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Older Americans' Ambivalence Toward Annuities

Results of an AARP Survey of Pension Plan and IRA Distribution Choices

Carlos Figueiredo
Sandy Mackenzie
AARP Public Policy Institute

Research Report

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AARP's Public Policy Institute informs and stimulates public debate on the issues we face as we age. Through research, analysis and dialogue with the nation's leading experts, PPI promotes development of sound, creative policies to address our common need for economic security, health care, and quality of life.

#2012-07
April 2012

AARP Public Policy Institute
601 E Street, NW, Washington, DC 20049
http://www.aarp.org/ppi

ACKNOWLEDGMENTS

The authors are grateful to Gary Koenig and Janet McCubbin for comments. Kathi Brown and Ari Houser provided very valuable advice on the statistical underpinnings of the paper. The authors alone are responsible for any remaining errors.

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EXECUTIVE SUMMARY

More and more older Americans face the difficult task of deciding how their nest egg should be distributed during retirement. In the past, more workers had a traditional employer-provided pension plan (defined benefit or DB plan) that typically paid benefits in the form of a life or joint and survivor annuity. The combination of Social Security and a traditional pension, for those lucky enough to have one, could replace a large part of end-of-career salary while providing valuable insurance against running out of money in old age. The decline of the traditional pension, the rise of the 401(k) plan, and the growing tendency of traditional plans to offer a lump sum alternative to the life annuity have substantially increased the scope for choice in distributing retirement income. However, greater choice entails greater risk: It increases the complexity of retirement planning, the risk that investment returns will be much lower than expected, and the risk of running out of money in old age.

This Research Report examines the results of an AARP survey of older workers and retirees that focused on the distribution decision. The survey sought both to gauge the popularity of life annuities and other distributional forms and to shed light on why the survey participants made the choices they did. The survey was conducted in the spring of 2010. Some 1,750 older workers, aged 50–75, and 670 retired people aged 59–75 were interviewed. Each survey participant had to be a member of at least one pension plan or have an individual retirement account (IRA).

The survey shed new light on the role of annuities in retirement planning. In particular, despite the unpopularity of the life annuities sold by insurance companies, almost half of workers and 70 percent of retirees expected to receive or were receiving income in the form of an annuity from their most important plan. Annuitants often received an annuity automatically. Nonetheless, 30 percent of workers and 41 percent of retirees with a choice intended to choose or had already chosen an annuity. In many cases, this reflected the implicit choice of DB plan members who accepted the default option rather than the lump sum. However, many defined contribution (DC) plan members also opted for an annuity. Of workers with a DC plan who were in a position to choose, 31 percent planned to elect a life annuity, and 24 percent of retirees had made a similar election.

Survey participants without the option of partial annuitization were asked to rate their interest in it. Interest was moderately strong among workers, but not among retirees. Interest in two more radical options—a trial annuitization arrangement, where participants could reverse the annuity purchase and redeem most of their principal after a trial period; and gradual annuitization, where contributions to a plan buy small annuities as they are made—was moderate. More than half of the workers polled expressed some interest in either a trial arrangement or gradual annuitization, but retirees again appeared to be content with the distributional mode they had already chosen.

The survey also explored what workers and retirees liked and did not like about life annuities. It found that potential annuitants are deterred by the risk of having no money in an emergency, dying prematurely, and receiving low returns or poor value. However, annuities were rated favorably for providing peace of mind and imposing financial discipline. All in all, the survey's findings suggest that there is more potential in the annuity market than many observers have assumed.

The survey's finding of greater than expected interest in annuities is heartening. However, annuitization remains the exception rather than the rule for 401(k) plan members, with the consequence that many retired Americans may run the risk of running out of money in old age. This is especially true of women, who on average live longer than men. Reducing the risk of under-annuitization should be a top policy priority.

INTRODUCTION

One of the best-known trends in pensions in the United States is the decline of the traditional defined benefit (DB) plan, and its replacement by the 401(k) plan. This development has potentially momentous implications for retirement security, because it shifts both investment and longevity risk from the plan sponsor to the member, who becomes responsible for managing his or her own investments and avoiding running out of resources in retirement.

An annuity is a financial instrument that turns an initial investment into a regular stream of income, typically a long-lasting one. A life annuity provides valuable insurance that income in retirement will not exhaust itself before the annuitant's death or the death of his or her designated survivor. Recent trends in pensions have undoubtedly reduced the share of older Americans benefiting from such longevity insurance, because distributions from 401(k) plans are rarely annuitized. This is a troubling development. The Social Security benefit is a life annuity that is indexed for inflation. For many Americans, the longevity insurance it provides will suffice. However, Americans with even average earnings during their working lives cannot expect that Social Security will provide them with an adequate replacement ratio. It was never intended to be the sole pillar of retirement income for all or most Americans. The current predominance of the 401(k) plan and the decline of the role of the traditional DB pension in providing retirement security will entail a decline in the share of the wealth of millions of retired Americans that takes the form of an annuity, or annuitized wealth. For many, the share of wealth annuitized may be undesirably low.

This Research Report analyzes results from a survey that was intended to shed light on the current role of annuities in providing longevity insurance and to gauge the receptiveness of a representative sample of older Americans to some proposals that would enhance that role. The report begins with a brief description of the survey—its coverage and the criteria that determined the eligibility of the two groups surveyed—older workers and retirees. It then turns to the survey's findings regarding the extent of annuitization of members of the various plan types, members' knowledge of the distribution options their plan provides, and their familiarity with and attitudes toward life annuities.

The next section summarizes the survey's findings regarding the interest of participants in a broader range of distribution options: specifically, an (all-or-nothing) choice between an annuity and a lump sum, partial annuitization, gradual annuitization, and a trial annuitization arrangement. It is followed by a summary of the report's main conclusions. The report has three appendixes. The first reproduces the definitions of the major pension forms that were given to survey participants. The second summarizes the findings of a statistical analysis of survey data to determine if there is any relationship between income, age, race, and other financial and demographic variables and the demand for annuities. The third lists the variables used in the regressions.

APPROACH OF THE SURVEY

The survey covered members of two different groups of people: older workers and retirees. Older workers had to fall between the ages of 50 and 75 and have a pension plan or retirement saving account of some kind. Retirees had to fall between the ages of 59 and 75 and to have begun drawing or receiving payments from their most important retirement plan/account in the last three years. The sample included 1,750 older workers and 670 retirees, for a total of 2,420.[1,2]

By including both older workers and recent retirees in the sample, the survey obtained estimates of actual distributional choices (by retirees) as well as of the intentions of workers who were sufficiently close to taking a distribution from their pension plan or individual retirement account (IRA) that most of them could be assumed to have given the issue some thought. To make the survey's responses as accurate as possible, the various pension types in which participants would have participated were carefully described to them (see appendix A for the survey's descriptions). Participants were then asked whether they had been or were members of a DB plan, such as a traditional (final salary) plan or a cash balance (CB) plan; a 401(k) or other defined contribution (DC) plan; or an IRA. Participants were invited to pick the most important plan they had, and to name the next most important plan if they had two or more plans. Apart from IRA holders, few survey participants had more than one plan.[3]

The survey collected basic demographic information as well as personal financial information, much of which has been used in this report to determine the extent to which the apparent interest in annuities of both older workers and retirees can be explained by age, sex, income wealth, and so on.[4] The survey's questions pertaining to pension and distributional preferences fell into three categories: questions of fact or intent, such as questions as to whether a participant had a DC plan, or was intending to partially annuitize his or her DC balance; questions regarding hypothetical events or choices, such as a participant's interest in a trial annuity; and questEions asking the participant to assess his or her knowledge of annuities.

