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# ADJUSTING RETIREMENT GOALS AND SAVING BEHAVIOR: THE ROLE OF FINANCIAL EDUCATION

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#### **EXECUTIVE SUMMARY**

There is considerable evidence that many Americans do not possess the essential knowledge needed to develop realistic retirement goals along with the saving and investment strategies necessary to attain their retirement goals. Given the low level of saving by many households, the need for enhanced financial education to improve the level of financial literacy is an important policy issue. Employer-sponsored education programs can play a major role in disseminating specific information in order to increase the knowledge related to retirement planning.

Inadequate financial knowledge may cause workers to start saving too late in life or save too little to realize their stated retirement goals. As a result, they are unlikely to achieve an optimal balance between consumption while working and consumption in retirement. In addition, a lack of information concerning the risk-return distribution of various investments might lead them to misallocate their retirement portfolios. If this situation is true for most workers, then financial education programs should enhance lifetime wellbeing and improve the retirement saving process.



To assist employees of colleges and universities and other nonprofit organizations achieve their retirement goals, TIAA-CREF offers financial education seminars on most college campuses. These voluntary programs offer faculty and staff the opportunity to learn more about the retirement process, income needs in retirement, investment strategies, and basic retirement programs. This paper examines the information contained in these financial education seminars offered by TIAA-CREF associates and assesses how these programs influenced individuals to modify their retirement goals and alter their retirement planning.

This research shows that financial education can influence workers to reconsider their retirement goals and alter their saving behavior. Discovering that they have based their desired retirement age and income goals on inadequate saving behavior can lead to the development of more realistic retirement goals and to change in their saving for retirement. Importantly, individuals with low desired retirement ages often increased their expected retirement ages based on the information provided while those with low retirement income goals also tend to raise their income target toward a level more consistent with having retirement incomes similar to their net income while working.

#### INTRODUCTION<sup>1</sup>

The adult life of most Americans is divided into about 40 years primarily devoted to work and then a period of 20 to 30 years mostly devoid of paid employment. Although the United States is a wealthy country, most Americans generate most of their lifetime income through paid employment. Thus, most individuals must develop, either implicitly or explicitly, a lifetime plan based on two retirement goals: the age at which they will stop working<sup>2</sup> and the level of desired income during retirement. In order to achieve these goals, individuals must refrain from consuming all of their income while working and save a portion of their earnings for retirement. Workers must decide how to invest these funds based on their risk preferences. Annual saving and the compounded return on investments create a fund that, in addition to Social Security and employers-provided pensions, can be used to finance consumption in retirement.

To develop an adequate lifetime plan for working, retiring, consuming, and saving, individuals need a basic understanding of financial mathematics, the risk return characteristics of financial markets, and the economic environment in which they work. There is considerable evidence that many Americans do not possess the essential knowledge needed to develop realistic retirement goals along with the saving and investment strategies necessary to attain their retirement goals.<sup>3</sup>

A fundamental economic principle is that greater income in retirement is not free, as higher consumption in retirement must be financed through lower consumption (saving) during the working years. Thus, in developing retirement saving strategies, individuals must weigh the lower satisfaction of reduced consumption today verses the gain in lifetime wellbeing associated with greater consumption during retirement. In developing personal saving plans, individuals should also consider other types of retirement income that are earned through their employment. Virtually, all American workers are covered by Social

Security which promises a lifetime retirement benefit adjusted for inflation.<sup>4</sup> However, for most households, Social Security benefits will be far less than their desired level of retirement income.

About half of all workers are also covered by employer-provided pension plans however, almost all full-time college faculty are eligible to participate in some type of employerprovided pension plan. Defined benefit pensions typically cover all full-time workers in a company or institution with a retirement plan that promises an annual income determined by a benefit formula. The retirement income from these plans is not based on any worker decisions about saving or investment. However, retirement benefits are influenced by job turnover, wage growth, and the continued operation of the company and its pension. In contrast, participants in defined contribution plans often must decide whether to contribute to the retirement plan, how much to contribute, and how the funds are invested. Many universities offer defined contribution plans that include mandatory participation with specified minimum employee and employer contributions.

