

**Participant Communications:
Strategies to Foster the Growth of Private Pensions**

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I'm delighted to be here in the beautiful country of Brazil and to be speaking about two of my favorite topics: expanding the reach of employer retirement plans and providing quality financial education to plan participants.

In my discussion today, I will be providing some background on my company and the state of pensions in the U.S. I will also summarize our approach to communicating with retirement plan participants, and I'll conclude my comments with a discussion of some research findings about improving participation rates and financial education.

Let me begin with a very brief overview of my company, TIAA-CREF. The company's history stems from a dramatic \$10 million gift by the philanthropist, Andrew Carnegie in 1905 for a foundation that would provide a free pension for teachers in higher education. As a significant contributor of charitable funds to institutions of higher education, Carnegie became aware of the plight of its faculty who, in order to further their careers, often move from school to school, losing any pension benefits built up during their employment upon leaving, and retiring destitute. Carnegie hoped that the fund would grow sufficiently so that it would provide an adequate retirement for all eligible educators. Well, \$10 million was a lot of money back then, but it wasn't enough to provide continuing support to all professors then or in the future. Today, TIAA-CREF includes among its participants not just those faculty members who were the reason for the original gift, but all types of employees at colleges and universities as well as other non-profit institutions and organizations involved in education or research, like hospitals and museums.

After it became clear that ongoing contributions would be required, the Teachers Insurance and Annuity Association, or TIAA, was founded in 1918 to serve as the pension system for participating colleges and universities. For many years, the fixed annuity called TIAA Traditional was the only investment choice in the pension plan. In 1952, TIAA formed a companion organization, called CREF, to offer the first variable annuity, which provided participants the opportunity to invest in the stock market.

Today, TIAA-CREF is the largest provider of retirement plans to colleges and universities in the United States. Working with 15,000 institutions, we currently manage about \$280 billion in assets for 2.9 million participants. In addition to advising institutions about their retirement plans and counseling their employees

about financial security issues, our job is to accept premiums, manage the investments, and pay out benefits when participants retire. The vast majority of our business consists of annuity contracts in defined contribution plans. Over the past several years TIAA-CREF has become a full service financial services organization, expanding its menu of available financial products to include Long Term Care Insurance, Life Insurance, Mutual Funds, Single Premium Immediate and Deferred Annuities, IRAs, Tuition Savings Plans and even Trust Services for our wealthier clients.

Let's now take a quick look at the financial condition of retirees in the United States.

Despite the enormous wealth in the U.S., the unfortunate truth is that millions of people who have worked hard throughout their adult lives are not financially prepared for retirement. According to the 2001 Survey of Consumer Finances, the median net worth of families nearing retirement, those having heads of households between the ages of 55 and 65, is \$181,500, including the value of their homes. Families who have to stretch these assets without any supplemental income over 25 or more years do not have a very comfortable retirement.

Most elderly people in the United States rely heavily on Social Security for a significant portion of their income. For roughly two-thirds of the elderly, Social Security accounts for 50% or more of their income. For approximately a third of the elderly, Social Security accounts for 90% or more of their income; and for 20% of the elderly population, Social Security accounts for all of their income. (Source: Social Security Administration)

You've undoubtedly heard about concerns of insufficient Social Security funds once the 77 million Baby Boomers reach retirement age. Baby Boomers is a term we use to refer to those individuals born following the end of World War II, between the years 1946 and 1964. When these Baby Boomers begin to reach retirement age, in 2008 when the youngest of this group reach age 62, the ratio of persons receiving benefits to persons making contributions will be increasing to a level dramatically higher than it is today. Federal spending will be strained not only by Social Security retirement payouts, but perhaps even more so by soaring health care expenditures for the elderly. Skeptical of the adequacy of Social Security funds in the future, many retirement experts are emphasizing the need for increased private savings through employer retirement plans and through individual savings.

The expected trend in the Elderly Dependency Ratio, which represents the number of people over age 60 as a percentage of the number of people of

working age, defined as ages 15-59 currently is about 27%, but it is expected to reach 46% in less than 30 years. The larger the Elderly Dependency Ratio, the greater the burden on future generations to provide support unless drastic changes occur enabling retirees to be better able to pay for their own expenses in retirement.