1 The study is not directly concerned with the important issue of pension plan coverage. The criterion that survey participants either have a pension plan or IRA or be drawing benefits from a plan means that a measure of the survey's coverage would be automatically 100 percent. It can, however, shed light on coverage by type of pension, and the changing roles of DC (401(k)) and traditional pensions. See Mackenzie and Wu (2009) for a detailed treatment of coverage.

2 The demographic characteristics of survey participants differ somewhat, but not greatly, from those of the general population. Income levels are higher, particularly at the lower end of the income distribution, as is educational attainment. Other surveys of active pension plan members have found that participation in a plan increases significantly with both income and educational attainment. The ethnic and gender composition of participants is similar to that of the population at large, although African Americans are somewhat underrepresented.

3 Some 43 percent of workers with an IRA had at least one additional important plan. Only 16 percent of workers without an IRA had at least one additional important plan. Of retirees with an IRA, 38 percent had at least two important plans, compared to just 12 percent of retirees without an IRA.

4 The report uses the expression "to be annuitized" to mean "to have purchased an annuity or to be or expect to be receiving a pension annuity."

FINDINGS

Coverage by Type of Plan

The survey revealed some noteworthy differences in the role of the different plan types for older workers and retirees (see box 1 for definitions of the major plan types and some basic related terms). Most notably, 61 percent of retirees had a traditional DB or CB plan with or without a DC plan or IRA, compared with only 33 percent of older workers (referred to hereafter simply as workers).[5] Because all survey participants had at least one pension plan or IRA, it follows that 39 percent of retirees had a DC plan and/or an IRA without a DB plan, compared with 67 percent of workers (see table 1).

Box 1. Glossary

Defined benefit (DB) pension—an employer-provided pension plan with a benefit that is determined by the terms of the plan. The traditional, although not the only, form of a DB pension is a final salary plan, in which the pension is determined by the number of years of plan service and average salary in the last one to perhaps five years of work.

Defined contribution (DC) pension—a pension plan that determines the contributions that members pay but not the benefit they receive. A typical employer-provided DC plan specifies a contribution rate as a proportion of salary. With some DC plans, members have no say in how the funds are invested, but in most plans investments are member-directed.

Cash balance (CB) plan—a defined benefit plan in which the benefit is determined by the rate of contribution set by the plan and a rate of interest applied to the member's balance, which is normally fixed. A CB plan is similar to a defined contribution plan in that it has a balance and the benefit is generally in the form of a lump sum, not an annuity. Nonetheless, it is classified legally as a DB plan, and therefore must offer an annuity.

Life annuity—a financial instrument that pays the annuitant a monthly stream of income, normally fixed, that lasts until the death of the annuitant. Life annuities commonly come with a guarantee period to ensure that payments will be made for at least a few years even if the annuitant dies during this period. With a deferred annuity, as the name suggests, there is a lapse of time, possibly a significant one, between the payment of the premium and the first payment to the annuitant.

Longevity insurance—insurance in which the total payout depends on the number of years lived, as is the case with a life annuity, which pays for as long as the annuitant lives.

Replacement rate—the ratio of income in retirement to income during working life, usually at the end of working life. The replacement rate can be an actual or a targeted rate.

[5] Participation in a CB plan was uncommon. Only 1 percent of both workers and retirees named a CB plan as their most important plan. CB plans have increased their coverage substantially in recent years, largely in response to the freezing of traditional plans to new and sometimes older participants (Mackenzie 2010). In consequence, many of their participants would be new entrants, who would tend to be young.

Most workers (64 percent) and retirees (74 percent) with a DB plan complemented it with a DC plan or an IRA. Only 12 percent of workers and 16 percent of retirees relied solely on a DB plan. These differences in the relative importance of the DB and 401(k) for workers and retirees partially reflect the secular trend of the declining role of the traditional pension in the provision of retirement security.[6]

Table 1
Coverage of Pension Types for Workers and Retirees
(in percentage of group total)

	Workers	Retirees
DB plan		
With or without other plan coverage	33	61
With DC and/or IRA	21	45
By itself	12	16
DC and /or IRA, but no DB	67	39

Source: Survey data.

A similar pattern emerges from the data on the type of pension that workers and retirees deemed to be most important. About 46 percent of workers and 29 percent of retirees named a 401(k) or other DC plan as their most important plan, while 40 percent of retirees and 24 percent of workers named a traditional plan as their most important plan.[7] About 29 percent of both workers and retirees named the IRA as their most important plan.[8] Among the 28 percent of retirees who had another plan they considered important (the "second or next most important plan"), the IRA was most frequently named. For workers, the IRA and 401(k) plans were about equally popular as second most important plans. Although the IRA's role as the most important plan is overshadowed by the employer-provided pension plans, it takes on a more significant role as the second most important plan, when workers or retirees have one.

The distribution options that pension plans make available to their members vary. DC plans usually allow members to withdraw 100 percent of their plan balance as a lump sum, but other options are not always available. Of participants whose most important plan was a DC plan, 26 percent of workers and 46 percent of retirees stated that their plan offered a life annuity option. The reported shares are higher than those reported by some other sources.[9] DB plans are required to offer a life annuity or a joint and survivor annuity to their members. Of participants whose most important plan was a DB, about 30 percent of both workers and retirees said that their plan offered members a lump sum option. Half of workers with a DC plan did not know whether their plan offered an annuity, and more than a quarter of workers with a DB plan did not know whether their plan offered a lump sum. As might be expected, retirees, who have already had to make a decision about distributions, were more knowledgeable than workers.

6 The higher share of retirees with DB plans could also reflect the tendency for DB plans to encourage early retirement.

7 Of workers who had both a traditional plan and a 401(k) or other DC plan, 65 percent named the traditional plan as their most important plan. The corresponding percentage for retirees was 57 percent.

8 Most of the funds in IRAs were transferred from employer-provided defined contribution plans, mainly 401(k)s (Investment Company Institute 2011).

9 According to the Plan Sponsor Council of America's 54th Annual Survey of Profit Sharing and 401(k) Plans, 16.6 percent of all plans surveyed offered annuities as a distribution option, while 60.2 percent offered installments as an option. The survey does not cover the universe of DC plans, but includes the experience of 820 profit-sharing and 401(k) plans with 10.5 million participants.