In addition to their primary pension plan, many workers also have the opportunity to establish and contribute to a voluntary or supplemental pension plan. In many plans, employers provide matching funds for employee contributions to these plans, but no employer contributions are made for workers who choose not to make employee contributions. Employer contributions to supplemental plans are less likely to be provided in the public sector. The need for additional saving beyond Social Security and employer pension plans depends on the expected payout from these retirement programs and the workers desired retirement goals.

Given the low level of saving by many households, the need for enhanced financial education to improve the level of financial literacy is an important policy issue. Employersponsored education programs can play a major role in disseminating specific information in order to increase the knowledge related to retirement planning. In addition, government regulations and programs may be needed to stimulate broad-based financial education programs. It seems obvious that increased financial awareness would be beneficial to workers planning for retirement. However, it is important that financial literacy programs be monitored, evaluated, and improved. To date, very few studies have attempted to systematically evaluate financial education programs in the workplace. An excellent review of the current state of financial education programs and financial literacy in general is provided in Lusardi (2008 forthcoming) which contains an expanded version of this paper.<sup>5</sup>

#### PLANNING FOR RETIREMENT

Some of the most important lifecycle choices facing workers are the age of retirement, the level of desired retirement income, and the amount of saving needed to achieve these retirement goals. To finance consumption during retirement years, individuals must save a portion of their earnings earlier in life. Basing retirement plans on their current level of financial literacy, workers may develop retirement goals and establish saving plans that are unattainable; i.e. a low age of expected retirement accompanied by a high desired income replacement rate while saving relatively little each month. With incomplete or inadequate financial knowledge, workers may be confident that they will achieve the impossible dream of high consumption in retirement with little saving. However, the reality often results in

unanticipated surprises at retirement. Workers employed by institutions of higher education, whether professors or staff, are no different than other Americans and they often lack relevant knowledge about planning for retirement.

Inadequate financial knowledge may cause workers to start saving too late in life or save too little to realize their stated retirement goals. As a result, they are unlikely to achieve an optimal balance between consumption while working and consumption in retirement. In addition, a lack of information concerning the risk-return distribution of various investments might lead them to misallocate their retirement portfolios. If this situation is true for most workers, then financial education programs should enhance lifetime wellbeing and improve the retirement saving process. Of course, financial education may indicate that some households are wealthier than they think and have saved more than they need to achieve their retirement goals; thus these households may respond by saving less or retiring earlier. In addition, financial education programs may confirm that some individuals are on track to achieve their retirement goals and thus no changes in plans or saving behavior are needed.

Recognizing this lack of financial knowledge, some employers now offer financial education programs for their employees.8 Employer-provided financial information consists of written or on-line communications explaining company retirement saving options, general information about financial markets and economic conditions, and retirement. Other employers provide funds for their employees to hire an outside financial advisor to help them develop a financial plan for retirement. It is important for employers to monitor these programs and evaluate their effectiveness. As the leading pension plan provider for higher education, TIAA-CREF is interested in promoting adequate saving for retirement. To assist employees of colleges and universities and other nonprofit organizations achieve their retirement goals, TIAA-CREF offers financial education seminars on most college campuses. These voluntary programs offer faculty and staff the opportunity to learn more about the retirement process, income needs in retirement, investment strategies, and basic retirement programs. This paper examines the information contained in these financial education seminars offered by TIAA-CREF associates and assesses how these programs influenced individuals to modify their retirement goals and alter their retirement planning. After reviewing our research findings on the impact of financial education, we consider the need to promote employer-based financial education and retirement planning programs and consider further research that would assist employers and plan providers develop more effective programs.

#### LEARNING THE BASICS OF FINANCIAL PLANNING

Individuals can increase their understanding of financial mathematics and markets using a variety of methods and types of programs. Financial education events that can be used to augment ones financial literacy include seminars, face to face sessions with financial planners, printed materials and lessons, and on-line programs. Currently, many institutions of higher education and pension plan providers offer one or more of these programs; however, there seems to be very little evaluation of the usefulness of these programs. It is important that we learn more about the success and failures of different aspects of financial education

programs so that they can be improved and to insure that employers and employees will get more benefit for the dollars allocated to these programs.

