## Employer survey: 1 of 4 boomers won't retire because they can't

Authors: Alicia Haydock Munnell, Steven A. Sass, Jean-Pierre Aubry

Persistent link: http://hdl.handle.net/2345/bc-ir:104457

This work is posted on eScholarship@BC, Boston College University Libraries.

Chestnut Hill, Mass.: Center for Retirement Research at Boston College, December 2006

These materials are made available for use in research, teaching and private study, pursuant to U.S. Copyright Law. The user must assume full responsibility for any use of the materials, including but not limited to, infringement of copyright and publication rights of reproduced materials. Any materials used for academic research or otherwise should be fully credited with the source. The publisher or original authors may retain copyright to the materials.



AN ISSUE IN BRIEF CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

WORK OPPORTUNITIES FOR OLDER AMERICANS

SERIES 6, DECEMBER 2006

# EMPLOYER SURVEY: 1 OF 4 BOOMERS WON'T RETIRE BECAUSE THEY CAN'T

By Alicia H. Munnell, Steven A. Sass, and Jean-Pierre Aubry\*

#### INTRODUCTION

The Baby Boom generation is now on the cusp of retirement, with the oldest Boomers 60 years old. As this huge generation makes its way out of the labor force, it will do so on much different terms than those offered workers over the past quarter century. The share of earnings replaced at any given age by Social Security and employer plans will be less. And that income stream will also be less secure. Many observers are thus concerned that Boomers will be unprepared for retirement. However, if Boomers can delay retirement, they can raise their retirement income far more than could workers in the past. Working longer has thus emerged as an important option for improving retirement income security.

\* Alicia H. Munnell is the Director of the Center for Retirement Research at Boston College (CRR) and the Peter F. Drucker Professor of Management Sciences at Boston College's Carroll School of Management. Steven A. Sass is Associate Director for Research at the CRR. Jean-Pierre Aubry is a research associate at the CRR. The authors wish to thank Christine Rhoder for flawless communication with Matthew Greenwald & Associates, who conducted the survey with skill and efficiency, and Kelly Haverstick and Bob Triest, for sage economic and statistical advice. The Center gratefully acknowledges support from the Prudential Foundation for this project. The authors encourage others to analyze the survey data, which are accessible at http://www.bc.edu/crr/surveydata.shtml.

Employers have a unique perspective on whether workers are prepared for retirement and on when they will retire. Employer-sponsored defined benefit pension and 401(k) plans are the most important source of retirement income for the nation's workforce, aside from Social Security. Moreover, employers must be able to predict when their older workers will retire in order to make effective staffing, training, and promotion decisions. And if continued employment is to emerge as a viable response to retirement income shortfalls, employers must be willing to create opportunities for work at older ages.

To gain the employer perspective on these issues, the Center for Retirement Research conducted a nationally representative survey of 400 employers. This *brief* reports on employer estimates of how many workers, currently in their 50s, will have the resources needed to retire at the organization's traditional age and how many unprepared workers will respond by opting to extend their careers. A second *brief* will report on employers' likely response to workers who will want to remain on the job.<sup>2</sup>

#### LEARN MORE

Search for other publications on this topic at: www.bc.edu/crr/

#### THE TERMS OF RETIREMENT

The Baby Boom generation will retire on much different terms than those offered workers over the past quarter century. A smaller share of pre-retirement earnings will be replaced at any given retirement age. But putting off retirement will produce larger increases in retirement income than for workers in the past.

The decline in replacement income is seen most clearly in the Social Security program. Boomers will be able to claim full benefits only at age 66, then 67—not 65. This change translates into lower benefits relative to pre-retirement income at any given age. In addition, benefits relative to pre-retirement earnings have declined because more wives are working. This outcome is virtually inevitable in a system that provides a 50-percent spouse's benefit. As women go to work, they increase the family's pre-retirement earnings but often fail to increase the couple's Social Security benefit in retirement.