Role of Annuities

Despite the small size of the U.S. voluntary annuity market, the survey found that an annuity, either an instrument purchased from an insurance company or an annuity from an employer-provided pension, was the most common form of distribution of benefits among workers, with 48 percent expecting or planning to receive an annuity of some kind, and 38 percent a life annuity.[10] Among retirees, no less than 74 percent were receiving (or expecting to receive) income from an annuity of some kind, and 63 percent were receiving income from a life annuity (see table 2).

Table 2
The Role of Annuities in Distributions
(percentage of workers and retirees receiving or expecting to receive an annuity)

	Workers	Retirees
Any type of annuity	48	74
Life annuity	38	63

Source: Survey data.

Many traditional plans still allow no choice of distributive options, and their members automatically receive their pension benefits in the form of a life or joint and survivor annuity. However, participants in traditional plans that did offer a lump sum more often than not declined that option to elect a life annuity. Among workers whose most important plan was a traditional pension that offered a lump sum distribution option, 63 percent intended to forego the lump sum. No less than 87 percent of retirees who had had a lump sum option had already chosen to forego the lump sum. About one in ten workers and retirees with a lump sum option expect to choose or had already chosen the option of the full lump sum balance. Only a handful chose the combination option.

Among workers and retirees whose most important plan was a 401(k)-type plan that offered options other than a lump sum, 31 percent of workers and 25 percent of retirees were planning to elect or had elected to receive a life annuity, and 24 percent of workers and 18 percent of retirees were planning to elect or had elected a series of regularly scheduled payments. Only 11 percent of workers but 30 percent of retirees planned to elect or had elected a lump sum. One in four workers had not made a decision. Among workers whose most important plan was an IRA and who were aware of the possibility of purchasing an annuity with their IRA, 20 percent were planning to receive income for life from an annuity.[11] All in all, some 30 percent of workers and 41 percent of retirees had made or expected to make an active choice of some kind of annuity.

Influences Inhibiting the Choice of a Life Annuity

To get some idea of the influences that could discourage a potential annuitant from either buying a life annuity outside of a plan from an insurance company or choosing a

[10] In 2008, sales of immediate annuities in the voluntary market amounted to only $7.9 billion dollars—less than 0.1 percent of gross domestic product. Over 1998–2007 they averaged $4.4 billion annually. Sales of deferred fixed annuities, which are basically a tax-favored saving vehicle, were much more robust, and averaged $61.4 billion per year over this 10-year period. Sales of variable annuities, also a tax-favored savings vehicle, were stronger still, amounting to $155.7 billion in 2009 (communication from LIMRA, 2009).

[11] Retirees whose most important plan was an IRA and who had been aware of the possibility of purchasing an annuity with their IRA were not sufficiently numerous to allow a meaningful conclusion.

life annuity option within a plan, the survey provided groups of participants in different situations with a series of 10 statements giving a reason or motive for not choosing an annuity. Participants could pick more than one statement and could choose to rate it as a major reason, a minor reason, or not a reason at all.

Table 3 shows the percentage of respondents who identified each of the 10 statements as either a major or minor reason. By this criterion, "I want to keep the money around in case there is an emergency," "I don't think the lifelong monthly payments would be a good value for the money," "I may not live long enough to make the lifelong monthly payments worthwhile," and "I think I could get a better return managing the money myself" rose to the top. This said, workers ranked three additional statements almost as highly as the four front runners.

The four motives for avoiding annuities just cited typically figure in economists' explanations for the small size of the voluntary annuity market. The first speaks to the concern that a potential annuitant could have over the consequences of loss of liquidity that buying an annuity would entail if the annuitant is faced with unexpectedly heavy expenditures. The plausibility of this motive is supported by another survey finding: that less than 50 percent of participants have bought or intend to buy long-term care insurance, and that about 40 percent have no specific plan for financing this contingency. The second and third motives could be interpreted as expressing a concern that annuity payments in old age are not sufficient to make up for the risk of early death.

Table 3
Responses of Survey Participants Who Stated That They Did Not or Would Not Select a Life Annuity Option from Their Most Important Retirement Plan
(percentage of respondents citing each reason as a major or minor reason for avoiding annuities)

		Workers (n = 732)	Retirees (n = 293)
1.	I want to keep the money around in case there is an emergency	83%	75%
2.	I don't think the lifelong monthly payments would be a good value for the money	79%	74%
3.	I may not live long enough to make the monthly payments worthwhile	78%	62%
4.	I think I could get a better return on my investment managing the money myself	76%	66%
5.	I don't have enough information about the lifelong monthly payments to be comfortable with them	75%	54%
6.	I fear loss of control over the money	73%	62%
7.	I fear that the financial institution or company that might manage the monthly payments could fail or go out of business	73%	56%
8.	I don't trust the financial institution or company that might manage the lifelong monthly payments	67%	51%
9.	I want to be able to leave some money to my family/friends after I die	62%	54%
10.	I need cash up front	50%	43%

Source: Survey data. Questions 12a, 23a, 23b, 32a, and 32b concerning respondent's most important plan.

The survey's findings cast doubt on the bequest motive as the standard explanation of anemic annuity markets. Significantly fewer respondents cited the desire to "leave some money to family/friends after I die" than the other motives already mentioned. The same is true of "I need cash up front" (see table 3). Responses to another question about the factors participants without annuities would consider in deciding how much money to withdraw from their accounts also suggest that the bequest motive was not strong: "Being able to leave an inheritance to your heirs" was by a considerable margin deemed the least important of the reasons that the survey proposed.

One additional reason for a lack of strong interest in annuities could be simple ignorance. This motive is partly captured by reason no. 8: "I don't have enough information about the lifelong monthly payments to be comfortable with them." Another indicator was the response of the whole sample to the question "How familiar would you say you are with a financial product called an annuity, which provides a series of payments guaranteed to last for specified period of time? For example, a 'life annuity' provides a series of payments guaranteed to last for life." Only one in two workers described themselves as either very familiar or somewhat familiar, leaving almost half to describe themselves as not too familiar or not at all familiar. In contrast, two of three retirees described themselves as either very or somewhat familiar with annuities, reflecting the higher coverage of DB pensions in this group and their greater firsthand experience with pension annuities and annuity markets. Nonetheless, more than 30 percent of retirees claimed to be unfamiliar with them.

A lack of understanding of an annuity's properties is also suggested by the responses that various groups of participants gave to a question regarding their knowledge of the options a plan offered. For example, of those older workers whose most important plan was a DC plan, 50 percent did not know whether the plan offered a life annuity. Similarly, 46 percent of older workers naming an IRA as their most important plan did not know whether they could use the funds from their IRA to purchase a life annuity. Ignorance was not nearly as prevalent among retirees in either case, perhaps because they had to investigate various plan options before making an election or had more experience making financial decisions. Although ignorance as to whether a participant's plan offered an annuity is not, strictly speaking, the same as ignorance of an annuity's properties, it does point to a lack of interest in finding out exactly what options a plan participant might enjoy. Because exploring a plan's options, if an annuity were among them, would be one way of learning about annuities, increasing workers' interest in their pension plan and its distributional options would likely stimulate interest in and demand for annuities.

