more favorable pricing and lower M&E (mortality and expense) charges than individuals who buy annuities in the retail market.[13] David Blanchett, head of retirement research for Morningstar's Investment Management division, noted on **PLANSPONSOR.com** that *with better features and lower costs, annuities held in plans are best-of-breed with institutional pricing. As a fiduciary, a plan sponsor should feel confident in these high-quality insurance products. One notable feature of institutional annuities is that many of them have no surrender penalties.*[14]

At about 50 basis points (0.5%), TIAA Traditional charges less than half the industry institutional annuity cost average — comparable annuities outside of the savings plan can average 2 to 4%.[7]

Including lifetime-income options in your plan demonstrates your fiduciary commitment to helping your employees achieve security.

4 Reassurance for plan sponsors

Some participants believe they can manage the distribution of their own money for better outcomes in retirement. But research concludes that if retirees elect systematic withdrawals that are equal to the income payments they would receive from a life annuity, there is a greater than 50% chance that they will run out of money.[15] As a fiduciary, you can take comfort in the fact that offering a low-cost, lifetime-income product such as an annuity with a lifetime-income option can increase confidence that employees can afford to retire and live comfortably in retirement.

72% of participants surveyed said they would be somewhat or very interested in contributing to an investment option in their 401(k), 403(b) or 457 plan that focuses mainly on generating guaranteed monthly income in retirement.[8]

5 Meeting key employee demand for lifetime income

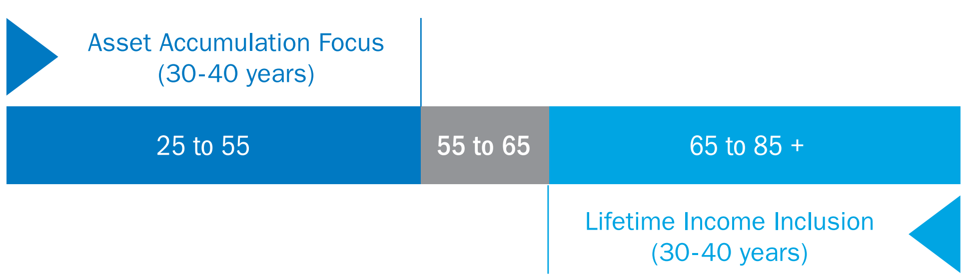
With many people spending as many years in retirement as they do working, getting employees through retirement with enough lifetime income is a growing concern. Americans' confidence in their ability to retire comfortably is at a historically low level.[16] Only 14% are "very confident" and 38% "somewhat confident" that they will have enough money to reach this milestone.[16] Among employees in higher education, the numbers are better but still reflect a strong concern, with only 25% feeling "very confident" and 50% feeling "somewhat confident."[17]

It is not surprising that employees, especially those close to retirement, are looking for lifetime income. One study cited 85% of investors 55 to 70 years of age as saying they value guaranteed monthly income over pursuing above-average monthly returns.[18] A recent Aon Hewitt Survey noted that more than 80% of employers doubt that their employees will be able to manage their income once they retire.[19]

Offering in-plan annuities can help meet employees' demand for lifetime income. And, only an insurance company such as TIAA can offer a product with income options guaranteed for life.

The importance of lifetime income

Lifetime income is important because people generally spend as many years in retirement as they do working.*



*The periods noted are part of a hypothetical example as periods noted will vary for each individual.

When combined with TIAA-CREF advice, participant outcomes can be even better.

At TIAA-CREF, we have found that participants who receive our personalized advice can have, on average, potentially more retirement income per month than participants who receive only guidance. Participants also tend to take an action that enhances retirement readiness.

A TIAA-CREF survey found that more than half of participants who received advice increased their contributions.[20] Under the conditions we studied, over a 30-year period, that could potentially result in $200,000 more in retirement savings[21] — or $1,100 more per month for life.[22]

Additional advantages from our history of strength

TIAA-CREF's long-term investment approach, attention to cost and disciplined risk management is designed to help deliver consistent performance and lifetime income. Our innovative approach to open architecture combines best-in-class investments with unique lifetime-income solutions to help ensure that employees will not outlive their retirement savings.[23] This has allowed us to pay competitive rates, maintain our high financial strength ratings, and still deliver secure, guaranteed retirement income.

