# The Kids Are All Right: Generational Differences in Responses to the Great Recession

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Data from a university survey of 2,799 employees were examined to determine age cohort differences in retirement planning activities in the aftermath of the Great Recession. A life course approach and logistic regression were used to assess whether members of four different age cohorts altered their retirement planning activities. Older cohorts were more likely to have sought advice from a financial planner but were less likely to have increased time spent educating themselves about financial topics. Older cohorts were also less likely to be saving more for retirement and more likely to be delaying retirement compared to the youngest cohort. The youngest cohort members were relatively more likely to be confident that they will have sufficient funds to live comfortably after retirement. Older cohorts responded to the Great Recession by seeking safety for their retirement assets, and they resigned themselves to working longer before retirement.

Key Words: financial behavior, financial planning, life course approach, retirement planning

### Introduction

How has the Great Recession changed Americans' financial attitudes and behavior? In the first year or two of the Great Recession, many researchers focused on how people coped by cutting back on their spending and borrowing (Brown, 2009; Clyde, Leinwand, Egol, & Hodson, 2010; Harris Interactive, 2009a, 2009b; Helman, Copeland, & VanDerhei, 2009; MetLife Mature Market Institute, 2009; Taylor & Morin, 2009). As the severe economic downturn dragged on, researchers began to examine its implications for Americans' retirement savings and investment decisions. In the current study, we aim to add to the growing literature by examining some of these potential shifts in retirement-related activities and focusing in particular on age differences. We investigated self-reported changes in behavior between the fall of 2008, when the U.S. stock market experienced a precipitous decline, and the fall of 2009, when the stock market had partially recovered.

#### **Review of Literature**

Two views exist of how the Great Recession of 2008-09 affected the retirement thinking and behavior of Ameri-

cans. One view is that the Great Recession had fairly permanent effects on all those who experienced it, regardless of age. Proponents of this perspective argue that the recession precipitated "a new frugality" in spending, renewed interest in saving, greater cautiousness in investing, and lower expectations regarding the length and quality of retirement (Clyde et al., 2010; The Hartford, 2009). These studies have had dramatic titles such as *Retirement at the Tipping Point: The Year That Changed Everything* (Age-Wave, 2009) and *How the Great Recession Has Changed Life in America* (Taylor, 2010). This approach either downplayed or ignored differences among generations. From a demographic perspective, researchers who adopted this view posited a "period effect."

A second view is that the effects of the Great Recession have and will vary widely among generations (or birth cohorts). Baby Boomers, or the "Threshold Generation" (i.e., those born between 1946 and 1965), might expect a delayed, shortened, and more austere retirement due to the decline in their net worth. Among the various cohorts, however, most attention has focused on the potentially

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scarring effects of the Great Recession on members of youngest adult cohort: Generation Y, also known as the Millennial Generation (i.e., those born between roughly 1975 and 2000). In a national survey, 60% of Millennial respondents agreed with the statement "My generation is being dealt an unfair blow because of this recession" (J. Walter Thompson Company, 2009). Like the people who were young adults during the Great Depression, many observers have been concerned that the difficulty experienced by members of Generation Y in establishing themselves in the job market will permanently affect their lifetime earnings, marriage and child bearing, spending patterns, investor behavior, and political attitudes (Foroohar & Guo, 2010; Kinas, 2009; Weinstein, 2010).

The life course approach (Denton et al., 2001; Elder, 2000, 2006a, 2006b) suggests that retirement planning behaviors are a function of aging within the context of the historical, political, and socioeconomic environments of the times. Rather than being a rigid life-cycle model of planning where retirement savings is simply a function of age and earnings, the life course approach has recognized that major historical events can have period effects, cohort effects, or both. These effects can potentially shape retirement savings behaviors for a long time. Was the Great Recession of 2007-09 such an event and, if so, did it have the same effect on all age groups/birth cohorts? We know of no research to date that has rigorously examined these questions. However, there were a number of studies that addressed the impact of age and birth cohort effects on retirement savings prior to the most recent recession. In addition, a handful of studies examined how the recent recession has altered retirement planning and investing more generally.