#### **TIAA-CREF Financial Education Seminars**

TIAA-CREF conducts financial education seminars at institutions where they offer either a basic pension or a supplemental pension plan. The seminars are open to all employees of these institutions. Attendees may be covered by a defined contribution plan offered by TIAA-CREF or another pension provider, or participated in a defined benefit plan. The objective of the seminars is to provide financial information that would assist individuals in the retirement planning process. Seminar leaders discuss retirement goals such as the amount of money needed in retirement to maintain their standard of living in retirement and the relationship between the age of retirement and the annual amount of saving needed to achieve the retirement income goal. Consultants also examine the risk-return characteristics of alternative investments.

The analysis of retirement saving is based on information obtained in three surveys of participants in the seminars. Participants completed the first survey prior to the start of the seminar. The second survey was completed at the end of the seminar before participants leave the room while the third survey was sent to participants several months later. To generate baseline information on retirement goals and saving behavior, survey one requested that participants provide the age at which they hope to retire and the annual retirement income as a percent of their final working year's earnings that they hope to have in retirement. They were also asked to indicate the likelihood that they would achieve these goals, how strongly committed they were to achieving these goals, and whether other priorities might make it difficult for the goals to be achieved. In addition, the first survey gathered baseline demographic and economic information on the respondents.

After completing the first survey, the seminar began and discussion continued for approximately one hour. At the conclusion of the seminar, participants were asked to complete the second survey. Respondents were asked whether, they had changed their retirement age goals or revised the desired level of retirement income. The second survey asked whether individuals intended to change their allocation of invested funds in their basic defined contribution plan. Respondents with a supplemental retirement plan were asked if they expected to increase their contributions or change their investment allocations. Individuals who did not currently contribute to a supplemental plan were asked if they plan to establish one. <sup>10</sup>

#### ALTERING RETIREMENT PLANS

After completing the seminars, respondents reported the chances that they would alter their retirement goals and saving behavior." The responses of individuals obviously depend on how they viewed the quality of the information they received. In general, participants thought they had been part of a high quality financial education program with 36 percent rating the seminar excellent and 54 percent good. In response to the statement that the

seminar had improved their understanding of the need for retirement saving, 32 percent strongly agreed with the statement and 58 percent agreed with the statement.<sup>12</sup>

During the seminar, participants may have acquired new information concerning how much money is needed to maintain consumption in retirement, the basic mathematics of retirement saving, and the risk-return characteristics of investment alternatives. Based on this new information, participants could be expected to reconsider their retirement plans and possibly alter their saving behavior. A comparison of retirement goals after the seminar to those stated prior to the seminar indicates how participants adjusted their retirement goals based on the new information. Similarly, many respondents also indicated that they expected that in the future they would change their savings behavior. Participants might also have learned more about the mathematics of retirement saving and have a more realistic assessment of the amount of retirement income that they will have based on their current savings rates. This new information could result in respondents deciding to increase or decrease their contributions to retirement plans. Finally, participants may have a better grasp of the risk associated with various types of financial instruments, inflation, and longevity. This new information might lead them to alter the investment allocations in their retirement accounts.

A small percentage of respondents changed their desired retirement age while over a quarter of participants altered their retirement income goal. After the seminar, 7 percent of the sample reported having increased their retirement age goal by an average of 3.5 years and 4 percent of respondents reduced their expected retirement age by an average of 4.1 years. As one might expect, a larger proportion of people with relatively low initial desired retirement ages tended to increase them. For example, 15 percent of participants who initially set a retirement age goal younger than age 60 indicated a later retirement age goal after the seminar. The average increase was 4.3 years. In contrast, less than 2 percent of those with an initial expected retirement age greater than age 65 indicated an older retirement age after the seminar. The tendency to lower retirement ages was greatest for participants whose pre-seminar retirement age goal was 65. On average they lowered their age goals by 4.8 years.

In a series of papers examining the survey results, we examined the impact of seminar participation on retirement goals and expectations of change in saving behavior. Empirical analysis indicates that compared to older seminar participants, respondents under age 45 were less likely to increase their desired retirement ages. Individuals without advanced degrees were more likely to increase their target ages of retirement while secretarial, clerical, and maintenance workers were more likely to lower their retirement ages. <sup>13</sup>

There was a much greater tendency to adjust retirement income goals than age goals. A little over 20 percent of the respondents increased their income goal while another 8 percent decreased their income objective. Of the participants who set an income goal less than 65 percent before the seminar, almost 37 percent revised their retirement income goal upward by an average of 19 percentage points. This suggests that based on the information provided in the seminar these individuals determined that their goal was too low and that

they should attempt to achieve a higher standard of retirement consumption. About one fourth of those with pre-seminar goals of between 65 and 85 percent revised their retirement income goal upward while less than 5 percent of those with initial targets greater than 85 percent revised their income goals upward. People with higher initial retirement income goals were more likely to revise their income targets downward.