It is likely that a lump sum payment would appeal to those who did not understand annuities, because it seems like a simple and completely flexible arrangement—the safe choice for a DC plan member or an IRA holder. With some understanding of annuities would come more appreciation of the disadvantages of a 100 percent lump sum withdrawal and the attractiveness of annuitizing at least a part of retirement wealth.

Interest in Annuities

In addition to addressing the issue of what deters plan members from opting for an annuity, the survey explored potential interest in annuities via several avenues. First, the whole sample was invited to answer a question intended to uncover those features of an annuity that were considered attractive. As with the attempt to discover what inhibited annuity demand, participants were given a menu of reasons from which to choose. They were asked to rate them as "very convincing," "somewhat convincing," "not too convincing," or "not at all convincing." The two top reasons that participants selected were that an annuity helps with managing the household budget and gives peace of mind—its income lasts as long as you do. By comparison, participants played down the reasons related to the investment aspects of annuities (see table 4).

Table 4
Responses of Whole Sample Regarding How Convincing the Stated Reasons Are for Buying an Annuity or Other Lifetime Income Product

	Older workers			Retirees		
	How convincing			How convincing		
	Very	Somewhat	Sum	Very	Somewhat	Sum
Helps you manage your budget because you get a predictable amount of money each month, just like a paycheck	38.8	43.5	82.3	43.4	37.6	81.0
Gives you peace of mind because the payments will continue as long as you [and your spouse] live	42.7	38.9	81.6	47.6	33.0	80.6
Ensures that your monthly income will not fall even if there is a large drop in the market	39.0	41.0	80.0	46.6	32.1	78.7
Can help you remain independent because the money will never run out	36.9	39.9	76.8	41.8	35.8	77.6
Certainty re rate of return	27.0	48.5	75.5	31.1	45.5	76.6
Provides you with a larger amount of money than you can get from withdrawing just gains, dividends, or interest	23.5	44.8	68.3	24.5	41.3	65.8

Source: Survey data. Question 68.

The second avenue was a direct exploration of participants' interest in the options of total annuitization, partial annuitization, trial annuitization, and gradual annuitization. Participants whose most important plan was a DC plan that did not offer an annuity option, as well as those whose most important plan was an IRA, but who were unaware of the possibility of purchasing an annuity, were asked how likely it was that they would consider selecting an option to annuitize some or all of their plan balance.

In general, interest in total annuitization was moderate. Of retirees who were asked whether they would consider this option, 22 percent said that they would have been very or somewhat likely to choose total annuitization had it been available. Among workers who were asked the same question, 45 percent expressed interest (see table 5). However, among both groups, few said that they were "very likely" to choose this option. Most said that they were only "somewhat likely" to choose it. This somewhat tepid response could simply reflect the all-or-nothing character of the annuity option: That is, either the whole balance would be converted into an annuity, or none of it. The inflexibility of this option can mean that a retiree is confronted with a choice of either too little or too much annuitization.

Partial annuitization might be more appealing than an all-or-nothing choice between an annuity and a lump sum. To test this possibility, participants with a DB or a DC plan who did not have the option of partial annuitization were asked how interested they would be in an arrangement that allowed them to annuitize only part of the balance of their plan.

The degree of interest in partial annuitization was not much different from the degree of interest in total annuitization (see table 6). As with the total (all-or-nothing) annuitization option, workers tended to be substantially more interested in the partial annuitization option than retirees were. This was particularly true of retirees with a traditional pension plan as their most important plan, suggesting that many retirees may be happy receiving all of their retirement benefits in the form of an annuity.

Table 5
Likelihood of Workers and Retirees Choosing an Available Annuity Option Rather Than a Lump Sum
(in percentage of workers and retirees questioned)

	Workers	Retirees
Very likely	7.6	5.4
Somewhat likely	37.2	16.3
Not too likely	40.6	45.7
Not at all likely	14.6	32.6

Source: Survey data. Questions 20w, 20r, 30r, and 30w concerning respondents whose most important plan was a DC plan with no annuity option and respondents whose most important plan was an IRA and who were not aware they could purchase an annuity with an IRA.

Table 6
Likelihood of Workers and Retirees Choosing Partial Annuitization
(in percentage of workers and retirees questioned)

	Workers	Retirees
Very likely	10.8	3.4
Somewhat likely	37.3	17.4
Not too likely	36.0	33.5
Not at all likely	15.9	45.4

Source: Survey data. Questions 12b and 24 concerning respondents with a DB plan as their most important plan, if it lacked a lump sum option or did not offer a combination, and participants with a DC plan as their most important plan, if it lacked options other than a lump sum withdrawal or did not offer a combination of options.

Finally, questions were asked to gauge interest in gradual annuitization and in trial annuitization. Gradual annuitization avoids the all-or-nothing approach that typically characterizes annuity purchase. Instead of a single or at most a few purchases at career's end, the purchase of an annuity is spread out over part or all of a worker's entire career. This is intended to take the sting—in this case, the all-or-nothing character—from annuity purchases (see Mackenzie (2010) for further discussion of gradual annuitization and Gale, Iwry, John, and Walker (2008) for a discussion of trial arrangements).

A trial arrangement—one where the participant would be able to back out of the annuity purchase after two years with the return of most of his or her investment—proved to be more attractive than partial annuitization, in that the share of both workers and retirees who are at least somewhat interested is substantially higher. In the case of workers, the share rises well above 50 percent (see table 7), although workers' interest is not really strong. As was the case with the all-or-nothing annuity lump sum choice and the partial annuitization option, retirees are clearly less interested in this innovation than workers are.

This difference probably reflects the high share of retirees who have an annuity, and their general satisfaction with that form of distribution.

A gradual arrangement, like the in-service annuity described in Mackenzie (2010), is somewhat like a trial arrangement, but has its own advantages as well. In particular, an investor can simply stop contributing to a plan that annuitizes each contribution as it is made, and thereby minimize the share of his or her assets in annuity form. In addition, gradual annuitization reduces the risk of having to annuitize all one's capital when interest rates are low. However, the degree of interest in gradual annuitization was not much different than that in a trial arrangement (see table 8). Difficulties in understanding the way a gradual arrangement works may have tempered enthusiasm for it.

Table 7
Likelihood of Adopting a Trial Arrangement
(in percentage of workers and retirees)

	Workers	Retirees
Very likely	15.0	9.4
Somewhat likely	42.7	27.2
Not too likely	28.3	34.3
Not at all likely	13.3	29.0

Source: Survey data. Questions 13, 25, and 34, concerning respondents with either a DB or a DC plan who could not choose, could not have chosen, would not chose, or would not have chosen an annuity; and IRA holders who were either unaware of the possibility of buying an annuity or did not plan to buy an annuity. Results relate only to respondents' "most important" plan.