For many decades, employer-sponsored retirement plans in the U.S. consisted mainly of defined benefit plans, also called DB plans, in which benefits were determined by a formula based on the individual's salary and years of employment. The employer assumed the risk related to investing and managing the funds and paying the specified benefits upon the employees' retirement. For most employees who remained with the same employer for many years, defined benefit plans provided them with a financially secure retirement. Shorter-term employees, who left their employers before vesting, or gaining ownership of the accumulated assets, were hurt by the loss of retirement benefits built up but not yet vested.

Over the past 15-20 years, however, employers increasingly have moved away from DB plans and toward defined contribution, or DC, plans. In 1985, there were 170,000 DB plans in the U.S., but by 1999 there were only 42,000, as thousands of DB plans were terminated every year. Participation by covered workers in those plans decreased from 30.2 million in 1985 to 23 million at the end of 1998. By contrast, the number of DC plans grew from 460,000 to 700,000. Participation in these plans has grown consistently over the last 25 years, from 11.4 million in 1975 to 50.3 million in 1999.

Part of this movement was motivated by employers seeking to reduce their companies' financial risks and part was motivated by employees wanting to have more investment control over their retirement plan savings. DC plans shift the investment risks and rewards to the individual, thus increasing the need for employees to become knowledgeable about adequate savings levels, market behavior, and investment options. While DB plans generally provide lifetime income options, many DC plans do not.

Let's now turn to TIAA-CREF's approach to helping individuals prepare for retirement. We are acutely aware that the two critical decision areas for employees with DC plans are: 1) how to invest the money they and their employers have contributed while they are working; and 2) how to withdraw the money during their retirement years. Our communications and education to participants focus largely on these two areas where they need to make informed decisions that will have lasting implications for their financial security.

Before we can start the education process, we first develop a relationship with the college or university and become an approved retirement plan provider. As more and more pension providers enter this market, institutions are faced with the challenge of narrowing the universe to a manageable number of quality providers. Competition among financial services companies is beneficial to employees in that it spurs providers to provide better services at lower prices. The trend in recent years toward offering a large number of choices of pension providers and investment funds has reversed somewhat as institutions have realized that too much choice can complicate further the already complex set of benefits-related decisions confronting employees. Keep in mind that in addition to choosing a pension plan provider, employees must also select how they want their pension contributions invested, and some plans offer an array of 20, 30, 40 or more investment options.

Institutions consider many factors when selecting retirement plan providers. These may include the integrity and financial strength of the provider, low administrative costs, the range of investment choices, past investment performance, the extent of employee education offered and other services, and the range of payout options available at retirement. Many institutions prefer to work with a company such as ours whose representatives are not motivated by commissions.

Once TIAA-CREF has been selected as one of the institution's retirement providers, our goals are to help employees understand the importance of pension plan participation, to guide them in making appropriate decisions for accumulating and distributing assets, and to handle all transactions and reporting as accurately and efficiently as possible. We recognize that there are many different learning styles and a wide range of personal preferences about the amount and level of education, guidance and advice individuals want. TIAA-CREF works hard to make available such information in a variety of media, both in print and on-line, as well as through one on one contact with TIAA-CREF representatives on the phone, in individual meetings with consultants and in group informational meetings

Because we recognize that human resources professionals, benefits and other business officers at institutions are often resources employees turn to for information and recommendations about pension plan issues, we also work hard to develop their trust. TIAA-CREF staff work closely with these individuals to handle various administrative aspects of the plan. Our staff stays up-to-date on all legislative and tax developments that may impact retirement plans, and share that information with human resource officers and other business officers. We realize that by educating these individuals, who have potential to guide employee financial decisions, we make great strides toward helping the employees themselves.

To encourage participation by new employees at institutions we serve, and to stimulate increased savings by existing plan participants, TIAA-CREF's primary focus is on education. We use many approaches, understanding that key messages about the importance of planning and saving for retirement need to be delivered with great frequency and in many different formats. We also rely on a growing use of marketing materials intended to enhance our name recognition in the face of competition from other financial services companies and on the strength of our relationship with campus administrators developed through years of effective consultation.