- **Ability to pay** — We pay over $12.3 billion in annuity payments and other disbursements per year to participants, and since 1918 a total of $329 billion in cumulative benefit and dividends have been paid.[24]
- **Safety and stability** — Contributions are backed by the claims-paying ability of TIAA, one of only three insurance groups in the United States to hold the highest financial strength ratings currently awarded from all four leading independent insurance industry ratings agencies.[25]

Effective, low-cost retirement income options through a menu that supports both the goals of accumulating assets and generating lifetime income, including guaranteed options, should play a major role in your plan's investment lineup.

For almost a century, every individual who has invested in TIAA Traditional has been able to count on a steady stream of income throughout retirement.

The TIAA-CREF higher standard

Lifetime income: Lifetime-income options are the foundation of our platform, which distinguishes us from many other providers. This base is complemented by a full open-architecture investment menu and brokerage options.

Personalized advice: TIAA-CREF has a more diversified model for providing personalized advice on employees' retirement plan investment options than even many of our largest competitors. Our model offers comprehensive options, flexibility and convenience.

Disciplined investment fiduciary process: TIAA-CREF works closely with you and your consultants to implement a comprehensive fiduciary compliance process.

For more information about TIAA-CREF and what we offer:

- Visit **tiaa-cref.org**,
- Contact your Relationship Manager, or
- Call the Administrator Telephone Center at **888 842-7782**, Monday through Friday, 8 a.m. to 8 p.m. (ET).

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[1] Source: *The Role of Guaranteed Income in Improving Retirement Security*. David P. Richardson, TIAA CREF Institute working paper, 2012

[2] US Bureau of Labor Statistics 2010 Consumer Expenditure Survey

[3] Source: American Council of Life Insurers (ACLI)

[4] *TRENDS AND ISSUES: Retirees, Annuitization and Defined Contribution Plans* white paper, Paul. J. Yakoboski, TIAA-CREF Institute (April 2010)

[5] Source: TIAA Actuarial. Assumes 30 years of level contributions to TIAA Traditional Annuity as compared to a one-time contribution at retirement, Single Life Annuity, age 65. Results are as of July 1, 2013. Our results are based on historical and current crediting and payout interest rates, and under different interest rate scenarios the results will vary. The experience of each investor depends on a many factors, including the number of years of participation, varying contribution levels, and the interest rate environment at the time of retirement. Thus, individual experience will vary. These calculations are purely hypothetical and do not illustrate past or projected performance. Past performance is not indicative of future returns

[6] The median participant-weighted all-in fee for TIAA-CREF record-kept plans is 0.51% of assets, while the median stated in the ICI/Deloitte 2011 Defined Contribution 401(k) fee study was 0.78%. TIAA-CREF annuities average about 50 basis points (0.5%), less than half the industry institutional annuity costs — comparable annuities outside the savings plan can average 2 - 4%.

[7] Based on Morningstar data, the expense ratio on all mutual fund products and variable annuity accounts managed by TIAA-CREF is generally less than half the mutual fund industry average. (64% are less than half their respective Morningstar Universe average and 57% are less than half their respective Morningstar Universe median.) Morningstar Direct, June 30, 2013.

[8] Source: Brightwork Partners (2011)

[9] Source: TIAA-CREF internal research.

[10] Source: Based on Dalbar findings. Quantitative analysis of investor behavior, 2012; average investment outcome refers to the universe of all stock and bond mutual fund investors whose actions and financial results are restated to represent a single stock and bond investor. Since 1994, DALBAR's QAIB has been measuring the effects of investor decisions to buy, sell and switch into and out of mutual funds over both short- and long-term time frames. The results have consistently shown that the average investor has earned less — in many cases, much less — than mutual fund performance reports would suggest. QAIB used data from the Investment Company Institute (ICI), Standard & Poor's and Barclays Capital Index Products to compare mutual fund investor returns to an appropriate set of benchmarks. Covering the period from January 1, 1991, to December 31, 2010, the study utilized mutual fund sales, redemptions and exchanges each month as the measure of investor behavior. These Behaviors reflected the "average investor." Based on this behavior, the analysis calculated the "average investor return" for various periods. These results were then compared to the returns of respective indexes. Source: "Quantitative Analysis of Investor Behavior, 2011," DALBAR, Inc. www.dalbar.com The performance figures for TIAA Traditional and CREF Stock were calculated based on an initial investment made at the start of the period (January 1, 1991) and did not take into account the money flowing into and out of these offerings, which was a factor in the DALBAR calculations.