Table 8
Likelihood of Adopting a Gradual Annuitization Arrangement
(in percentage of workers and retirees)

	Workers	Retirees
Very likely	5.8	5.5
Somewhat likely	46.0	33.8
Not too likely	34.2	31.1
Not at all likely	13.6	29.6

Source: Survey data. Questions 26 and 35, concerning DC plan members who do not have an annuity option or who would not have chosen it anyway and IRA holders who are unaware of annuity option or do not plan to annuitize. Results relate only to respondents' "most important" plan.

Alternatives to Annuitization in Managing Decumulation

As the introduction noted, the indexed annuity that Social Security pays may provide enough longevity insurance for some older Americans but too little for others. Whether or not retired people have a traditional pension in addition to Social Security, they need to have a strategy to deal with longevity and other risks that could jeopardize their well-being in retirement. One such strategy might be to limit withdrawals from their savings to some percentage chosen to minimize the risk that they would run out of money. Financial planners typically assume that a sustainable rate of withdrawal is in the neighborhood of 4 to 5 percent.[12]

The survey asked the full sample to choose among rules for managing withdrawals from a list that the survey provided of approaches that they either would plan to follow or were following: regularly take out a constant amount or percentage; take only gains (i.e., capital gains), dividends, and interest; take money only in emergencies; use some other approach; or have no specific approach.

The choices of participants who have annuitized or plan to do so differ significantly from those of participants who have not annuitized or have no plans to do so. Among

[12] See Guyton and Klinger (2006) for a study of sustainable withdrawal rates.

workers and retirees who did not or would not choose an annuity, about one in five chose the standard approach of making a constant amount or percentage withdrawal. Among these same participants, retirees were more likely to take money only in emergencies than workers were. Offsetting this difference was the lower proportion of retirees who claimed to have no specific approach (see table 9). Workers choosing an annuity were more likely than workers not choosing one to claim that they would withdraw money only in emergencies, and were more likely to opt for a specific rule.

Table 9
Approaches Taken in Managing Withdrawals by Workers and Retirees
(percentage of participants choosing the stated approach; only one permitted)

	Without annuity or no plans to buy		With annuity or intending to buy	
	Workers (n = 1,447)	Retirees (n = 517)	Workers (n = 303)	Retirees (n = 153)
Regularly take a constant amount or percentage	21.6	19.3	21.8	21.3
Take only gains, dividends, or interest	11.9	8.2	12.3	11.8
Take money only in emergencies	12.5	28.6	23.7	31.9
Use some other approach	4.4	11.2	4.0	6.9
Have no specific approach	48.5	32.4	38.2	28.1

Source: Survey data. Questions 72a and 72b. Base: full sample.

Advocates of annuitization have argued that providers of defined contribution plans should be required to offer their plan members the option of annuitization. The whole sample of survey participants was asked if they would be in favor of such a policy. A majority—62 percent of workers and 70 percent of retirees—were in favor of making annuitization a required option. Although some of these responses may have been motivated simply by a penchant for more options from which to choose, the overall support for the policy does suggest a general recognition that annuities are a desirable form of distribution for many.

One plausible alternative to annuitization is working longer. The survey found that some 30 percent of workers plan to work to age 70 or older. Other surveys, including some conducted under the auspices of the Society of Actuaries,[13] have found that the proportion of older Americans who actually do work past age 65 is less than the proportion who intend to do so. Part of this could be explained by increased likelihood of disability as one ages, although the risk of disability is not easily insured. Another strategy is tapping into the equity in one's home. However, retirees were virtually unanimous in saying that (to date) they had not availed themselves of this resource. Only

[13] See for example, Society of Actuaries (2008). This survey of retirees and preretirees found that 90 percent of the retirees had retired at or before age 65, and that 52 percent had retired before age 60. However, only 10 percent of preretirees expected to retire before age 60, and 28 percent stated that "retirement does not apply."

3 percent of retirees had used all or part of their home equity to finance retirement. Some 12 percent of workers plan to do so when they retire, however.

These findings do not allow us to make specific statements about the financial security and the prospects for financial security of workers and retirees. They do imply that most workers and retirees without an annuity intend to impose a degree of financial discipline on themselves, however, inasmuch as half of the survey respondents are either following or intend to follow a plan to avoid running out of money.

CONCLUSIONS

The survey provides additional evidence, if any were needed, that the defined contribution plan is the now the dominant pension plan form in the United States. More than four in five older workers and retirees with any type of plan were covered by one. The growth in popularity of DC plans has undoubtedly increased the distribution options available to workers, and the scope for choice will be even greater for today's younger workers.

Annuities dominate other forms of distribution for retirees, 70 percent of whom are receiving (or expect to receive) payments in the form of an annuity, automatically or by choice. Almost half of the older workers surveyed expected to receive one. The significant role that annuities play does not simply reflect the importance of membership in DB plans where a benefit in annuity form is automatic. Two of three workers and four of five retirees in defined benefit plans offering a lump sum as an option have elected or plan to elect one. A smaller share of survey participants in employer-provided DC plans or in IRAs had made or would make similar decisions. The statistical work the paper summarizes finds that membership in a DB plan substantially increases the likelihood that participants in a position to choose an annuity will do so.

The survey suggests that annuities are more popular than is suggested by the small size of the market for annuities provided by insurance companies. Nonetheless, most survey participants in a position to choose an annuity did not or would not choose one. The survey's poll of participants who did not or would not pick an annuity suggests that fears of premature death, anxiety over low returns, and the consequences of illiquidity were paramount concerns for them. Ignorance of the insurance role of annuities, as well as more general ignorance about the options retirement plans offer, may also play a role. A life annuity's most attractive qualities were found to be its role in managing household budgets and the longevity insurance it provides.

The survey's exploration of more flexible forms of annuitization suggests that such innovations as partial annuitization, gradual annuitization, and trial annuitization would all boost the demand for annuities. Participants' enthusiasm for these options was not overwhelming, but appears to be substantial enough that their commercial development might be viable. Because only a minority of older workers has an annuity of any kind, most households have to manage and control the pace of withdrawals from their retirement nest egg. Finally, the survey found that participants without annuities or who do not expect to have an annuity were less likely to have a specific approach (like withdrawing a constant share of wealth) and more likely to withdraw funds for routine expenditures.

APPENDIX A. THE SURVEY QUESTIONNAIRE'S DESCRIPTION OF THE FOUR MAIN PENSION TYPES

An employer-sponsored defined contribution retirement savings plan, such as a 401(k) or 403(b) plan, a thrift savings plan (TSP), a 457 plan, a money purchase plan, a supplemental retirement account (SRA), or an employee stock ownership plan (ESOP). In these types of plans, the final value in the account depends on the value of your contributions and/or your employer's contributions and the rate of return to those contributions.

An employer-provided traditional pension plan, also called a traditional defined benefit plan. In this type of plan, the benefits that you receive at retirement usually take the form of monthly payments for life. The traditional pension benefits are funded entirely by your employer based on a formula that takes into account your salary and the number of years that you have worked for the employer.