Results from the empirical analysis estimating changes in income goals as a function of individual and household characteristics showed significant differences across participants. Women were 6 percentage points more likely to increase their income goal compared to men. Participants with higher earnings were also more likely to raise their desired income replacement rates. Compared to respondents with annual earnings of \$50,000, those earning \$60,000 were one percentage point more likely to raise their income goals after the seminar. Individuals with defined benefit plans were more likely by 12 percentage points to raise their income goals.<sup>14</sup>

In response to the seminars, the proportion of participants who changed either of their retirement goals is relatively small. However, the respondents who changed their retirement age and retirement income goal made rather large changes in their desired retirement age and in their desired income replacement rate. These rather large changes suggest that these participants did in fact increase their financial literacy and acted on their new knowledge.

#### ALTERING SAVING AND INVESTMENT BEHAVIOR

On the basis of the information provided in the seminar, respondents indicated that they expected to be more active in planning for their retirement. Forty percent of those who did not have a supplemental pension plan said that they planned to establish one with their employer. Among respondents that currently had a supplemental plan, 37 percent stated that they would increase their contributions to them.<sup>15</sup> Empirical analysis showed that respondents in basic defined benefit pension plans had a 30 percentage points higher chance of wanting to start a new supplemental plan compared to respondents in basic defined contribution plans. Compared to younger individuals, respondents aged 60 and older were less likely by 21 percentage points to want to start a new plan. Women were more likely than men by 22 percentage points to say that they planned to start a new supplemental plan, and married respondents had a 28 percentage points higher likelihood than others of wanting to start a new plan. As one might expect, individuals with longer-term saving horizons were more likely to report that they now want to establish a pension plan.

Compared to respondents age 45 to 59, individuals age 44 or younger were more likely by 17 percentage points to report that they were going to increase their contributions to their supplemental plan after participating in the seminar. Those 60 and older were less likely by 29 percentage points to indicate a desire to increase their contributions. Once again women had a greater likelihood of wanting to increase contributions than men did. The difference is 14 percentage points. Secretarial, clerical, and maintenance workers had a much higher desire to increase contributions after the seminar than did faculty, other professionals, and administrators.

In addition to changing their saving rate, some individuals expressed a desire to alter their choices of assets in their pension accounts. Ten percent of all respondents with basic defined contribution plans indicated that they intended to increase the proportion of their investment in equities while 20 percent reported that they intended to increase their investment in bonds. In addition, one third of those with supplemental retirement plans intended to change their investment allocations in those plans. The change in investment allocations is estimated separately for balances in the basic retirement plan and in supplemental plans. Women were more likely to plan to alter their investment allocations, especially in their supplemental plans, than men were. Married individuals had a higher probability of changing their investment patterns in both plan types. Those with basic defined benefit plans were less likely to indicate a desire to reallocate their investment allocations in their supplemental plans. Respondents attending a financial seminar for the first time were more likely, after the seminar, to plan to reallocate their investments.

Several other interesting relationship were found based on risk preferences and the use past use of financial advisors by those attending the conference. Individuals that reported favoring conservative or moderate levels of investment risk were more likely to enter the seminar with a lower retirement age goal. After the seminar, these individuals who did not already have a supplemental retirement plan were less likely to say that they were going to establish one compared to individuals who were more willing to take investment risks. However, among individuals who already had a supplemental plan, those favoring conservative to moderate risk in their investments were more likely to report that they were going to increase their annual contributions to these plans.

Persons who had previously worked with a financial advisor entered the seminar with lower retirement age goals. In addition, they were more likely to reduce their desired age of retirement after the seminar. Such a reaction could signal that these individuals had accumulated sufficient wealth to meet or exceed their stated goals. Those individuals who had consulted a financial advisor but who did not have a supplement retirement plans were less likely to state that they would establish such a plan after the seminar compared to individuals who had not worked with an advisor perhaps indicting that they already had a well established wealth accumulation plan and did not think they needed to open a supplement retirement plan.