[11] Source: TIAA Actuarial proprietary research. As of 7/1/13, someone who was in TIAA Traditional for 25 years and amassed $100,000 through level monthly contributions would receive 23% more income as compared to someone who contributed or transferred $100,000 immediately before retirement. However, the experience of each investor depends on a many factors, including the number of years of participation, varying contribution levels, and the interest rate environment at the time of retirement. Thus, individual experience will vary. These calculations are purely hypothetical and do not illustrate past or projected performance. Past performance is not indicative of future returns. Our results are based on historical and current crediting and payout interest rates, and under different interest rate scenarios the results will vary.

[12] Source: LIMRA, Not-for-Profit Market Survey, first-quarter 2013 results. Based on a survey of 29 companies. Market share ranking does not reflect current investment performance. Average assets per participant are based on full-service business. Please note average retirement account balances are not a measure of performance of TIAA-CREF retirement offerings.

[13] Statement on Best Practices for the Design of Defined Contribution Plans," Financial Economists Roundtable, October 2006. Additional note: The median participant-weighted all-in fee for TIAA-CREF record-kept plans is 0.51% of assets, while the median stated in the ICI/Deloitte 2011 Defined Contribution 401(k) fee study was 0.78%. TIAA-CREF annuities average .48%, less than ½ the industry institutional annuity costs — comparable annuities outside the savings plan can average 2 - 4%.

[14] Source: Based on content on PLANSPONSOR.com (March 2013)

[15] Source: TIAA-CREF Institute: *TRENDS AND ISSUES* (10/06). The payout annuity assumes a 65-year-old retiree, single-life annuity with 10 years guaranteed, 4% rate of return, and the mortality assumptions used in computing current total income under TIAA or CREF payout annuities.

[16] Source: 2012 Retirement Confidence Survey conducted by the Employee Benefits Research Institute

[17] *Retirement Confidence on Campus: The 2011 Higher Education Retirement Confidence Survey*, Paul J. Yakoboski, TIAA-CREF Institute, June 2011.

[18] The Trends that will Define the Industry in 2010, Corporate Executive Board

[19] Aon Hewitt Survey, 2012

[20] Based on a survey of 2,376 individuals that received TIAA-CREF advice via phone or in person from April through September 2011

[21] Based on TIAA-CREF proprietary research, 2010-2012. In 2010, the average annual contribution of premium-paying participants who took advantage of our Advice offering was $11,900 prior to the session and $13,700 after the session, representing an increase of 15%. Hypothetically, over a 30-year period, the additional accumulation at retirement will be $204,388. This assumes end-of-month contributions, 6% annual rate of return and 3% annual premium increase rate.

[22] The payout annuity in all cases assumes a 65-year-old retiree, single life annuity with 10 years guaranteed, 4% rate of return, and the mortality assumptions used in computing current total income under TIAA pension payout annuities. The experience of each investor depends on a number of factors and individual experience will vary. These calculations are purely hypothetical and do not illustrate past or projected performance. Past performance is not indicative of future returns. Account balances depend on employee and employer contribution rates as well as performance of the investments selected.

[23] **Past performance is not indicative of future results.**

[24] As of 12/31/12. Benefits include annuity payments from TIAA and CREF, additional amounts paid on TIAA Traditional above the guaranteed rate, surrender benefits and other withdrawals, death benefits, health insurance and disability insurance benefits, and all other policy proceeds paid.

[25] For its stability, claims-paying ability and overall financial strength, TIAA currently holds the highest possible ratings from the four leading company rating agencies: A.M. Best (A++ as of 5/13), Fitch (AAA as of 6/13), Moody's Investors Service (Aaa as of 7/13) and Standard & Poor's (AA+ as of 6/13). Per S&P criteria, the downgrade of U.S. long-term government debt limits the highest rating of U.S. insurers to AA+ (the second-highest rating available). There is no guarantee that current ratings will be maintained. Ratings represent a company's ability to meet policyholders' obligations and do not apply to variable annuities, mutual funds or any other product or service not fully backed by TIAA's claims-paying ability.

TIAA Traditional is a guaranteed insurance contract and not an investment for Federal Securities Law purposes.

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

Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not bank deposits, are not insured by any federal government agency, are not a condition to any banking service or activity and may lose value.

TIAA-CREF is not providing investment advice and is not a plan fiduciary with respect to the education and information presented herein. Note also that TIAA cannot and does not provide legal advice. Consult such advice from your tax and legal advisors. The TIAA-CREF Retirement Advisor will provide asset allocation advice based upon the information that you provide. It will not provide specific recommendations regarding your retirement assets.

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