

Presentation to Financial Advisor Advisory Board
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August 7, 2001

I am delighted to have the opportunity to join you today in the continuing series of discussions on life annuities.

My presentation this morning will focus on TIAA-CREF Retirement Annuities - how they work, how they are priced and how they may be helpful to you in meeting your clients financial objectives.

Let me begin by briefly reviewing the annuity concept.

At its most fundamental level, a life annuity is a mechanism through which a group of people agree to pool their assets in order to avoid the risk of outliving their financial resources.

These people recognize that some will inevitably live far longer than average and will thus need additional assets to support them at the advanced ages, while others will die prematurely and thus not need all of their retirement savings to provide income in retirement.

Since they all face the same risk of outliving their assets, but no one knows how long they will live, they agree to pool their assets with the understanding that the assets of those who die early will be used to provide for those who survive.

The role of the insurance company is simply to ensure that the arrangement is administered fairly and equitably among all interested parties.

This mutually beneficial arrangement ensures:

- That each participant will receive monthly income for as long as he or she lives, and
- That the monthly income payments will be larger than the payments would have been if the individual had instead chosen to receive level payments --comprised of principal and interest-- for a fixed period equal to his or her average life expectancy at retirement.

Stated another way, under this arrangement each payment is comprised of principal plus interest plus a share in the assets of those who fail to survive.

A life annuity would thus appear to offer three principal advantages:

First, an annuity maximizes the amount of retirement income that can be generated from a retiree's nest egg.

For many individuals this can mean an enhanced standard of living in retirement or perhaps being able to afford an earlier retirement.

For wealthier individuals, it can mean freeing up more assets to be used for other purposes (such as: charity, gifts, estate planning, or more aggressive investing)

A second advantage of annuities is that they enable people to avoid the financial risk of outliving their assets.

I'm constantly amazed at how many financial writers blithely tell their readers to draw down their retirement savings at a rate that assumes they will live for 25 or 30 years in retirement, and simply ignore the very significant financial risk of living longer than 30 years.

One wonders what exactly these writers expect people to do if they find themselves to be quite healthy (thank you) even as they approach the end of the 25-or-30-year deadline: the period the financial writer had suggested they use for planning purposes, with their retirement savings rapidly dwindling.

It's also difficult to understand why people, who readily recognize the financial risk of premature death, simply ignore the equally significant risk that they will outlive their retirement savings.

We would all advise a 35-year old individual with young children to buy some 10- or 20- year term life insurance. Yet the probability of a relatively healthy 35 year old dying within the next 20, or even 25 years, is less than 5% while the probability that a healthy 65-year-old will live to be 100 is approximately 10%, -- and there is a 25% chance that the 65-year-old will live to be 95!

A third advantage of annuities relates to the human element, which is frequently ignored in these discussions.

An annuity provides financial security and peace of mind to the participant.

While there are many financial issues to consider in deciding whether to choose a life annuity, it is also important to recognize the psychic benefits and peace of mind that come from knowing that you can never outlive your retirement savings.

The transition from active employment and a regular paycheck to living on a fixed amount of savings can be quite frightening to many people, and it is not uncommon for retirees to begin feeling (financially) insecure as they age, even if they have substantial assets.

They see their physical strength and health declining, along with their hearing, visual acuity and mental vigor. They experience the illness, decline and death of friends and loved ones and feel increasingly frightened, vulnerable and alone.

They begin to see their life savings as the only barrier between themselves and an increasingly frightening world that they cannot control or even fully understand.

As a result, many older people develop an aversion to spending their money in retirement for fear that they will deplete their savings and be left with insufficient assets in their declining years.

We've all read about elderly people who live impoverished lives, but are then found to have had substantial assets squirreled away, after they die.

Similarly, I know of a large supermarket in an attractive up-scale neighborhood in Miami Beach that was forced to close its doors several years ago due to repeated and uncontrollable shoplifting by educated, middle-income senior citizens.

The cause of all these phenomena is the same – a deep fear of depleting one's assets prematurely.

And these feelings are intensified for those who lived through hard times during the depression and for those who have a strong desire to avoid becoming a burden to their children.

By contrast, a monthly income stream that is guaranteed to continue for life can provide retirees with the confidence and peace of mind they need to enjoy their hard-earned financial resources and make the most of their lives during their retirement years.

Arrayed against these advantages are a number of reasons that make people hesitant to purchase annuities.

Some cite the fact that they will lose everything if they die prematurely.

However, this risk can be significantly reduced by selecting a refund feature and/or a two-life annuity option.