Not surprisingly, studies have consistently noted age differences in retirement preparedness. Researchers have found that older individuals were more likely to recognize the relevance of retirement issues (Ekerdt & Kosloski, 2000; Hershey & Mowen, 2000), engage in more retirement planning (Lusardi & Mitchell, 2007b, 2009; Moen, Sweet, & Swisher, 2005), have more retirement wealth (Ameriks, Caplin, & Leahy, 2003; Bernheim, 1998; Hatcher, 2002; van Rooij, Lusardi, & Alessie, 2008), and they were less likely to have retirement shortfalls (Mitchell, Moore, & Phillips, 2000). These findings were consistent with the life-cycle model and the life course perspective.

Proponents of the life course perspective have argued that one must look beyond simple age effects because individuals in various birth cohorts experience socioeconomic

phenomena at different life-cycle stages. For instance, individuals who enter the job market during a period when the supply of labor is limited and labor demand is high are likely to experience higher earnings throughout their lifetimes relative to individuals who enter the job market when there is an abundant supply of labor and labor demand is sluggish (Easterlin, 1980). In regard to retirement planning, evidence of cohort-specific effects has been somewhat mixed (Dushi & Iams, 2008; Iams, Phillips, Robinson, Deang, & Dushi, 2008; Lusardi & Mitchell, 2007a; VanDerhei & Copeland, 2010; Wolff, 2003). For instance, Iams et al. (2008) noted that women age 55-64 in 2004 were much better prepared for retirement than were similarly aged women in 1984 and 1994. In contrast, VanDerhei and Copeland (2010) found no cohort-specific effects. They observed that retirement preparedness improved over seven years for each of three birth cohorts (Early Boomers, Late Boomers, and Generation X).

The recent economic recession provided researchers with the opportunity to examine how dramatic changes in the business cycle may have affected financial planning behaviors and attitudes across different age groups. To date, three studies have been instructive despite presenting only descriptive results. Two of these studies were conducted by financial services firms that have been undertaking surveys in successive years.

For several years, Scottrade conducted an annual, national retirement survey covering multiple generations. Authors of the initial February 2007 survey downplayed generational differences and reported that a failure to save enough for retirement was a problem across all age groups (Scottrade, 2007). A year later, the Baby Boomers grabbed the study's headline. They were worried about the adequacy of their retirement savings and were cutting back on their spending, but were not allocating any savings to their retirement accounts (Scottrade, 2008). The 2009 study revealed growing differences in the ways Americans of different age groups viewed retirement (Moloney & Mistretta, 2009). One finding was that members of Generation Y (i.e., those born after 1975) were less concerned about having enough money to retire relative to both Generation X (i.e., those born in 1965-1974) and the Baby Boomers (i.e., those born in 1946-1964). The authors also found that the percentage of each pre-retirement cohort that reported being actively engaged in retirement planning increased with age, and Baby Boomers were more likely than members of Generations X or Y to be actively getting advice from a professional financial planner (Moloney & Mistretta, 2009).

The authors of the 2010 survey also highlighted some notable generational differences (Scottrade, 2010). Members of Generation Y had less debt than older generations but reported the most difficulty in paying down their debt. The members of Generation Y, Generation X, and the Baby Boomers were similar in one retirement-relevant respect: roughly 60% of all three generations said they were saving less than the previous year due to non-mortgage debt and expected to be saving less yet again in the coming year. Finally, the authors of the 2011 survey zeroed in on Generation Y, dubbing them Generation Procrastination for their failure, relative to older cohorts, to plan or save for retirement (Scottrade, 2011).

In 2007, another financial services company, Metropolitan Life Insurance Company (MetLife) began an annual, national survey with respect to retirement. The first MetLife study was based on data collected in late 2006. In retrospect, it was blind to the oncoming financial storm. The survey focused on the problems associated with constantly rising expectations regarding consumption. According to MetLife study, the "ratcheting expectations [of] a constantly rising bar" (p. 3) were felt most strongly by members of Generation Y (MetLife, 2007). By the time of the 2009 survey, the members of Generation Y were distinguishing themselves in a positive fashion: members of this age cohort were more likely than other age cohorts to have become more educated on financial planning or were planning to do so (MetLife Mature Market Institute, 2009). Members of Generation Y were also more likely to say they were planning to meet with a financial advisor, although they were least likely to have already done so. Whereas the authors of the Scottrade studies portrayed the members of Generation Y as procrastinators who ignored the lessons of the Great Recession, the authors of the MetLife studies suggested that the economic downtown served as a wake-up call for them.