An employer-provided cash balance plan, a newer kind of defined benefit plan. This type of plan is different from a traditional pension plan because the benefits in a cash balance plan are usually expressed as the total value of your account rather than as monthly payments. Your cash balance account is entirely funded by your employer and grows over time based on employer contributions and interest on the account balance.

An individual retirement account, or IRA. This is a tax-favored account that you usually set up yourself at a bank or other financial institution to save for retirement. You may have opened an IRA when you left a previous employer and rolled over assets from your previous employer-sponsored retirement savings plan.

APPENDIX B. A STATISTICAL ANALYSIS OF THE DEMAND FOR ANNUITIES

This appendix summarizes the results of a statistical analysis of the characteristics of annuity buyers and the determinants of demand for annuities that is based on the findings of the survey. It begins with a review of what standard economic theory as well as behavioral economics would imply are the basic determinants or inhibitors of demand for annuities. Annuities are a financial asset, and economists assume that the demand for them should increase with income and wealth. A life annuity provides insurance against living an unexpectedly long life. As such, it would appeal to people who are both cautious or farsighted and expecting to live a relatively long time. In addition, any annuity with a potentially long payout period imposes discipline on expenditure—although it is not the only financial instrument that can do this—and it takes some of the worry out of financial planning. As an example, someone with a life annuity or a 20-year period certain annuity has less need to worry about the rate at which his or her nest egg should be run down.

Because an annuity permanently locks up what can be a large share of a retiree's nest egg, it makes financing unexpected or very large expenditures difficult. Consequently, an annuity will be less attractive to someone who has no health insurance, or has insurance with a very high deductible and a large copayment. In addition, because there is such a thing as being overannuitized, the demand for the annuities that insurance companies supply should be reduced when a potential annuitant has earned or will receive an annuity pension from a present or former employer.

The demand for annuities will also be reduced when the potential annuitant plans to leave a large bequest. Finally, the demand for annuities may be inhibited by a misunderstanding or underappreciation of the insurance that an annuity provides. This can occur if the risk of dying prematurely is given a bigger weight than the risk of living so long that one runs out of money.

Demographic factors other than age might also explain variations in the demand for annuities. For example, there is no obvious reason for someone with a steady income who is not nearing retirement to wish to purchase an annuity.[14] Ethnicity may also play a role if some ethnic groups are less familiar with annuities than others are, or are less willing to enter into an annuity contract because they rely less on the formal financial sector in both their business and personal lives. Perhaps more important, life expectancy, even at a relatively advanced age, differs across ethnic groups.

Because annuities are not well understood, and because appreciating their role as insurance requires financial sophistication, the demand for them could increase with the formal educational attainment and financial literacy of the potential annuitant. Advice from a financial professional could also affect demand. In this case, however, it is not clear what the direction of the effect would be. Financial advisors who are paid on commission are said to be less enthusiastic about annuities than they are about other products because they are a once-off transaction without potential for continuing payment of fees.

[14] In principle, a worker aged 50–55 might buy a deferred annuity—an annuity with a premium that is paid when the contract is signed but with a delayed start to payments—that would start paying in his or her sixties. However, a developed market for such an instrument does not exist in the United States, and even though the upfront payment for a deferred annuity is less than that for an immediate annuity with the same monthly income, the typical American would not have accumulated enough wealth to buy one.

The effort to model the demand for annuities separated the older workers from the retired, and focused on the decision made by those who had a real choice. Consequently, it excluded workers and retirees who had received or would receive an annuity automatically from their traditional plan, but included members of a traditional plan who had a choice of a lump sum. Of the total unweighted sample of 1,750 workers and 670 retired people, some 629 workers and 341 retirees would in principle be able to choose a live annuity upon retirement. Some 704 workers and 399 retirees could choose a nonlife annuity. The retirees purchased or elected 143 life annuities and 133 nonlife annuities; workers expressed the intention to purchase or elect 280 life annuities and 274 nonlife annuities.

Regressions were run with both life annuity purchase and nonlife annuity purchase as dependent variables. Because the dependent variable was binary (with 1 for the purchase or choice of an annuity and 0 for the nonpurchase of an annuity) a logit function was estimated. The independent variables were mainly binary (e.g., female/male), but they also included a few categorical variables based on the answers of survey participants to questions with three or more alternatives (see table B1). In addition, variables were included to capture the possible effect on demand when an IRA is either the most or the next most important plan. IRA holders who would choose a life annuity need to use the funds in their account to buy an annuity from an insurance company, a requirement that could make life annuities less attractive to them.

The relationship between income or wealth and annuitized wealth that economic theory posits is not evident in the survey data. Experiments with different specifications did not uncover a statistically significant relationship at the 95 percent level—the standard that the report uses—between income levels and the probability of choosing either type of annuity. Asset levels were significant for workers choosing a life annuity, but with the wrong sign. The relationship between annuity choice and educational attainment also fails the 95 percent statistical significance test (see tables B2–B5). Some of the other variables were found to be statistically significant in one or at most two of the four specifications that were estimated, as explained below. However, the variable "has a defined benefit plan" was significant in all cases, with a positive sign in the case of life annuities, and a negative sign in the case of other annuities.

Life Annuities

The probability that *workers* would choose a life annuity is significantly affected by whether they are in a defined benefit plan, and whether they would use their unannuitized wealth only in an emergency. Specifically, the probability of choosing a life annuity increased from 0.42 for a base case participant, defined as a white non-Hispanic male with less than a complete college education, no financial advisor, and not a DB plan member, to 0.62 if he were a member of a DB plan (see the first column of table B2, which shows how the probability of choosing an annuity is affected for each variable by changing its value from zero (the base case value) to one).[15] Workers' demand for life annuities is also related to not being white non-Hispanic (table B2) but the relationship is not significant.

[15] The other base case settings were has no LTC insurance, is in very good health, takes money from his liquid assets in regular installments or takes only income, shares responsibility for decision making, is not very familiar with annuities, has assets less than $100,000, and is aged 50–59. The base case settings are indicated by the shaded rows in table B1. In the base case, all variables take the value of zero, and the probability of

Table B1
Variable Codings—Workers and Retirees

Independent Variables	Value Labels	Parameter coding (1)	(2)	(3)
health	(1) excellent	1	0	0
	(0) very good	0	0	0
	(2) good	0	1	0
	(3) poor or fair	0	0	1
ira2	(0) No second plan	0	0	
	(1) IRA is the most important second plan	1	0	
	(2) IRA is not the most important second plan	0	1	
take_money	(0) regularly take a constant amount/percentage or take only gains/dividends/interest	0	0	
	(1) take money only in emergencies	1	0	
	(2) other approach or no specific approach	0	1	
resp_mar_status	(1) has primary responsibility and is not married	1	0	
	(2) has primary responsibility and is married	0	1	
	(0) share responsibility(most are married, some not)	0	0	
education	(0) Less than Bachelor's degree	0		
	(1) Bachelor's degree or higher	1		
race/ethnicity	(0) White, Non-Hispanic	0		
	(1) Non-Hispanic of other races + Hispanic of any race	1		
long_term_care	(1) Has long term care	1		
	(0) Does not have long term care	0		
financial_advisor	(1) Has financial advisor	1		
	(0) Does not have financial advisor	0		
familiarity_with_annuity	(1) Very familiar with annuities	1		
	(0) Not familiar with annuities	0		
DB_plan	(1) Has DB plan	1		
	(0) Does not have DB plan	0		
ira1	(0) IRA is not the most important first plan	0		
	(1) IRA is the most important first plan	1		
asset_level	(0) less than $100k	0		
	(1) $100k or more	1		
age_cohort (workers)	(0) 50-59	0		
	(1) 60+	1		
age_cohort (retirees)	(0) 59-64	0		
	(1) 65+	1		
Gender	(0) Male	0		
	(1) Female	1		