For example, adding a 20-year certain period typically reduces the "amount at risk" to about 10%. That is, even if the annuitant dies soon after purchasing the annuity, the present value of the remaining survivor payments alone is equal to 90% of the purchase price.

And if only a portion of the individual's assets is annuitized this "amount at risk" is reduced even further.

In truth, the best financial advice usually embodies moderation, diversification and avoidance of large risks, and this would certainly seem to suggest that annuitizing at least a portion of one's retirement assets, in order to moderate risk, would be a prudent course of action for most people.

Another commonly cited reason for not considering annuitization is the belief that annuities are for the unsophisticated and that inflation will erode the value of an annuity's payments.

Some of you may have seen Jonathan Clements article in the Wall Street Journal last week entitled "Savings That Lasts as Long as You Do".

While I've generally been a real fan of Mr. Clements, over the years, I've watched with some dismay as he wrote about ways to draw down one's savings during retirement without ever considering the use of a life annuity.

Well, the good news from last week's column is that Mr. Clements has come to recognize the severity of the problem and that an annuity may be part of the solution.

Mr. Clements notes that, according to T. Rowe Price Associates, using a 5% withdrawal rate from a balanced (60% stock / 40% bond) portfolio, with annual adjustments for inflation, there is 42% chance that the investor will run out of assets over a 30-year retirement.

He also notes that over the past few years he has become a fan of immediate fixed annuities.

Nonetheless, he feels one should put no more than 25% to 30% of one's retirement assets in these products, noting that – and I quote- :

[citing Henry Hebel (author of J.K. Lasser's
"Your Winning Retirement Plan") he says:]

"Immediate Annuities are really good if you have no interest in finance ... [T]he big problem is inflation, which will gradually erode the value of an annuity's fixed payments."

However, these beliefs fail to recognize the broad range of fixed & variable annuity options that are currently available.

TIAA-CREF offers (variable) payout annuities supported by Inflation-Linked Bonds, Real Estate and five different equity accounts, as well as the TIAA Graded Benefit Method – all of which provide significant inflation protection.

Working with their financial advisors, individuals can combine these inflation-adjusted annuity options with traditional annuities and other investments to obtain the optimal blend of income stability, inflation protection, liquidity, and financial security that meets their personal needs and objectives.

Moreover, TIAA-CREF offers Post-Settlement Transferability ... the flexibility to transfer among the various TIAA-CREF investment options after annuity income payments have begun.

This is an area where the assistance of a sophisticated financial planner can be especially helpful.

The retirement years are dynamic rather than monolithic.

Needs and circumstances inevitably change over time and the suitability of the investment allocation must periodically be re-examined, and adjusted accordingly.

While a 62-year-old retired couple needs a great deal of long-term inflation protection, there is obviously much less vulnerability to long-term inflation risk for a 90 year-old retiree. Similarly, a client's appetite for risk, investment preferences, and personal circumstances change as the retiree ages, and suitable adjustments to the asset allocation are extremely important.

TIAA-CREF's post-settlement transferability option ensures that these changes can be made simply and easily within the annuity, without in any way diminishing the financial security that is provided by a monthly income stream that the individual can never outlive.

Having noted some of the important benefits that life annuities can offer, I should also note that there are many circumstances where annuitization is not appropriate.

A Life Annuity would plainly be inappropriate for an individual with a life-threatening medical condition. Similarly, an adequate level of liquid assets should always be available to meet emergencies, and these liquid funds do not belong in a life annuity.

However, for most retirees life annuities can be an extremely valuable retirement planning tool, and their use should be carefully considered when deciding how funds are to be used as the individual moves into retirement.

With this as background, let me now turn to the specifics of the TIAA-CREF pension annuity products.

The design and pricing of TIAA-CREF retirement annuities is driven in large measure by our corporate mission:

to provide financial products and services on the
most favorable financial terms possible,
and to do so on a strictly not-for-profit basis.

Consistent with this philosophy, TIAA-CREF pension annuity products are designed with the objective of operating on a participating basis emphasizing low costs and conservative guarantees, in an effort to maximize the actual benefits that are paid to participants.

While it is obvious that low costs contribute to benefit maximization, the connection between conservative guarantees and benefit maximization may not be as obvious.

In practice, however, it is axiomatic that assuming additional risks through more aggressive guarantees increases the company's risks and thus requires increased contingency reserves to be established. But funds that must be set aside in contingency reserves are funds that cannot be paid to policyholders.