A final piece of research pertinent to the questions addressed here was released by the Pew Research Center in November 2011. The major theme of the 2011 national survey was that "the nation's worst economic meltdown since the Great Depression has had a disproportionate impact across generations" (Pew Research Center, 2011, p. 55). The members of Generation X were distinguished from other age cohorts by their relatively low level of confidence in their ability to save enough for retirement. Generation Y suffered the most on the job front, but strangely, were more likely than other generations to report an improvement in their finances over the course of the recession. The main impact of the recession on the Baby Boomers was a new retirement timetable: among those respondents who were not yet retired, 66% indicated that they might have to delay retirement (Pew Research Center, 2011).

Taken as a group, existing surveys of generational differences in the impacts of the Great Recession suggested a complex pattern. Not only did these impacts vary noticeably across generations, but the results for each generation indicated a mixture of constructive and maladaptive responses.

In addition to the national surveys conducted by financial services companies, two recent, smaller-scale studies examined investor risk aversion in the context of the financial crisis of 2008-09. One group of researchers investigated how the recession affected investors' risk tolerance, concluding that the downturn precipitated a moderate increase in risk aversion (Bateman, Louviere, Satchell, Islam, & Thorp, 2010). Similarly, in another study of 120 members of a university community, the researcher found that higher levels of risk tolerance were associated with riskier investment portfolios and greater losses during the 2008-09 economic downturn (Corter, 2010). Neither of these studies examined age differences in risk tolerance or investment responses to the recent recession.

In sum, only a few researchers addressed generational differences in responses to the Great Recession, especially in terms of investor behavior and preparation for retirement. Reports of this research provided only the most basic results, stopping far short of multivariate analyses that might control for the effects of other economic and demographic variables. In the analyses that follow, we use the life course framework to guide our exploration of the extent to which the Great Recession of 2008-09 affected individuals' retirement planning behaviors. We give careful consideration to whether any observed behavioral changes differed by age group/birth cohort. Given the cross-sectional nature of the data, we are unable to disentangle age from birth cohort effects. For ease of exposition, we couched the analyses in terms of age effects, returning to the question of age versus birth cohort effects only in the discussion at the end of the paper.

# Methods

# Data

Data for the study came from two sources: (a) an online survey conducted in October 2009 of all benefits-eligible employees (faculty, staff, and administrators) of a large university, and (b) two follow-up focus groups consisting of employees from the same university conducted in March 2010. Both data gathering exercises were approved by the university's institutional review board and were carried out with the cooperation of the university's benefits department. We describe each data source beginning with the survey.

Conducted with the cooperation of the university's benefits department, the survey had multiple research objectives. Only the findings related to retirement planning in the aftermath of the Great Recession are reported here. As of September 2009, the university had 15,174 benefits-eligible employees, but only about two-thirds of employees had university-based email addresses. An email invitation to participate in the survey was sent to these 10,152 employees, with 405 being returned as undeliverable. Hence, a maximum of 9,747 employees had the opportunity to read the invitation and decide whether to participate. A second invitation was sent out approximately one week before the end of the month-long survey period. In addition, the researchers distributed reminder bookmarks at a university-wide employee appreciation event and posted flyers on campus.

As an incentive to participate, all respondents were offered the opportunity to enter a drawing with five iPod Nanos and twenty, \$50 restaurant gift certificates. Upon submitting the survey, participants also immediately received a personalized feedback form. This form grouped an individual's questionnaire responses into categories (e.g., knowledge of university retirement plan) and generated one of two ratings: "area of strength" or "area of possible improvement." These publicity efforts and participation incentives were included to enhance the survey cooperation rate in light of the length of the questionnaire, which had an average completion time of 25 minutes, and the potentially anxiety-provoking nature of the survey's topics. Recall that this was a year after the stock market's downward plunge in October 2008 and it was a period during which people joked about their 401(k)s having become 201(k)s. By the end of the month (October 2009), 3,000 people submitted completed questionnaires, yielding a cooperation rate of 32.1%.