Boomers will also rely primarily on 401(k) plans, not traditional defined benefit pensions. But they have not accumulated large 401(k) balances. Median 401(k) assets, including IRAs, for workers in their 50s are just \$60,000.<sup>3</sup>

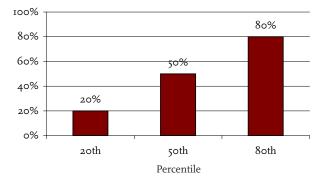
While expected retirement income may be lower and less certain, both Social Security and employer plans will offer Boomers significant increases in income if they retire at a later age. In the past, Social Security and traditional pension plans provided little or no increase in benefits to those who worked past the specified normal retirement age.4 Many employer pension plans actually offered financial incentives to induce even earlier exits.<sup>5</sup> 401(k) plans have no such age-based incentives. If Boomers delay retirement, they get more time to contribute, their assets have more time to accumulate investment earnings, and they reduce the time in retirement these assets must support. In the case of Social Security, now that the "Delayed Retirement Credit" has been fully phased in, the program will increase monthly benefits at the actuarially appropriate rate for delaying retirement from the earliest age a worker can claim, age 62, to the latest, age 70. Each year a worker delays claiming increases monthly benefits by 7-8 percent; two years by 15 percent; and four years adds one-third.<sup>6</sup>

The labor market is also seen as increasingly hospitable to older workers, due to the employment shift from goods to services and the growth of white-collar jobs. Therefore, many Boomers might respond to a lack of resources, and to the increased rewards to postponing retirement, by remaining in the workforce longer.<sup>7</sup>

## HALF OF ALL BOOMERS ARE UNPREPARED

The survey asked employers how many white-collar and rank-and-file employees, currently in their 50s, will not have the resources needed to retire at the same age as similar workers have in the past. At the median, employers responded that half will not have the necessary resources. The estimates vary a good deal, however. Ranking employers in terms of their assessment of "unpreparedness," those at the 80th percentile expect 80 percent of their employees will not have enough resources to retire at the traditional age; those at the 20th percentile expect only 20 percent will not be prepared (see Figure 1).

FIGURE 1. EMPLOYER ESTIMATE OF PERCENT OF BOOMERS UNPREPARED TO RETIRE AT THE TRADITIONAL AGE, 20TH, 50TH, AND 80TH PERCENTILE ESTIMATES

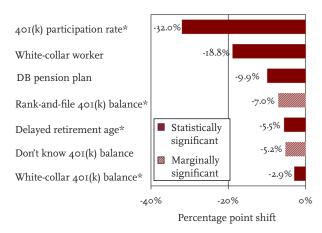


*Source*: Authors' calculations from Center for Retirement Research at Boston College (2006).

We tested the effect of various factors on the employer's assessment of preparedness, with the regression results given in Appendix Table 1.8 The most significant factors, illustrated in Figure 2, are:

Participation in 401(k) plans. The logic for this variable is the greater the percentage of employees who participate in their employer's 401(k) plan, the smaller the percent unprepared for retirement. The results are consistent with intuition. Controlling for other factors, a one-percentage-point increase in 401(k) participation is associated with a .57 percentage point decrease in the estimated share of workers with insufficient resources to retire at the traditional age.

FIGURE 2. FACTORS AFFECTING EMPLOYER ESTIMATE OF PERCENT OF BOOMERS UNPREPARED TO RETIRE AT THE TRADITIONAL AGE



\* The effect illustrated reflects a shift from the 20th to the 80th percentile value of the variable. See Appendix Table 1. *Source*: Authors' calculations from Center for Retirement Research at Boston College (2006).

To gauge the effect of participation on the variation in employer estimates of preparedness, we use this coefficient to estimate the effect of a swing from the 20th to the 80th percentile participation rate. The 20th percentile 401(k) participation rate was 30 percent and the 80th percentile rate was 86 percent. An increase in the participation rate from 30 to 86 percent would result in a 32-percentage-point decrease in the share of workers with insufficient resources to retire at the traditional age.

Whether workers are white-collar or rank-and-file employees. The intuition behind this variable is that white-collar workers, who generally have higher education and income, are less likely to be unprepared for retirement. Indeed, employers expect the share of white-collar workers with insufficient resources to be 19 percentage points less than the share of rank-and-file workers.