When institutions hold benefits meetings for new employees, the representatives from the approved retirement plan providers are generally invited to make presentations. TIAA-CREF considers this a very important opportunity to increase the familiarity of our company among the new hires and to provide key financial education messages. We understand that name recognition is important – people want to feel familiar with whatever company they decide to entrust with their pension savings. We provide potential participants with descriptive materials and an application to sign up for the plan, and we encourage them to contact us with further questions and to explore our web site.

In our communications with potential participants, we emphasize our low-cost structure and the lack of hidden charges on our investment accounts. Individuals are also attracted by our 85-year history of serving colleges and universities. And like the employers we serve, TIAA-CREF is also a non-profit organization, meaning that other than expenses necessary to effectively administer the pension plans, invest and distribute funds, and educate participants, all returns on our investments benefit the individuals who are TIAA-CREF customers, whether through their accumulating accounts or through distributions of their retirement funds. The fact of interest to our customers is that TIAA-CREF has the highest ratings of financial strength from all of the major credit ratings agencies in the U.S. I am referring to independent agencies whose job it is to evaluate how likely it is that financial services companies will be able to honor all their financial commitments at any point in time. That TIAA-CREF consistently gets high marks gives individuals peace of mind that we'll be around to pay their benefits when they retire.

Another factor that we emphasize is our expertise in both fixed-income and equity markets. Our hallmark TIAA Traditional fixed annuity offers a very competitive interest rate, consisting of a guaranteed earnings rate of 3% in addition to additional amounts in excess of the guaranteed rate that change depending upon market interest rates. Other fixed-income options, which do not provide guarantees, include an inflation-protected bond fund and another fund with both government and corporate bonds. In addition, our core equity

offerings include broad-based U.S. equities, international equities, and a unique real estate annuity that is at least 70% invested in direct real estate holdings. We also emphasize our range of payout options, including that of guaranteed lifetime income.

The information that we provide to potential participants includes a Risk Tolerance Questionnaire to help them understand what kind of investor they are so that they can make appropriate asset allocation and investment selections. Having determined through the questionnaire whether they are an aggressive, moderately aggressive, moderately conservative or conservative investor, enrollees may choose their own mix of investments or they may select the model portfolio that is suggested for them based on the risk questionnaire. The Risk Tolerance Questionnaire is one tool we offer to help guide individuals' investment decisions. For those interested in more advice, we offer consultations with TIAA-CREF representatives who use software to help evaluate a customer's financial goals, risk tolerance, and available assets to generate specific recommendations about what types of financial products make the most sense and what specific investment choices to consider.

A small percentage of institutions have shifted to electronic enrollment on the Internet, allowing both individuals enrolling and the institutional administrator to avoid paper transmission through the mail and the delays often associated with traditional submission of enrollment information and contributions. This trend undoubtedly will continue in order to gain further efficiencies. Although many individuals still prefer paper-based communications, increasing numbers are now enjoying the ease of electronic transactions and request all communications to be Internet-based.

After enrollment, participants receive quarterly statements of their accounts and a bi-monthly magazine which contains educational information about investing, saving, and other financial planning topics. The TIAA-CREF web center is a tremendous resource that contains details about the investment guidelines for building portfolios and information about other products such as life insurance and long-term care insurance. It has sections presenting answers to frequently asked questions about a wide variety of financial topics. Messages from TIAA-CREF's chairman and other TIAA-CREF experts offer insights on changes to the economic landscape, implications of new or proposed legislation, or information about new products and services. We have highly trained staff in our telephone counseling center that is open Monday through Friday from 8:00 a.m. to 10:00 p.m. ET and on Saturdays from 9:00 a.m. to 6:00 p.m. to answer participants' questions and to handle instructions related to their accounts. Through technology advances, TIAA-CREF representatives are able to access essentially all information related to clients' accounts while on the phone with them. Individual consultants also are available to meet face-to-face with participants

both at the institutions where they work and at one of our many offices located throughout the U.S.

We are currently putting in place plans to open additional local offices, getting closer to our customers and making educational resources more accessible. The goal is to expand over the next few years from approximately 23 regional offices to between 50 and 60 across the country in areas that have high concentrations of individuals who work for colleges, universities or other non-profit organizations.