Note: The categorical variable codings for retirees are the same as those for workers, except that for the independent variable age_cohort the reference case is 59–64 (0) and the alternative is 65+ (1).

choosing an annuity is determined by the value of the constant. The base case settings for retirees are the same as those for workers, except that the base case age setting is 59–64. The different definition reflects the small number of workers in the oldest age bracket and the small number of retirees in the youngest.

Table B2
Probabilities and Odds Ratios in the Equation for Life Annuity—Workers

Independent Variables	Probability	Significance	B	Exp(B)
gender(1)	0.48	.228	.238	1.269
education(1)	0.41	.774	-.056	.946
race_ethnicity(1)	0.52	.054	.428	1.535
long_term_care(1)	0.49	.157	.296	1.344
financial_advisor(1)	0.43	.766	.058	1.059
familiarity_with_annuity(1)	0.36	.270	-.250	.779
DB_plan(1)	0.62	.000*	.802	2.231
health(1)	0.43	.834	.049	1.051
health(2)	0.40	.769	-.064	.938
health(3)	0.38	.684	-.157	.855
age_cohort(1)	0.37	.397	-.184	.832
resp_mar_status(1)	0.35	.198	-.283	.753
resp_mar_status(2)	0.35	.253	-.283	.754
asset_level(1)	0.32	.034*	-.442	.643
take_money(1)	0.67	.000*	1.045	2.844
take_money(2)	0.46	.445	.150	1.161
ira1(1)	0.37	.397	-.216	.806
ira2(1)	0.34	.188	-.350	.705
ira2(2)	0.48	.231	.255	1.291
Constant	0.42	.252	-.328	.720

Note: for definition of variables, see text.

The estimated equation is $p = \exp(\beta x)/(1+ \exp(\beta x))$, where p is the estimated probability of choosing an annuity, the betas are coefficients, and the x's are the variables.

* means significant at 95 percent.

DB plan membership would undoubtedly increase a worker's familiarity with, and also the probability of his or her choosing, a life annuity, because the life annuity is the default option for defined benefit plans. That a conservative attitude to drawing on the retirement nest egg would increase the probability of annuitization could reflect in part the use of annuity income to finance routine expenditure, and could also be a sign that cautious, prudent people are more likely to annuitize part of their wealth than impulsive people are.

Membership in a DB plan also increases the probability of *retirees'* purchasing a life annuity, and by more than it does with workers. Specifically, membership in a DB plan increases the probability of choosing an annuity from 0.28 in the base case to 0.71. Curiously, having primary responsibility for financial decisions and being married is statistically significant, but its coefficient is negative (the exponent of the coefficient is less than one). Taking money only in emergencies also increases the probability that a retiree will buy a life annuity. An increase in a retiree's age above 64 reduces the probability of choosing a life annuity, suggesting that the decision to buy or choose an annuity is made in the period immediately preceding the conventional retirement age (table B.3). Finally, having an IRA as the next most important plan lowers the demand for life annuities by retirees.

Table B3
Probabilities and Odds Ratios in the Equation for Life Annuity—Retirees

Independent Variables	Probability	Significance	B	Exp(B)
gender(1)	0.27	.778	-.084	.919
education(1)	0.25	.535	-.185	.831
race_ethnicity(1)	0.24	.570	-.232	.793
long_term_care(1)	0.27	.812	-.074	.929
financial_advisor(1)	0.35	.321	.310	1.364
familiarity_with_annuity(1)	0.35	.353	.298	1.347
DB_plan(1)	0.71	.000*	1.812	6.121
health(1)	0.38	.290	.433	1.541
health(2)	0.39	.161	.485	1.624
health(3)	0.20	.353	-.430	.650
age_cohort(1)	0.17	.036*	-.629	.533
resp_mar_status(1)	0.30	.794	.085	1.089
resp_mar_status(2)	0.12	.013*	-1.039	.354
asset_level(1)	0.20	.253	-.448	.639
take_money(1)	0.51	.007*	.959	2.610
take_money(2)	0.43	.056	.651	1.918
ira1(1)	0.26	.792	-.105	.900
ira2(1)	0.11	.009*	-1.173	.309
ira2(2)	0.40	.095	.527	1.694
Constant	0.28	.085	-.927	.396

Note: See the note for Table B2 for an explanation of the derivation of the estimated probabilities and the meaning of exp(β).
* means significant at 95 percent.

Other (Nonlife) Annuities

The probability that *workers* will buy an annuity other than a life annuity is, as might be expected, reduced substantially by membership in a DB plan (table B4). DB plans typically offer no annuities other than a life annuity. However, a worker who follows a rule of making regular withdrawals from his or her nest egg is more likely to purchase a nonlife annuity than otherwise. In addition, workers aged 60 or older are less likely to buy a nonlife annuity. For *retirees*, as with workers, membership in a DB plan significantly reduces the probability of buying this type of annuity, and there is again a statistically significant association between regular withdrawals and the probability of annuity purchase (table B5). If both workers and retirees who choose a nonlife annuity are less likely to make only emergency withdrawals, it may be that the income their annuity provides is less than that of the typical life annuity, and withdrawals from the retirement nest egg will be made more routinely. Being married and having primary responsibility for decision making is again significant with a negative sign. Finally, having an IRA as the most important plan substantially increases demand for nonlife annuities by both workers and retirees. Having an IRA as the second most important plan is significant only for workers.

Table B4

Probabilities and Odds Ratios in the Equation for Other Annuity—Workers

Independent Variables	Probability	Significance	B	Exp(B)
gender(1)	0.43	.817	.047	1.048
education(1)	0.41	.894	-.026	.974
race_ethnicity(1)	0.37	.371	-.208	.812
long_term_care(1)	0.40	.648	-.101	.904
financial_advisor(1)	0.47	.316	.195	1.215
familiarity_with_annuity(1)	0.40	.751	-.072	.930
DB_plan(1)	0.16	.000*	-1.314	.269
health(1)	0.40	.699	-.092	.912
health(2)	0.43	.841	.045	1.046
health(3)	0.47	.652	.183	1.201
age_cohort(1)	0.32	.049*	-.443	.642
resp_mar_status(1)	0.44	.695	.088	1.093
resp_mar_status(2)	0.42	.952	-.015	.985
asset_level(1)	0.47	.338	.211	1.235
take_money(1)	0.18	.000*	-1.223	.294
take_money(2)	0.24	.000*	-.829	.436
ira1(1)	0.68	.000*	1.063	2.896
ira2(1)	0.62	.002*	.800	2.224
ira2(2)	0.44	.754	.069	1.071
Constant	0.42	.274	-.320	.726

Note: See the note for Table B2 for an explanation of the derivation of the estimated probabilities and the meaning of exp(β).