Whether the employer offers a defined benefit pension plan. The motivation for including defined benefit coverage is that these plans will generally provide generous benefits to workers in their 50s, so the percent of such employees unprepared for retirement should be less. The results show that the presence of a defined benefit plan reduces the estimated share of workers with insufficient resources by an additional 10 percentage points.

Average 401(k) balance. The rationale for including the employer's assessment of average balances is simply that larger balances should mean fewer unprepared workers. The respondent's estimate of the assets workers have in their 401(k) account has a surprisingly small effect for white-collar workers. For rank-and-file workers, however, a swing from the 20th to 80th percentile balances — from \$12,000 to \$75,000 — decreases the share of workers with insufficient resources by 7 percentage points. II

Delayed retirement age. As discussed above, working longer is a powerful antidote to the contraction of the retirement income system. The intuition, therefore, is that the later the employer's normal retirement age the smaller the percentage of workers unprepared. The results are consistent with this expectation. A swing from the 20th to 80th percentile traditional age — from 60 to 65 — reduces the share of workers with insufficient resources by 6 percentage points.

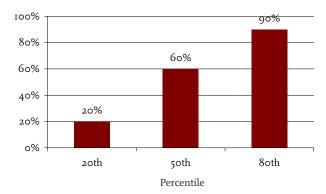
Ignorance of average 401(k) balances. <sup>12</sup> Half of all respondents could not provide estimates of the average 401(k) account balances. Initially, we thought that lack of knowledge about the level of 401(k) balances might signal employer disinterest in the provision of retirement income and therefore a higher percentage of employees unprepared. A lack of knowledge on the part of a respondent, however, decreased the estimate of unpreparedness by 5 percentage points.

Other factors, such as the size of the employer, the employer's industry (goods or services), or the proportion of the employer's workforce age 50 or more, were included in earlier regressions, but they had a negligible impact on the percent unprepared.<sup>13</sup>

## MOST OF THE UNPREPARED WILL WANT TO STAY ON THE JOB

We then asked the employers how many Boomers with insufficient retirement resources will want to remain on the job at least two years longer than similar workers have in the past. According to the employers surveyed, 60 percent will want to stay on. There is also more variation in these employer estimates of the employment response than in their estimates of preparedness (see Figure 3).

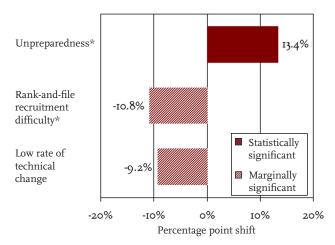
FIGURE 3. EMPLOYER ESTIMATE OF PERCENT OF UNPREPARED BOOMERS WHO WILL WANT TO WORK LONGER, 20TH, 50TH, AND 80TH PERCENTILE ESTIMATES



*Source*: Authors' calculations from Center for Retirement Research at Boston College (2006).

We tested the effect of various factors on these employment response estimates, with the results given in Appendix Table 2. The most important factors are illustrated in Figure 4.

FIGURE 4. FACTORS AFFECTING EMPLOYER ESTIMATE OF PERCENT OF UNPREPARED BOOMERS WHO WILL WANT TO WORK LONGER



\* The effect illustrated reflects a shift from the 20th to the 80th percentile value of the variable. See Appendix Table 2. *Source*: Authors' calculations from Center for Retirement Research at Boston College (2006).

The percent unprepared. The percent unprepared could either increase or decrease employer assessment of the proportion of the unprepared who will want to work longer. On the one hand, a large portion of unprepared workers could make low retirement income seem like the norm, creating little impetus for employees to work longer. Alternatively, a large portion could result in the common perception that working longer is the only way to guarantee a secure retirement. The results show that respondents who believe a larger share of their employees will be unprepared predict a greater share of their employees will want to work longer. A 1-percentage-point increase in the estimated share of workers that will be unprepared is associated with a 0.2 percentage point increase in the share expected to work longer. An increase in the estimate of unpreparedness from the 20th to the 80th percentile levels — from 20 to 80 percent of workers currently in their 50s — raises the expected employment response by 13-percentagepoints.