In the survey following the seminar, respondents provided information on their desire to change their saving behavior. Of course, desire and intent does not always produce action. In order to assess whether seminar participants actually changed their behavior, a third survey was sent approximately three months after the seminar in which individuals were asked to report whether they actually had altered their saving behavior in the first few months following the seminar. At the time of the seminar, half of the respondents reported that they did not have a supplemental retirement plan. Of these, 41 percent had indicated that in response to the seminar they planned to establish a supplemental plan. Of the individuals who returned the third survey and who had indicated that they planned to open a new account, 25 percent had actually established a new plan and 63 percent stated that they still intend to open a new supplemental plan. Of those who did not initially have a supplemental plan and who did not expressed a desire to establish such a plan, 72 percent

reported that they had not yet opened a plan and still did not plan to open a plan while 22 percent now indicated that they intended to establish a supplement plan.

Among those who had pre-existing supplemental plans, 37 percent had expressed a desire to increase future contributions. Of these respondents who completed the final survey, 42 percent had increased contributions. In contrast, 30 percent of those who stated that they were not going to increase contributions had actually increased their contributions to the supplemental plan. These findings indicate that there was limited follow through on the plans developed during the seminar. The lack of change in saving behavior could be due to changed circumstances in the months following the seminar, insufficient time to complete the desired adjustments, or inertia that characterizes many of us.

#### GENDER DIFFERENCES

The pre-seminar survey revealed that female participants had different retirement goals and different levels of retirement saving. Furthermore, statistical analysis showed that women were more likely to alter goals and behavior after the seminar. Prior to the seminar, women had a slightly lower expected retirement age and a lower desired income replacement rate compared to male respondents. Before they have participated in the seminar, women had less confidence in their abilities to attain their retirement goals. On a scale of one to ten, women indicated that they had a 6.7 confidence level in being able to retire at the desired age but only a 5.7 confidence level in their ability to achieve the retirement income goal. In comparison, the men had confidence levels of 7.7 on their retirement age goal and confidence level of 7.0 on achieving the retirement income goal.

After the financial education seminar, sixteen percent of the women modified their expected age of retirement while only 6 percent of the men reported a change in their desired retirement ages. Women were twice as likely to increase their expected retirement age than to lower it while men were split almost equally between those that raised and those that lowered their retirement age goal. Among women, many of those who had initially hoped to retire before age 65 raised their expected retirement age after learning more about financial markets and the saving process. Almost one quarter of women who had initially indicated a desired retirement age of less than 60 raised this target after the seminar and the increase was by an average of over 4 years. Regardless of their initial retirement goal, relatively few men tended to alter their expected retirement age.

In response to the new knowledge obtained in the seminar, women were also much more likely to alter their retirement income goal. Approximately 35 percent of the women changed their income target compared to only 20 percent of the men. Almost three quarters of women, who modified their goal, raised their desired income replacement rate. Almost half of those women who had initially reported a desired replacement rate of less than 65 percent of final earnings raised their retirement income goal. Similarly, men with relatively low retirement income goals were more likely to increase their desired replacement ratio after the seminar.

Women had much lower account balances in their retirement plans than did men. Building on the new information provided in the seminar, women were much more likely to have stated an intent to increase their retirement saving and alter their investment choices. Among persons without a supplemental retirement plan, 48 percent of the women but only 33 percent of the men indicated that they would establish such a plan in the future. Among persons who already had a supplemental plan, 53 percent of women compared to only 33 percent of the men were planning on increasing their annual contributions. Women were also more likely to report that they were going to alter their investment choices in both basic and supplemental pension plans.<sup>17</sup>

#### IMPLICATIONS FOR FINANCIAL EDUCATION AND PLAN SPONSORS

This project shows that financial education can influence workers to reconsider their retirement goals and alter their saving behavior. Discovering that they have based their desired retirement age and income goals on inadequate saving behavior can lead to the development of more realistic retirement goals and to change their saving for retirement. Importantly, individuals with low desired retirement ages often increased their expected retirement ages based on the information provided while those with low retirement income goals also tend to raise their income target toward a level more consistent with having retirement incomes similar to their net income while working.

