

About the research

Hybrid retirement plans that combine the best features of defined benefit (DB) and defined contribution (DC) plans can provide an efficient and equitable means of ensuring retirement security. Yet most U.S. private sector workers lack access to such plans. The TIAA-CREF system, which began in 1918 and covers millions of workers in the nonprofit and public sectors, provides an example of a plan design with features of a hybrid co-operative pension.

The report summarized here, *TIAA and CREF: Program Features and Recent Evidence on Performance and Utilization*, by Benjamin Goodman, TIAA-CREF, and David P. Richardson, TIAA-CREF Institute, analyzes the historical performance and key features of TIAA (a guaranteed fixed annuity) and CREF (a variable annuity), including contributions, investment returns, risk pooling and distribution characteristics.

To download the full report, click here or paste into your browser: www.tiaa-crefinstitute.org/public/p df/rd114a_program_features_rece nt_evidence.pdf



TIAA-CREF Institute

TIAA and CREF: Program Features and Recent Evidence on Performance and Utilization

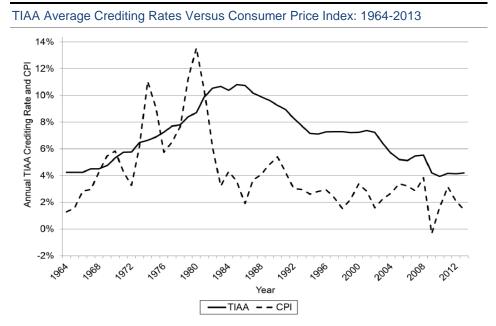
Research from the TIAA-CREF Institute September 2015

Lifetime income options in a hybrid plan design

As the U.S. population ages and spends more time in retirement, policymakers have taken increased interest in hybrid retirement plan designs with guaranteed income features. The TIAA-CREF system fits this description, combining a DC structure during the savings-accumulation phase, a DB structure during retirement, and, for people who participate in the fixed annuity component over their working and retired lives, a co-operative pension structure that distributes to participants all assets net of operating costs and can provide significant income advantages in retirement compared to other plan structures.

When building their retirement portfolios, TIAA-CREF system participants choose from a range of mutual funds, deferred fixed and variable annuities, and other investments. There is one guaranteed asset: the TIAA Traditional annuity, which provides a guarantee of principal, guaranteed interest rate and additional amounts in excess of the guaranteed rate.

TIAA Traditional can be purchased at retirement or while working by investing in deferred TIAA annuity units through an employment-based retirement plan. Accumulated TIAA units earn a lifetime guaranteed minimum rate of return that is generally between 1% and 3%. For the past few decades, however, actual crediting rates have been much higher and have exceeded the inflation rate, as shown below.



Source: TIAA-CREF and Bureau of Labor Statistics

Reduced volatility

Another important aspect of investing in TIAA is the lack of downside volatility in the total return to the participant. When market interest rates rise or fall, bond holders can experience portfolio gains or losses to their total return because of the interaction between interest rates and bond prices. By contrast, TIAA participants always earn a positive return because the interest rate risk is managed within the TIAA general account, which is not required to distribute capital losses to participants. This lack of downside investment risk compares favorably to other "safe" fixed-income investments – namely bond funds – that are required to make such distributions (see chart below).

Average Returns to TIAA and Barclays Aggregate (as of December 31, 2013)

| | 5 years | 10 years | 20 years | 30 years |
|-------------------------|---------|----------|----------|----------|
| TIAA Traditional | | | | |
| Average return | 4.5% | 4.3% | 5.9% | 7.4% |
| # of negative months | 0 | 0 | 0 | 0 |
| Barclays Aggregate Bond | | | | |
| Average return | 4.3% | 4.4% | 5.6% | 7.5% |
| # of negative months | 17 | 38 | 77 | 106 |

Source: Author calculations

The CREF variable annuity

In 1952, CREF became the first commercially offered variable annuity product. Its design concept is simple: During the accumulation phase, CREF investments appear to perform similar to mutual fund investments. Participants purchase fractional shares (units) of a basket of underlying assets. The daily share value changes based on the underlying performance of the assets held in the fund. But there is a key difference between CREF and a mutual fund in the payout phase, when a participant can convert CREF accumulations into a stream of lifetime income. Similar to TIAA, participants can choose if, when, how and how much of their CREF accumulations to annuitize. They also may take non-annuity distributions similar to mutual funds, take lump-sum or systematic withdrawals, or draw down their accumulations based on the Required Minimum Distribution rules.

A unique feature of the CREF payout annuity is that it offers post-settlement asset allocation choices. Conversion from any CREF annuity to another CREF annuity and/or to a TIAA annuity is permitted. Thus, if an annuitant wants to "lock in" gains after a good year, or adjust the risk of her annuity payment stream, she can transfer some or all the assets to another account. In this way, an overall asset allocation goal can be achieved through retirement, with the right to collect payments for life.

For more information

To learn more about converting savings to income in retirement, go to www.tiaacrefinstitute.org > Research > Lifetime Income & Retirement Security.



This material is for informational purposes only and should not be regarded as a recommendation or an offer to buy or sell any product or service to which this information may relate. Certain products and services may not be available to all entities or persons. **Investment**, **insurance and annuity products are not FDIC insured**, **are not bank guaranteed**, **are not 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 Institute is a division of Teachers Insurance and Annuity Association of America (TIAA), New York, NY. TIAA-CREF Individual & Institutional Services, LLC, Teachers Personal Investors Services, Inc., and Nuveen Securities, LLC, Members FINRA and SIPC, distribute securities products.

©2015 Teachers Insurance and Annuity Association of America - College Retirement Equities Fund (TIAA-CREF), 730 Third Avenue, New York, NY 10017.