Difficulty in recruiting rank-and-file workers. This variable was included in the survey as a factor that could induce employers to create employment opportunities for older workers. It turned out to reduce the estimated employment response among unprepared rank-and-file (but not white-collar) workers. This suggests that difficulty in recruiting rank-and-file (but not white-collar) workers may be associated with difficult or unpleasant work. A change in recruitment difficulty from the 20th to 80th percentile levels, from a three to a seven on a scale from one to ten, is associated with an II-percentage-point decline in the estimated employment response.

A slow pace of technical change. A slow pace of technological change was initially thought to be more conducive to the continued employment of older workers because they would not be constantly required to learn new material. The results show just the opposite effect, however. Employers were asked to characterize the pace of technical change as high, moderate, or low. Only 12 percent characterized the pace as low. The employment response at these employers, controlling for the other factors in the regression, was 9-percentage-points less than at employers with a moderate or high rate of technical change. This finding is somewhat surprising, and encouraging, as the increasingly brisk pace of technical change is often seen as undermining employment opportunities for older workers. However, this result must be seen as tentative as it was statistically significant only at the 20 percent level.

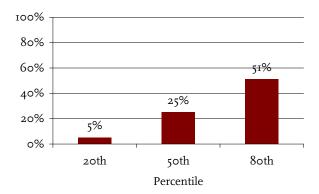
Other factors included in the regression, and listed in Appendix Table 2, were not statistically significant and only one had more than a 5-percentage-point effect on the respondent's estimate of the employment response. These factors, which would tend to make employment more hospitable to older workers, include: jobs in the services sector, in white-collar positions, or with an employer expecting healthy job growth or with an early traditional retirement age.

### 1 OF 4 BOOMERS WILL BE UNPREPARED AND WANT TO STAY ON

So what is the aggregate employment response to the new terms of retirement? Our employer survey indicates that a quarter of all Boomers currently in their 50s will lack the resources needed to retire at the age similar workers have in the past and, in response, will want to stay on the job at least two years longer. One might intuitively expect the median aggregate employment response to be 30 percent — the product of the median percent unprepared (50 percent) and the median employment response of those who are unprepared (60 percent). However, this is not the case because the median respondent for these questions is not the same.

Estimates of the aggregate employment response vary substantially. The aggregate response at the 20th percentile is 5 percent; at the 80th percentile, employ-

FIGURE 5. EMPLOYER ESTIMATE OF PERCENT OF BOOMERS WHO WILL BE UNPREPARED AND WILL WANT TO WORK LONGER, 20TH, 50TH, AND 80TH PERCENTILE ESTIMATES



*Source*: Authors' calculations from Center for Retirement Research at Boston College (2006).

ers expect over half of employees will respond to a lack of resources for retirement by wanting to stay on the job longer (see Figure 5).

The main driver of the variation is the result, reported above, that the more workers seen as having insufficient resources, the greater the expected share of such workers who will opt to work longer. This finding has several possible explanations. First, if respondents expect most employees will be prepared and will retire on time, they might expect the remainder to not be far behind. So relatively few would need to work that much longer before they too could retire. Second, respondents might expect social convention to encourage unprepared workers, if they are relatively few, to simply "go [out] with the flow," and leave when their colleagues do. Finally, defined benefit pension plans are associated with a high level of preparedness and often include financial incentives that discourage continued employment. This should also strengthen the relationship between preparedness and relatively few unprepared workers wanting to stay longer.14

#### Uncertainty and Its Consequences

Our survey collected estimates on two key determinants of retirement income security for the Baby Boom generation: 1) how many Boomers will have enough resources to retire at the same age as similar workers have in the past; and 2) how many workers with insufficient resources will opt to stay on the job at least two years past that traditional retirement age.

Employers in the past were well-positioned to make such estimates. Most workers in their 50s remained with their employer to retirement. Such workers would then collect Social Security benefits and an employer pension based on final salary and fifteen or more years of service. Employers could thus report, with a high degree of confidence, that most would have the resources needed to retire at the organization's traditional age. Social Security and employer plans also had features that discouraged workers from remaining on the job past specified target ages. Employers could thus report — again with a high degree of confidence — that few employees would stay past the traditional age even if they lacked the resources to retire. Indeed, it was an important personnel policy objective in many organizations to see that workers could, and did, retire in an orderly fashion.