Many participants stated that they intended to alter their saving behavior by opening new retirement savings plans and increasing contributions to existing plans. Presumably, they are considering making these changes to increase the likelihood that they achieve their retirement goals. Frequently, plans to alter retirement savings were not immediately executed. This lack of follow through suggests that it would be useful if arrangements are made so that participants in financial education programs could open new supplemental plans or alter contributions rates at the conclusion of educational programs. The ability to make on-site changes in their savings plans at the end of a seminar would tend to reduce the forces of inertia and procrastination. The addition of post-seminar communications and encouragement could also increase the likelihood that participants will adopt their new retirement plans.

The results of this study are interesting and have direct policy implications for plan sponsors and workers. The analysis indicates that financial education matters. Quality educational programs encourage workers to reassess their retirement goals, to make more realistic plans, and to change their behavior in order to achieve their objectives. Follow through on plans made during a seminar remains problematic and introducing methods for immediate action would be useful additions to educational programs. Finally, the research shows the importance of evaluating financial education programs and the need to modify these programs to maximize their benefits.

Knowing that on-the-job financial education programs can be effective in improving retirement planning is only part of the solution. Several important questions still remain. First, we need to know more about why some companies offer these types of plans and

others do not. A survey by Ernst & Young indicates many employers are concerned about potential liability associated with providing this type of benefit to their employees. While the Pension Protection Act addresses some of these issues, firms may still be awaiting a clear statement of safe harbors for financial education programs. Second, financial education programs come in many shapes, a better understanding of the cost and benefits of these alternative programs might lead to firms concluding that some programs are more cost effective than others and thus, they might be more interested in offering them. Third, the government could consider whether financial education should be required of those companies that offer pension plans.

The lack of financial literacy has also lead to movements to automate the retirement saving process. Automatic enrollment in 401(k) plans, increasing contribution rates, default into lifecycle funds, and managed accounts are just some of the methods being considered and adopted by firms to increase the retirement saving of their employees. However, most of these innovations are voluntary and contribution rates are often set at minimum levels. Thus, the need for more extensive financial education is not eliminated by the implementation of these policies.

For companies offering financial education programs, can employers increase interest in and attendance at company-provided financial education programs? It may be easier for some workers to take time off during the work and attend a program than other employees. Companies could consider methods of providing equal access to these programs. Tailoring information and programs to individuals<sup>19</sup> or types of workers may be more effective than general types of programs. Companies should explore programs aimed specially at low income workers, women, minorities, or specific work units are more effective than general education programs. Small monetary incentives or prizes for attending financial education programs might also increase participation and lead to more significant changes in retirement planning.

As members of the baby boom cohort near and enter retirement, providing financial education programs for pre-retirees should become more of a national priority. First, pre-retirees need to have a better understanding of many of the one time, irreversible choices that they must make in the next few years. These include whether to annuitize some or all of these retirement saving, when to start receiving Social Security benefits, and when to leave their career jobs. In addition, pre-retirees should develop investment plans about how to manage their assets during their retirement years. Employers interested in their older workers moving smoothly from full time work into retirement should consider offering pre-retirement planning programs, evaluating these programs and then modifying them to best fit the needs of their workers.

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**Dr. Robert Clark** is Professor of Management, Innovation, and Entrepreneurship, and Professor of Economics, North Carolina State University. Professor Clark has conducted research examining retirement decisions, the choice between defined benefit and defined contribution plans, the impact of pension conversions to defined contribution and cash balance plans, the role of information and communications on 401(k) contributions, government regulation of pensions, and Social Security.

He has examined the economic responses to population aging in developed countries and has written widely on international retirement plans, especially the Social Security and employer pension systems in Japan. Clark has conducted research examining the effectiveness of financial education programs and how they have influenced retirement plans and retirement goals. He has also written widely on the economics of higher education and edited two books based on conferences held by the TIAA-CREF Institute. Professor Clark earned a B.A. from Millsaps College and a M.A. and Ph.D. from Duke University and is a Fellow of the TIAA-CREF Institute.