Moreover, from a federal income tax perspective, every dollar set aside in a contingency reserve is treated as a gain from operations and is subject to a 35% corporate federal income tax. Thus for every extra dollar that TIAA must set aside in contingency reserves to support more aggressive guarantees, a tax of more than 50 cents must be paid. And it is obvious that every dollar paid in taxes is a dollar less in potential benefits to participants.

Finally, high guarantees can introduce unintended distortions and cross-subsidies among participants. For example if TIAA makes guarantees to a group of policyholders and these guarantees ultimately prove to be unworkable, earnings that would otherwise have been credited to other policyholders would have to be diverted to cover the guarantees that had been made to the former group.

Stated another way, because TIAA-CREF operates on a non-profit basis, with all earnings ultimately used to pay policyholder benefits, any losses the company incurs with respect to one policyholder block will ultimately reduce the benefits that can be paid to all others.

With that as background, let's take a closer look at the specifics of the TIAA-CREF annuity products.

Let's begin with the TIAA Traditional Retirement Annuity.

Each premium remitted to a TIAA accumulating annuity (and each dividend credited during the accumulation stage) purchases a specific amount of guaranteed benefits as determined by the rate schedule in the contract. Thus, for example, the contract provides for a guarantee of principle plus a minimum interest rate of 3% during the accumulation stage. Similarly the contract provides that the participant can convert the accumulation into a guaranteed stream of lifetime income payments using specified interest rates (currently 2.5%) and mortality tables.

Since TIAA's contractual rates guarantee lifetime benefits that will not be paid out until many years in the future, these rates are based on conservative assumptions that are intended to make the annuities fully self-supporting.

For example, contributions made to TIAA today by a 25-year-old participant may be annuitized 40 years hence and benefits payments to the participant and his or her spouse can be expected to continue for another 30 or more years beyond that. Since no one can reasonably know what mortality rates or economic conditions will be like 50, 60 or 70 years into the future, prudence dictates that guarantees be established on a conservative basis.

However, when actual results are more favorable than the contractual assumptions, dividends are declared on a year-by-year basis to reflect this more favorable experience.

Because the yields available on new investments tend to change over time, TIAA groups the premiums it receives over discrete periods of time into, what we call, vintages, typically comprised of one or more contiguous years.

TIAA then monitors the financial experience of each vintage and establishes dividend rates reflecting that experience.

For example, a net investment earnings rate is determined for each vintage reflecting both the yields at which premiums were originally invested and the rates at which subsequent cash flows were reinvested. These cash flows represent the excess of each year's investment income and "rollover" (redemptions, sales and maturities of assets), over the corresponding disbursements for benefit payments and expenses.

The dividend interest rate that is to be credited on the accumulations in each vintage is then determined as:

The net investment earnings rate of that vintage, less:

- (1) an at-cost charge for administrative expenses, currently about 25 basis points, and
- (2) less an additional charge (of about 25 to 50 basis points) for "contingency reserves."

These contingency reserves provide back-up financial protection for all TIAA policyholders. They are designed to enable the company to meet its contractual guarantees to policyholders in the event of unplanned-for and unforeseeable adverse circumstances.

It is important to understand that all insurance companies are required by both insurance law and financial prudence to establish contingency reserves. It is, after all, the company's backup financial reserves that give substance and meaning to the company's contractual guarantees.

Where TIAA differs, is in the ultimate disposition of these funds: TIAA systematically returns any contingency reserves that ultimately prove to be unneeded to the participants from whom they arose in the form of dividends, which increase the amount of lifetime income payable during the payout phase.

Because of its low costs, widely-respected investment expertise and not-for-profit pricing TIAA's dividend interest rates are typically among the highest, if not the highest in the industry.

Currently, for example, TIAA is crediting a total interest rate of 7% on newly remitted Retirement Annuity premiums.

For funds remitted in previous years the rates vary from 6.5% to 8%, by vintage, with an average rate of 7.42% being credited through February 28, 2002.

Competitive analyses consistently indicate that our new money rates are well above those of our competitors. And our rate advantage tends to be even greater on funds remitted in earlier years.

Payout Annuity Dividends

At retirement, each participant's total accumulation (including both the guaranteed and dividend interest that was credited during the accumulation stage) is normally converted into a payout annuity providing contractually guaranteed lifetime income payments, plus dividend payments, as established by the TIAA Board on a year-by-year basis.

These payout dividends are designed to distribute all earnings to participants, while at the same time

minimizing the risk that annuity income levels will ever have to be reduced ... since our participants generally seek stable income from TIAA to balance their more volatile equity holdings in CREF.

To this end, the mortality basis used to calculate the dividend payments represents an estimate of the mortality rates that are expected to prevail over the lifetime of newly retiring participants. These rates are derived from our most recent mortality studies, with adjustments for anticipated mortality improvements based on emerging trends.