Employers are no longer well-positioned to make such estimates. The income from 401(k)s, for workers now in their 50s, cannot be predicted with a high degree of confidence. Whether Boomers will think they have enough to retire will depend on market performance and individual decisions on asset allocations, future contributions, how quickly to draw down assets in retirement, and risk tolerance. Employers also don't know the assets workers have in plans of former employers or in IRAs.<sup>15</sup> In the defined benefit world, benefits earned at former employers had little value at retirement. The opposite is true with 401(k)s, as contributions made early in a worker's career often have far more value at retirement than contributions made at the end.<sup>16</sup>

It is also hard to gauge the reliability of employer estimates of the employment response. Shortfalls in retirement resources will be much greater for the Baby Boom generation, raising the need to remain employed. Social Security and employer plans will also offer significant increases in retirement income for delayed retirement, whereas in the past these programs discouraged continued employment. These changes suggest that people may want to work longer, but whether they will actually end up delaying their retirement is uncertain. This uncertainty is reflected in the survey results. On a scale from 1 to 5, respondents rated their confidence in their estimate at 3.35, only slightly more confident than the midpoint between "highly uncertain" and "highly confident."

The greatest uncertainty is in the aggregate employment response — in how many Boomers will actually lack the resources needed to retire and, in response, will want to stay on the job at least two years past the traditional retirement age. The survey indicates that a quarter of all Boomers currently in their 50s will fall into this category. It also indicates that the aggregate employment response will largely depend on the level of preparedness. How well Boomers will be prepared at the time of retirement, however, is difficult to predict. It will largely depend on market performance and decisions made by individual workers.

This uncertainty about the aggregate employment response to the new terms of retirement means that the retirement process could become quite messy. It will certainly make it difficult for workers and employers to plan the end of their relationship.

Employers, especially, will be in a much poorer position to predict retirement behavior than they were in the past. They have only partial information about each worker's retirement resources. Nor do they

know what level of resources each worker considers sufficient. Nor do they know whether individual workers will respond to a perceived shortfall by opting to remain on the job. If the retirement process becomes disorderly as a result of this uncertainty, employers may decide not to encourage, train, promote, or hire older workers.

#### Conclusion

If the survey results prove accurate, half of all Boomers who are currently in their 50s will lack the resources needed to retire at the same age as similar workers have in the past. This is bad news and confirms concerns about their retirement prospects. However, an estimated 60 percent of these unprepared workers will want to remain on the job at least two years longer. This is good news, as continued employment would make a significant contribution to retirement income security. If they are able to extend their working careers, many Boomers could enter retirement reasonably well prepared — either by having sufficient resources at the traditional retirement age or by working longer.

These employer estimates are subject to substantial uncertainty, so the survey results must be viewed with caution. This uncertainty about how many workers will be unprepared and want to remain on the job could also make the retirement process quite messy. Employers might respond by limiting employment opportunities for older workers. If so, it could seriously undercut an important way for workers to improve their retirement income security.