I've mentioned financial education several times already -- TIAA-CREF is widely recognized as offering extensive and high-quality financial education to participants and we believe this helps to set us apart from other providers. We have developed more than 20 financial education seminars to help participants with various aspects of saving, investing, understanding account statements, rebalancing portfolios, and choosing among distribution options at retirement. Other seminars may focus on goal setting, college savings strategies, maximizing Social Security benefits, and estate planning. TIAA-CREF staff members work with benefits officers at the institutions to arrange for times and locations to conduct these seminars. In 2002, TIAA-CREF Consultants delivered nearly 4500 financial education seminars, attracting over 122,000 people. We expect those numbers will be even higher for 2003. Most of the topics are also covered in detail in a series of educational booklets made available to all participants.

I'd like to share with you a few examples of the kinds of Financial Education seminars I just mentioned. Through these seminars and the educational materials designed to be used with attendees at these meetings, and through other educational materials TIAA-CREF produces for participant to use, TIAA-CREF makes available decision-making guidance during participants' working careers and into their retirement years. One such presentation is specifically designed for newer participants in our system. This presentation covers concepts important to younger people who have just begun to confront issues such as the decision to save, how to invest, diversification, risk and the long-term time frame available to invest. It encourages attendees to take advantages of tax deferral through their employers' retirement and supplemental retirement plans, and demonstrates visually and through numbers the powerful and positive impact of tax deferral. It talks about the importance of diversifying investments among different asset classes. TIAA-CREF stresses in these presentations, and in all of its educational materials, the importance of using at least three of the five major asset classes when investing for the long term -- guaranteed investments, equities, fixed income, real estate and money market. This presentation also encourages participants to gain an understanding of their own tolerance for the potential volatility of investment returns, and to then invest

their funds accordingly so that they can be psychologically comfortable with the risk they are taking at the various stages of their lives.

These concepts are reviewed in another presentation that is designed for people who are in the middle of their working careers. These individuals are faced with competing goals for their available savings dollars, including home purchase, savings for children's education, vacation, or other large purchases, in addition to the never-ending need to save for retirement. This presentation gives seminar attendees an idea of how to go about investing for these competing goals, introducing the concept of an investment time horizon that must be coordinated with one's risk tolerance. The presentation also introduces individuals to some of the issues to consider as a potential retirement date becomes clearer, including the concept of a replacement ratio and the notion of maintaining one's lifestyle in retirement.

Another presentation we conduct is one that can be delivered to audiences of any age, because the issues that are discussed are universal: those involved with making investment decisions. This presentation focuses on the key decision that is so critical to all participants in defined contribution plans -- how to invest both new contributions and existing assets in their plans. We stress asset diversification as well as periodic rebalancing to control asset allocations rather than allowing investment returns to build up accumulations in any one particular asset class. This presentation and associated educational materials will point out the added risk participants take on when attempting to time market movements when rebalancing. Instead we encourage periodic reviews of one's account balances, or conducting such reviews when major life events occur, like marriage, purchase of a new home, and birth of a child.

A final example from our library of Financial Education seminars that I'd like to share with you is one of our most popular seminars. Seminars conducted for individuals within five or so years from retirement draw our largest audiences. These people recognize the weight of their impending decisions about how to best use these dollars they have worked so hard to accumulate through their working years, to provide a comfortable level of income throughout their retirement years. Employees also recognize the particular importance of education for these individuals, wanting these people to have appreciation for the retirement plan and the contributions that were made by the employer to these plans to provide for their retirement. Concepts stressed at these sessions include a more realistic look at replacement ratio, or the percentage of final income in the last year of working that would be necessary to maintain a desired lifestyle in retirement, other potential sources of income in retirement, including a review of Social Security with a listing of available resources about that system, income options available through TIAA-CREF such as lifetime income, lump sum distributions and systematic payout of specified amounts or frequency of

payments. We offer a demonstration of the value that receiving at least some portion of retirement distributions in the form of lifetime income brings to participants.

Hopefully, these examples will give you an idea of the types of guidance and education we attempt to provide at all stages of an employee's lifetime. As I mentioned, these messages are consistent from the presentation of our seminars, to print materials participants receive, to decision-making tools and information available on TIAA-CREF's web site. Each TIAA-CREF representative who speaks with individuals about their plans are also trained to provide consistent information, education and guidance to those with whom they interact.