Madeleine d'Ambrosio is Executive Director of the TIAA-CREF Institute. She has responsibility for the Institute's strategic goals and objectives and management of its operations. She has oversight for the Institute's research agenda, Fellows Program, annual National Higher Education Leadership Conference and other forums, partnerships, and the TIAA-CREF Institute Series on Higher Education and Series on Financial Security, which include books, periodicals, and other resources developed to support strategic planning and decision making by higher education leaders. Earlier in her career at TIAA-CREF, Ms. d'Ambrosio was Vice President of Education and Financial Support Services, responsible for training, financial guidance and advice for participants, and development of educational seminars on topics important to the financial well-being of individuals and their families. As Vice President, Institutional Counseling, she had management responsibilities for the design and administration of institutional benefit plans and the counseling of participants. She is co-editor of The New Balancing Act in the Business of Higher Education and Transformational Change in Higher Education, as well as co-author of many articles related to financial education. She is a member of the National Academy of Social Insurance, and the Cornell Higher Education Research Institute Advisory Board. She is a trustee of the Employee Benefits Research Institute, and a member of the Board of Directors of the March of Dimes New York State Chapter.

#### **ENDNOTES**

- The research described in this paper was conducted as part of a grant from the TIAA-CREF Institute and in collaboration with Ann McDermed, and Kshama Sawant. We would like to thank and acknowledge the TIAA-CREF consultants who administered the surveys as part of regularly scheduled retirement seminars.
- Increasingly, retirement is not an all or none decision. Instead many Americans, especially college and university faculty, now are transitioning into retirement through phased retirement programs on their career jobs or by moving from a career job to a bridge job before retiring completely. This period of partial retirement adds a new dimension to the lifetime planning process where the individual continues to have some earnings but they must be augmented by retirement savings to prevent a sharp decline in consumption.
- <sup>3</sup> For evidence on the incidence of financial education programs, see Hilgert, et al, (2003); National Council on Economic Education, (2005).
- <sup>4</sup> Faculty at some public universities are among those workers not covered by Social Security.
- The volume consists of papers presented at a conference sponsored by the National Bureau of Economic Research, May 2007. The edited volume consists of papers examining a wide range of issues associated with retirement planning, financial knowledge, and programs to increase the level of financial literacy.
- <sup>6</sup> See, Bernheim, Skinner, and Weinberg (2001).
- <sup>7</sup> For example, Bernheim (1998) presents evidence that questions whether the typical household has enough financial literacy to make appropriate saving decisions in their pension plans.
- Arnone (2002) estimates that 40 percent of employers with more than 1,000 employees offer some type of educational program; however, he believes that only half of these companies provide a high quality educational program. He defines such a program as "an employer-paid program available throughout the year during working hours and including both education that is custom tailored to the employer's specific benefit plans and counseling that is individualized to each employee." It is his assessment that most of the 42 million participants in 401(k) plans are in effect "on their own" as they plan for retirement.
- Olark and d'Ambrosio (2002) provide a more detailed description of the seminars and the surveys.
- <sup>10</sup> The research project was based on seminars conducted from March 2001 to May 2002. A total of 36 seminars at 24 institutions along with 24 community-based seminars in eight different locations are included in the analysis. A total of 633 usable responses in

which participants completed both Survey One and Survey Two were obtained. The responses to the first two surveys are described below. We received 110 completed questionnaires for the third survey or only 17 percent of the 633 respondents who completed the first two surveys.

- <sup>11</sup> This discussion of the research findings from this project draws heavily from Clark and d'Ambrosio (2003), Clark, d'Ambrosio, McDermed, and Sawant (2004, 2006).
- Respondents also indicated that they now had a greater chance of achieving their retirement age goal and their retirement income goal.
- <sup>13</sup> See, Clark et al (2006).
- <sup>14</sup> See, Clark et al (2006).
- <sup>15</sup> After completion of the seminar, 29 percent of the respondents stated they planned to open new IRAs or increase their contributions to an existing IRA.
- <sup>16</sup> This section draws heavily from Clark and d'Ambrosio (2003) and Clark et al (2004).
- <sup>17</sup> Statistical tests, reported in Clark et al (2004), confirm that there are significant differences in how men and women responded to the financial education seminars.
- <sup>18</sup> For discussions of some of these issues and policies, see Utkus (this volume) and Vicera and Mottla (this volume).
- <sup>19</sup> A report by Ernest & Young (2004) concludes that "When programs include personalized assistance, however, the impact on employee behavior is significantly greater" than traditional or general programs.