#### **ENDNOTES**

- I The sample is representative of U.S. employment by employer size. As in the nation, three-eighths of employers in the survey have more than 1,000 employees, three-eighths have less than 100 employees, and one-quarter have between 100 and 999 employees. To eliminate noise in our relatively small sample, we excluded employers with less than 50 workers or with less than 10 percent of all workers age 50 or over. The sample is also reasonably representative in terms of geography, with 21 percent in the Northeast (versus 18 percent of U.S. non-agricultural employment), 35 percent in the South (the national percentage), 28 percent in the Midwest (versus 23 percent), and 16 percent in the West (versus 23 percent). Goods-producing industries (manufacturing, construction, and mining) are somewhat over-represented, accounting for 30 percent of the sample versus 20 percent of U.S. non-agricultural employment.
- 2 Other studies that address these issues have taken a different approach. Preparedness has been evaluated most accurately by statistical studies using national data sets, such as our own National Retirement Risk Index based on the Survey of Consumer Finances (Munnell, et al. 2006a). Most find significant shortfalls. Our Index finds that 35 percent of "Early Boomers," born between 1946 and 1954, will lack the resources needed to retire at age 65 on a reasonable replacement income. Such studies, however, involve significant methodological hurdles and their results are far from conclusive. Worker surveys, such as the Retirement Confidence Survey, consistently report that most workers intend to retire at 65 and continue to work in retirement. But these results are poor predictors of behavior, as most workers retire by age 63 and do little or no work in retirement (Center for Retirement Research at Boston College, 2004).
- 3 Munnell and Sundén (2006).
- 4 Social Security began to offer workers higher monthly benefits for claiming after the Normal Retirement Age in 1972, and the increase was only I percent per year. The adjustment was raised to 3 percent per year in 1977. The 1983 Amendments scheduled a gradual increase to the actuarially fair adjustment 8 percent per year, which was fully phased in only for workers age 62 in 2004 and after (Sass 2003).

- 5 The Social Security program also encouraged early exits by reducing initial benefits to anyone earning more than an "exempt amount." See Sass (2003) for additional details.
- 6 Under reasonable assumptions, working longer has a similar effect on income from 401(k) assets.
- 7 Munnell, et al. (2006b) and Butrica, et al. (2006).
- 8 We estimated the effect of these factors using a median regression measuring the effect of changes in each factor on the median employer estimate. We chose medians as the best estimator given the existence of some extreme and seemingly implausible responses. Results using means, however, are not significantly different.
- 9 In our survey, 91 percent of employers had a 401(k) plan. Of those with a plan, 97 percent of respondents could estimate the participation rate.
- 10 All references to defined benefit pension plans will be to plans that the respondent expects to remain in place going forward.
- II We estimated the effect of balances separately for white-collar and rank-and-file workers. This is because white-collar workers, with higher incomes and lower Social Security replacement rates, need higher 40I(k) balances to be prepared for retirement. The effect of white-collar balances could be masked by a greater dispersion of white-collar incomes, which would disturb a simple relationship between average balances and preparedness.
- 12 To measure the effect of a respondent not knowing the average 401(k) balances for white-collar or rank-and-file workers, we assume that the actual 401(k) balances are the median values for each group. This assumption should not introduce much error into our regression results, as average balances in our regressions have a negligible effect on preparedness. This is true in regressions that included and excluded respondents that did not know the average 401(k) balances.

- 13 The proportion of the employer's work force age 50 or more, but not the industry or employer size, are correlated with 401(k) participation rates. However, both employer size and the proportion of the employer's work force age 50 or more are correlated with coverage by a defined benefit plan. These two factors could be said to affect preparedness but through their effect on defined benefit pension coverage and 401(k) participation rates.
- 14 The small effect of a defined benefit plan could be due to the sharp decline in early retirement incentives in such plans, especially in plans that have adopted hybrid formats.
- 15 Most assets in IRAs derive from employer-plan roll-overs.
- 16 In our sample, 20 percent of employers have a defined benefit plan and thus are reasonably well-positioned to estimate preparedness and retirement behavior. Another 9 percent have no retirement plan, and thus are reasonably well-positioned to estimate *un*preparedness. The remaining 71 percent of respondents, employers with only a 401(k), are not well-positioned to estimate preparedness and retirement behavior. This is especially so for those respondents who could not estimate the participation rate or the average balances held by white-collar and rank-and-file workers 38 percent of the sample.