About two thirds (65%) of the 3,000 survey respondents were female and the median respondent age was 44 years. As a point of comparison, as of October 2009, 58% of all university employees were female and the median employee age was approximately 42. Thus, the survey respondents generally reflected the larger population of university benefits-eligible employees in terms of gender and age. For the current analyses, we eliminated the 103 respondents who were age 64 or older and the 98 respondents who had missing data on one or more of the variables used in the analyses. After these deletions, the resulting sample size was 2,799.

The two focus groups were conducted four months after the survey. Their purpose was to explore in greater depth some of the more important and intriguing survey findings. We invited individuals who had won one of the prizes in the survey to participate in the focus groups or to recommend someone else from their unit who would be interested in participating. We also invited a few additional university employees to participate to achieve balance by age, gender, and type of retirement plan. Participants were offered a \$30 bookstore gift certificate to compensate them for their time. Thirteen individuals participated in the first focus group and 10 participated in the second focus group. Each focus group lasted approximately 75 minutes. Both focus groups were recorded and transcribed. In this article, we use the transcriptions to add some qualitative richness to the primarily quantitative analysis.

# Measures

The survey contained questions about four possible adjustments in retirement planning behaviors: (a) changes in educational efforts related to retirement planning matters, (b) changes in the amount of money saved, (c) changes in the risk taken with retirement investments (both new contributions as well as overall accounts), and (d) changes in retirement time horizons. Specifically, we asked, "Below is a list of changes that some people have made in response to recent economic events. For each one, please indicate whether YOU have increased, decreased, or not changed: (a) the amount of money you save on a regular basis, (b) the age at which you expect to retire, (c) the investment risk you are taking with the existing money in your retirement account(s), (d) the investment risk you are taking with new contributions to your retirement account(s), and (e) the amount of time you spend educating yourself about financial topics." These five questions were modified versions of questions asked in the 2009 AARP and MetLife Surveys (AARP, 2009; MetLife Mature Market Institute, 2009). The questions differentiated between investment risk with existing retirement funds and investment risk with new retirement contributions because new contributions may be more important for younger employees who do not have a lot of money in their retirement account, while existing funds may be more salient to older employees who have accumulated considerable funds in their retirement accounts.

In addition to the five questions described above, the survey contained a question about whether the respondent had met with a financial advisor in the past 12 months. This question was the sixth measure of behavioral reactions to the economic recession.

Finally, the survey also contained a question about retirement confidence in the wake of the recession. The question wording was, "Overall, how confident are you that you (and your spouse/partner) will have enough money to live comfortably throughout your retirement years?" This question has been asked on an annual basis in national surveys conducted by the Employee Benefit Research Institute (EBRI, 2009). Answer categories ranged from "not at all confident" to "very confident" along a 4-point scale. We dichotomized the scale so that its measurement parallels the behavioral change questions, and we used it to gauge age differences in overall retirement confidence in the aftermath of the recession.

As an overall pattern, we hypothesized that older individuals are less likely to have made many retirement planning behavior changes in response to the economic downturn than younger individuals. First, members of younger birth cohorts have a longer time period over which to reap the benefits of better retirement planning than do older workers (i.e., an age effect). Second, a variety of private sector and government policy changes are compelling younger adults to take greater responsibility for their retirement savings compared to older cohorts (i.e., a cohort effect). One illustration is the continued shift from defined benefit to defined contribution plans for young workers. Various governmental efforts to encourage long-term retirement savings, such as automatic enrollment in retirement plans and easier rules for conversion of traditional IRAs to Roth IRAs, are also likely to be more relevant to younger cohorts than older ones. We also hypothesized that younger workers will have relatively greater retirement confidence. Younger people likely lost less in the recession on an absolute dollar basis than older people and have more time to regain any recent investment losses before reaching retirement.