As I mentioned, we have found that people nearing retirement are particularly receptive to education and information about retirement - and other financial issues. We believe it is very important to offer increased services as participants approach retirement. They need to understand the different income options that are available to them and to get assistance in determining the right distribution methods to meet their needs.

As defined benefit plans become scarcer, and concerns mount about the viability of Social Security, lifetime income options for retirement funds offer a solution to the growing issue of longevity risk. TIAA-CREF is proud of its history of providing lifetime payout annuities and helping millions of Americans achieve financial security in retirement. Many DC plans do not offer annuitization but rather allow participants to take lump sum distributions or to take withdrawals on a when-needed basis. In our view, payout annuities are one of the best ways to manage longevity risk, or the risk of running out of money in retirement. This view is supported by several research studies and analyses TIAA-CREF has conducted. One study was designed to measure the probabilities that particular asset allocations will provide inflation-adjusted income for life and whether annuitizing part of the portfolio helps or hinders that probability. The results showed that the higher the percentage of equities in the portfolio, the greater the chance that the retired investor could maintain inflation-adjusted income for more than 20 years in retirement. They also showed that annuitizing 25% of the portfolio increases the probability that retired investors would maintain their inflation-adjusted income for life, regardless of the number of years. Annuitizing 50% further increased this probability. While there are trade-offs, a distribution plan that includes annuitizing at least a portion of one's assets ensures income that will last a lifetime, allowing investors to potentially invest non-annuitized funds more aggressively.

In addition to educational programs for participants, TIAA-CREF offers informational seminars on employee benefit plans to human resource

professionals and business officers at participating institutions. The seminars are available live in various cities and are also accessible on the web. These seminars are intended to give these influential individuals greater understanding about how TIAA-CREF contracts work, about investing, about trends and demographics impacting retirement plan design, and about new developments in the employee benefits world. Several TIAA-CREF publications also provide plan administrators with notifications and analysis of developments in benefit plans. All of this education is intended to help these administrators better guide their employees in the use of employer-provided benefits, including, of course, their TIAA-CREF retirement plans.

Let's now take a look at some of the current research in the area of retirement plan design and financial education of participants. The TIAA-CREF Institute conducts considerable research in this area, both through our own researchers and also through external researchers who participate in our grants and visiting scholars programs. The Institute also fosters important research through its Samuelson Award for excellent contributions to furthering financial knowledge.

I'd like to talk about research in two categories: retirement plan design and financial education.

One of our winning entries in the Samuelson Award competition this year looked at the impact of automatic enrollment and fund selection. In an effort to increase participation rates, a large financial services company in the U.S. decided to start providing automatic enrollment and 3% employee contributions into the firm's 401(k) plan, thus eliminating the need for the employee to have to take the initiative to get signed up through the benefits office. Employees may select from about 10 investment options; if they do not make an active selection, the contributions are invested automatically in the money market fund. As before, the company begins to match employee contributions at a 50% rate after one year of employment.

Part of the company's motivation in implementing automatic enrollment, contributions and fund selection was to satisfy government requirements for non-discrimination so that participation in the plan would expand to include more low-income employees.

Two researchers — Brigitte Madrian of the University of Chicago and Dennis Shea of Aetna, a financial services company — examined the effect of these changes on savings behavior. They found that participation rates of newly eligible employees jumped dramatically from 49% to 86%, which helped considerably to close the participation gap between different socio-economic groups. Unfortunately, the plan's overhaul was not as successful in terms of

contribution *rates* and investment selections. After the modifications, the majority of new participants maintained the automatic 3% contribution rate and the automatic investment choice of the money market account. Before the modifications, the average contribution rate was higher and participants generally chose multiple investments. The authors stated that these findings highlight the need for plan designers to incorporate some type of automatic increase in contribution rates – perhaps related to salary increases —and to consider some type of balanced fund consisting of fixed income and equities investments for the automatic or default investment choice, rather than a money market fund.