#### REFERENCES

- Butrica, Barbara A., Karen E. Smith and C. Eugene Steuerle. 2006. "Working for a Good Retirement." Working Paper 2006-8. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Center for Retirement Research at Boston College. 2006. Survey of Employer Views on Worker Retirement Preparedness and Work Expectations. Available at: http://www.bc.edu/crr/surveydata.shtml.
- Center for Retirement Research at Boston College. 2004. "People Expect To Work Longer Than They Actually Do." *Data Profile* 4. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Munnell, Alicia H. and Annika Sundén. 2006. "401(k) Plans Are Still Coming Up Short." *Issue in Brief* 43. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Munnell, Alicia H., Anthony Webb, and Luke Delorme, 2006a. "A New National Retirement Risk Index." *Issue in Brief* 48. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Munnell, Alicia H., Marric Buessing, Mauricio Soto, and Steven A. Sass. 2006b. "Will We Have To Work Forever?" Work Opportunities for Older Workers Brief 4. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Sass, Steven. 2003. "Reforming the U.S. Retirement Income System: The Growing Role of Work." Global Issue in Brief I. Chestnut Hill, MA: Center for Retirement Research at Boston College.



#### APPENDIX

Table 1. Regression Explaining Employer Estimate of Percent of Employees in Their 50s That Will Not Have Sufficient Resources to Retire at Traditional Retirement Age

Variable	Coefficient	t-statistic	Percentile value		Percentage point effect
			20th	8oth	Dummy or 20th to 80th percentile shift
401(k) participation rate*	-0.572	-8.69	0.30	0.86	-32.0
Employee type (white-collar)*	-0.188	-3.84	N/A	N/A	-18.8
Defined benefit plan*	-0.099	-2.34	N/A	N/A	-9.9
Rank-and-file 401(k) balance**	-0.011	-1.56	\$12k	\$75k	-7.0
Retirement age (years below 65)*	-0.011	-2.30	60	65	-5.5
Don't know 401(k) Balance**	-0.052	-1.47	N/A	N/A	-5.2
White-collar 401(k) balance*	-0.002	-3.68	\$40k	\$160k	-2.9
Pseudo R <sup>2</sup>	0.151				
Number of Observations	531				

<sup>\*</sup>Statistically significant at 5%; \*\*Statistically significant at 10%.

Source: Authors' calculations from Center for Retirement Research at Boston College (2006).

Table 2. Regression Explaining Employer Estimate of Percent of Unprepared Employees that Will Want to Remain on the Job at Least Two Years beyond the Traditional Retirement Age

Variable	Coefficient	t-statistic	Percentile value		Percentage point effect
			20th	8oth	Dummy or 20th to 80th percentile shift
Unprepared*	0.223	2.98	0.20	0.80	13.4
Recruitment difficulty, rank-and-file (1-5 scale)**	-0.027	-1.91	3	7	-io.8
Rate of technical change (low)***	-0.092	1.29	N/A	N/A	-9.2
Recruitment difficulty, white-collar (1-5 scale)	-0.005	-0.35	4	7	-I.5
Defined benefit plan	-0.016	-0.30	N/A	N/A	-1.6
Industry (goods producing)	-0.041	-0.85	N/A	N/A	-4·I
Employee type (white-collar)	-0.110	-0.92	N/A	N/A	-I.I
Employment growth (1-5 scale)	-0.022	-0.70	3	5	-4.4
Pseudo R <sup>2</sup>	0.027				
Number of Observations	626				

<sup>\*</sup>Statistically significant at 5%; \*\*Statistically significant at 10%; \*\*\*Statistically significant at 20% *Source*: Authors' calculations from Center for Retirement Research at Boston College (2006).

#### ABOUT THE CENTER

The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

#### AFFILIATED INSTITUTIONS

American Enterprise Institute
The Brookings Institution
Center for Strategic and International Studies
Massachusetts Institute of Technology
Syracuse University
Urban Institute

#### **CONTACT INFORMATION**

Center for Retirement Research Boston College 258 Hammond Street Chestnut Hill, MA 02467-3808 Phone: (617) 552-1762 Fax: (617) 552-0191

Website: http://www.bc.edu/crr

E-mail: crr@bc.edu

### www.bc.edu/crr

© 2006, by Trustees of Boston College, Center for Retirement Research. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that the authors are identified and full credit, including copyright notice, is given to Trustees of Boston College, Center for Retirement Research.

The research reported herein was supported by the Prudential Foundation. The findings and conclusions expressed are solely those of the authors and should not be construed as representing the opinions or policy of the Prudential Foundation or the Center for Retirement Research at Boston College.