* means significant at 95 percent.

Table B5
Probabilities and Odds Ratios in the Equation for Other Annuity—Retirees

Independent Variables	Probability	Significance	B	Exp(B)
gender(1)	0.34	.409	.232	1.261
education(1)	0.33	.567	.164	1.178
race_ethnicity(1)	0.22	.441	-.357	.700
long_term_care(1)	0.21	.166	-.428	.652
financial_advisor(1)	0.30	.867	.049	1.050
familiarity_with_annuity(1)	0.22	.271	-.350	.705
DB_plan(1)	0.14	.015*	-.920	.399
health(1)	0.39	.243	.447	1.564
health(2)	0.43	.086	.592	1.807
health(3)	0.44	.134	.634	1.886
age_cohort(1)	0.32	.658	.138	1.148
resp_mar_status(1)	0.21	.179	-.427	.653
resp_mar_status(2)	0.15	.036*	-.866	.421
asset_level(1)	0.32	.702	.149	1.160
take_money(1)	0.15	.018*	-.811	.445
take_money(2)	0.12	.001*	-1.073	.342
ira1(1)	0.69	.000*	1.671	5.320
ira2(1)	0.46	.057	.727	2.069
ira2(2)	0.29	.990	-.004	.996
Constant	0.29	.099	-.888	.412

Note: See the note for Table B2 for an explanation of the derivation of the estimated probabilities and the meaning of exp(β).

* means significant at 95 percent.

APPENDIX C. THE VARIABLES USED IN THE REGRESSIONS

	Worker		Retiree		Total	
	Weighted	Not Weighted	Weighted	Not Weighted	Weighted	Not Weighted
life_annuity_purchase						
missing	66.4%	64.1%	49.0%	49.1%	61.6%	59.9%
0	18.0%	19.9%	29.9%	29.6%	21.3%	22.6%
1	15.6%	16.0%	21.1%	21.3%	17.2%	17.5%
other_annuity_purchase						
missing	62.8%	59.8%	42.0%	40.4%	57.0%	54.4%
0	23.3%	24.6%	40.8%	39.7%	28.2%	28.8%
1	13.9%	15.7%	17.3%	19.9%	14.8%	16.8%
gender						
male	51.7%	55.4%	50.1%	45.8%	51.2%	52.7%
female	48.3%	44.6%	49.9%	54.2%	48.8%	47.3%
education (categorical)						
less than Bachelor's degree	59.3%	52.2%	68.7%	53.9%	61.9%	52.6%
bachelor's degree or higher	40.7%	47.8%	31.3%	46.1%	38.1%	47.4%
race / ethnicity						
white, Non-Hispanic	80.4%	77.0%	77.4%	87.2%	79.5%	79.8%
non-Hispanic of other races + Hispanic of any race	19.6%	23.0%	22.6%	12.8%	20.5%	20.2%
long_term_care						
missing	0.9%	0.6%	0.3%	0.6%	0.7%	0.6%
has long term care	19.8%	20.7%	29.4%	30.4%	22.4%	23.4%
does not have long term care	79.3%	78.6%	70.3%	69.0%	76.8%	76.0%
financial_advisor						
missing	0.8%	0.9%	0.0%	0.1%	0.6%	0.7%
has financial advisor	34.0%	37.9%	48.7%	58.5%	38.1%	43.6%
does not have financial advisor	65.2%	61.2%	51.3%	41.3%	61.3%	55.7%
familiarity						
missing	0.4%	0.4%	0.9%	0.7%	0.6%	0.5%
very familiar with annuities	11.8%	14.3%	20.9%	24.5%	14.3%	17.1%
not familiar with annuities	87.8%	85.3%	78.2%	74.8%	85.1%	82.4%
DB_plan						
has DB plan	25.2%	26.1%	41.6%	42.2%	29.8%	30.5%
does not have DB plan	74.8%	73.9%	58.4%	57.8%	70.2%	69.5%
health						
missing	0.7%	0.6%	0.0%	0.0%	0.5%	0.4%
excellent	18.0%	20.1%	12.4%	15.8%	16.5%	18.9%
very good	44.6%	43.6%	42.1%	43.3%	43.9%	43.5%
good	28.4%	28.2%	29.8%	28.5%	28.8%	28.3%
poor or fair	8.3%	7.5%	15.7%	12.4%	10.3%	8.9%

	Worker		Retiree		Total	
	Weighted	Not Weighted	Weighted	Not Weighted	Weighted	Not Weighted
age_cohort_workers						
50–59	**79.6%**	**80.1%**	5.0%	4.3%	59.0%	59.1%
60+	**20.4%**	**19.9%**	95.0%	95.7%	41.0%	40.9%
age_cohort_retirees						
50–58	73.0%	73.4%	0.0%	0.0%	52.8%	53.1%
59–64	21.8%	22.6%	**40.6%**	**39.6%**	27.0%	27.3%
65+	5.1%	4.0%	**59.4%**	**60.4%**	20.2%	19.6%
resp_mar_status						
has primary responsibility and is not married	33.5%	28.4%	35.5%	32.1%	34.0%	29.4%
has primary responsibility and is married	15.7%	16.5%	13.7%	14.3%	15.2%	15.9%
share responsibility (most are married, some not)	50.8%	55.1%	50.8%	53.6%	50.8%	54.7%
asset_level						
missing	5.4%	4.9%	4.9%	6.3%	5.3%	5.3%
less than $100k	44.8%	39.9%	37.6%	26.9%	42.8%	36.3%
$100k or more	49.7%	55.1%	57.5%	66.9%	51.9%	58.4%
take_money						
missing	0.8%	0.6%	0.2%	0.1%	0.6%	0.5%
regularly take a constant amount/percentage or take only gains/dividends/interest	33.7%	36.7%	28.8%	31.9%	32.3%	35.4%
take money only in emergencies	14.4%	14.4%	29.4%	30.9%	18.6%	19.0%
other approach or no specific approach	51.2%	48.3%	41.6%	37.0%	48.5%	45.2%
ira1						
IRA is not the most important first plan	71.7%	71.3%	70.6%	68.1%	71.4%	70.4%
IRA is the most important first plan	28.3%	28.7%	29.4%	31.9%	28.6%	29.6%
ira2						
no second plan	71.5%	68.6%	72.2%	65.4%	71.7%	67.7%
IRA is the most important second plan	11.9%	12.1%	11.7%	12.2%	11.8%	12.1%
IRA is not the most important second plan	16.6%	19.4%	16.1%	22.4%	16.4%	20.2%
Total N	**1,750**	**1,750**	**670**	**670**	**2,420**	**2,420**

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