To further minimize the likelihood of dividend reductions in future years, the payout annuity dividend interest rate is based on a 2-tier dividend structure comprised of a first-year dividend rate and a renewal dividend rate that applies to the second and subsequent years.

The dividend interest rate that is used to calculate First Year benefits for new retirees is based on our projected investment income rates, less a margin to provide for the risk of asset losses and other unanticipated deviations from the projected earnings levels. For well-established vintages little or no margin is needed since the contingency reserve position that was developed over many years of participation provides sufficient protection.

In each subsequent year, TIAA establishes a Renewal Dividend rate based on the actual (unreduced) earnings of the assets in the vintage, plus an additional component representing a gradual payout of any unused contingency reserves that have been built up over the years.

Any excess of the Renewal Dividend Rate over the base dividend rate that was used to establish first-year payments increases the level of income that will be paid in all subsequent years.

In this way, we can minimize the risk that we will ever have to reduce anyone's income payments, while systematically returning any unneeded margins to annuitants in the form of benefit increases.

If earnings fall short of our expectations, the renewal dividend rate would be cut back and future increases would be reduced or even eliminated, but there would be very little risk that income levels would actually have to be reduced.

In practice, payments under this method have produced modest increases in income payments each year, and the average TIAA annuitant who began receiving income at the beginning of 1995, when the new methodology was fully implemented, is now receiving about 8.7% more monthly income than he was receiving at the outset... certainly a nice bonus for an annuity that was expected to provide stable income payments.

In a very real sense we can think of these increased benefit payments as dollars that would have flowed to the corporate coffers as profits if TIAA were a commercial, for-profit company.

But because of TIAA's participating-style and not-for-profit operations, these extra earnings can instead be distributed to our participants.

I should emphasize, however, that this dividend methodology is not designed with the objective of providing benefit increases.

The primary objective of TIAA's payout annuity dividend methodology is establishing a sustainable level of monthly income that is unlikely to decline in future years. The modest increases that have resulted are simply a by-product of this approach and of our commitment to a participating pricing style.

For participants who are interested in a payout annuity with an increasing benefit pattern we offer the Graded Payment method.

The Graded Method was introduced in 1982 in recognition of the fact that while TIAA Traditional annuities had been successful in providing a stable level of income in nominal terms, the purchasing power of these annuities was gradually being eroded by inflation.

Under the Graded Method, first year payments are calculated on the basis of a 4% total (guaranteed plus dividend) interest rate. Then at the end of each year the difference between the 4% rate and the dividend interest rate that would have applied under the standard method is used to purchase an additional layer of annuity income.

For example, if the dividend interest rate was 7%, participants who selected the Graded Method would see their monthly payments grow by the ratio of 1.07 over 1.04, or roughly 3% beginning in the following year.

This innovative dividend option has produced payment levels that have consistently outpaced inflation since its introduction in 1982, and is currently being selected by nearly 30% of our annuitants each year.

In summary, TIAA seeks to maximize policyholder benefits by:

- establishing conservative guarantees
- crediting earnings that reflect the actual investment experience of each vintage's funds, on a year-by-year basis,
- establishing annuity income levels with a margin for adverse deviations, in order to minimize the risk of future benefit reductions
- systematically returning any unneeded margins and contingency reserves to participants during the payout stage in the form of increased monthly payments

Before leaving this topic, there are two important implications of TIAA's pricing methodology that should probably be emphasized:

1. First, by withdrawing TIAA Traditional Annuity accumulations rather than annuitizing them, participants may be giving up the opportunity to share in the gradual payout of unused contingency reserves.

Currently, for example, renewal dividend rates on TIAA payout annuities are being credited with dividends based on an average rate of 9.55%

Thus if a participant wants to withdraw funds from TIAA-CREF Retirement Annuities, they will frequently be better served by withdrawing accumulations from the CREF and TIAA Variable annuities rather than from the TIAA Traditional annuity.

This is especially true of accumulations that have been participating in TIAA for many years, since such funds are more likely to have a significant contingency reserve position that has been built up over the years.

Thus while renewal dividend rates on TIAA payout annuities are currently based on an average rate of 9.55%; the rate for all pre-1986 funds is 10.75%.

2. A second point to remember is that, in deciding whether to annuitize a TIAA accumulation, one can't simply look at the first year income payments, since the TIAA dividend methodology makes it likely (though certainly not guaranteed) that benefits will be increasing in future years.

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I would be glad to respond to answer any questions, comments or suggestions you may have.