Other research on contribution rates by Richard Thaler of the University of Chicago and Shlomo Benartzi of UCLA has been developed into a program called “Save More Tomorrow” that TIAA-CREF may pilot with several institutions. Employees can sign a salary reduction agreement that allows for automatic increases in their contribution rates. The increases can occur annually or when their salaries are raised, until participants reach the maximum legally allowable contribution level or opt out of the program. A recent test at a large corporate employer demonstrated that of those employees choosing to participate in the SMART plan, 54% agreed to a 1% per year increase in their contribution rate, 35% agreed to a 2% increase and 11% agreed to a 3% per year increase. Savings rates at the corporation increased by 36%, from 3.4 % on average before the plan to 4.61% after the first payroll under the plan. The research seems to indicate that automatic increases in contribution rates are a relatively painless way to increase retirement accumulations.

Another recent study, by Gary Engelhardt and Anil Kumar, both of Syracuse University, examined the impact of employer matching in 401(k) plans on savings behavior. Using data from the U.S. government’s Health and Retirement Study of persons nearing retirement age, the researchers found that employer matching has a large and statistically significant impact on 401(k) saving. They estimated the elasticity of 401(k) contributions with respect to the match at 25 percent. This means that an increase in the match rate from 50 percent to 100 percent raises 401(k) contributions by 25 percent. These estimates are significantly larger than those from previous research, and suggest employee contributions are quite responsive to matching. Implications of this research could extend to the Social Security system if and when voluntary private accounts are established.

Let’s now consider some of my own research examining the importance of financial education. Robert Clark of North Carolina State University and I developed a research project that assessed the retirement goals and saving behavior of participants in financial education seminars sponsored by TIAA-CREF. Prior to attending the seminar, individuals provided information on a survey on

their desired retirement age and the level of retirement income. In addition, respondents stated the balances in their retirement plans and their annual contributions to these accounts. Immediately after the seminar, participants responded to a second survey and reported whether they had altered their retirement goals and whether they intended to modify their savings behavior. About three months later, they responded to a third survey and reported whether they had actually made any changes in their savings behavior.

Our results indicated that after the seminars, many participants changed their retirement goals and stated an intention to change their saving rate. Those with relatively low goals for retirement income of about 50% to 60% of their final salary tended to increase their target retirement income following the seminar. These changes are in line with the information provided in the seminar concerning the level of retirement income needed to maintain the same standard of living. Similarly, individuals with younger desired retirement ages became aware that they would be unable to attain this goal with the desired level of retirement income at their current level of savings. As a result, they raised their expected retirement age.

In response to the information provided in the seminar, most individuals planned to revise their savings plans. Individuals who did not currently have a supplemental pension plan reported that they were now more likely to establish such a plan. Of those who had already established a supplemental plan, more than 30% indicated they planned to increase their contribution rates to those plans after attending the seminar. Based on a greater level of understanding of risk and return characteristics of investment options, many participants also reported that they planned to alter the mix of bonds and equities in their retirement accounts.

Our research suggests that financial education can be an effective method of improving retirement planning. Employees attending financial education seminars are more likely to increase contribution rates to retirement accounts, change their investment choices, and form more appropriate retirement goals. Another key finding was that women and lower-income employees were more responsive to financial education. This finding has significant policy implications for employers and lawmakers. The behavioral responses of participants to new information should produce a more comfortable retirement for those who are willing to complete financial education programs.

For more information about any of the research I've been discussing over the last few minutes, you can refer to the TIAA-CREF Institute web site. The site houses all of the research done by the Institute whether by our own researchers or through grants or our visiting scholars. If you would like to see more information about TIAA-CREF's educational materials, decision-making guidance

or even just general information about TIAA-CREF products and services, I invite you to visit TIAA-CREF's corporate web center.

Clearly many factors influence how people use their money. Some are purely personal – financial goals, dreams, needs, and wants all shape spending and saving behavior. Other factors are external – characteristics of the financial landscape such as interest rates, taxes and tax shelters, and other saving incentives. Personal and external factors also play a significant role in pension plan participation. Many of these factors are outside of our control. But if we can help arm people with knowledge, individuals and families can make better decisions that will help them achieve lifelong financial security. In closing, I would like to applaud your efforts in helping to develop plans that will improve the likelihood of workers enjoying a financially secure retirement. And let us all keep in mind the important role that financial education can play toward achieving that same goal.