We divided respondents into four age groupings and attached labels that reflect their birth cohorts. Older Baby Boomers were defined as those individuals age 54-63 at the time of the survey (i.e., born between 1946-1955). Younger Baby Boomers included all respondents age 44-53 at the time of the survey (i.e., born between 1956-1965). The Generation X group included respondents age 34-43 in 2009 (i.e., born between 1966-1975) and the Generation Y group included all respondents under age 34 (i.e., born after 1975). Respondents were approximately equally divided between these four groups.

In addition to controlling for age cohort, all of the multivariate analyses controlled for education, income, gender, home ownership, and marital status because these sociodemographic factors were linked to retirement preparation in past research (Clark & Strauss, 2008; Deaves, Veit, Bhandari, & Cheney, 2007; Joo & Grable, 2005; Noone, Alpass, & Stephens, 2010; Yuh & DeVaney, 1996). We also controlled for the type of employer-sponsored retirement plan in which the respondent was enrolled, the respondent's financial risk tolerance, and the respondent's expected longevity.

The university offers two types of defined contribution (DC) pension plans (standard and the Hospital Plan Plus or HPP) and one defined benefit (DB) pension plan (State Retirement System or SRS). Most faculty members and administrators were automatically enrolled in the standard DC plan where the university contributes 14.2% of the employee's salary each pay period but makes no contribution toward any supplemental plans. The HPP plan covers all employees of the university's hospitals and clinics hired after January 1, 2001 and many of the hospital and clinic employees hired before that date. HPP is a DC plan based solely on a university contribution of 6% of salary (an increase from 3% earlier). There is no employee matching in this defined contribution plan. Beginning approximately a year before the survey, the university began a matching program for supplemental retirement accounts for employees in the HPP program only. The university matches employee contributions to their supplemental retirement accounts one-to-one up to 3% of the employee's salary. Finally, most non-faculty staff members were enrolled in a state-run, DB retirement plan (SRS). While this plan provides a benefit based on earnings and years of service, it also contains an additional small cash balance portion where the university contributes 1.5% of the individual's salary to a separate, self-directed account. Employees have the option of investing the 1.5% in 11 different investment funds that vary in terms of risk.

The different structures of these DB and DC pension plans have implications for the level of control and risk that an employee has with respect to her/his retirement contributions (Dushi & Iams, 2008; Poterba, Venti, & Wise, 2007). Employees in the two DC plans exercised relatively greater control regarding their retirement investment options, and they also faced more risk than their counterparts in the DB plan. The fact that the DB plan pays benefits based on years of service and earnings while the DC plan does not also has implications for retirement planning time horizons. Indeed, past research has found employees in DC pension plans retired, or planned to retire, about two years later than otherwise similar employees in DB plans (Friedberg & Webb, 2005; Mermin, Johnson, & Murphy, 2007). For all of these reasons, we included controls for employer-sponsored plan type in the multivariate analyses.

Risk tolerance has been linked with investment choices in several studies (Grable, Roszkowski, Joo, O'Neill, & Lytton, 2009; Jacobs-Lawson & Hershey, 2005; van Rooij, Kool, & Prast, 2007). By extension, individuals who were more risk tolerant were likely to react to the economic recession differently than less risk tolerant individuals. We hypothesized that, relative to less risk tolerant respondents, they were more likely to take on added risk, and they were more likely to have increased the amount they were saving for retirement in response to the economic downturn. For example, financial advisors advocate that individuals should purchase stocks when the market is low. Yet, risk adverse individuals likely hesitate to do so because of the fear that the market will decline even further. In contrast, risk tolerant individuals are more likely to follow the advice to buy (more) stocks when the price is low. The measure of risk tolerance was taken directly from the Survey of Consumer Finances risk tolerance question (Board of Governors of the Federal Reserve System, 2011).

Finally, we hypothesized that reactions to the recession are a function of how long one plans to be retired. The longer an individual plans to be retired, the more s/he will need to accumulate and therefore the more incentive s/he will have to be an active and adaptive retirement planner. As a rough measure of expectations about time spent in retirement, we controlled for the respondent's assessment of his/her chances of living to age 85. The life expectancy question we used in the survey mirrors a question asked in the 2008 Health and Retirement Study (Institute for Social Research, 2011). Answers to this question range from zero to 100%.

# Results

# Descriptive Results

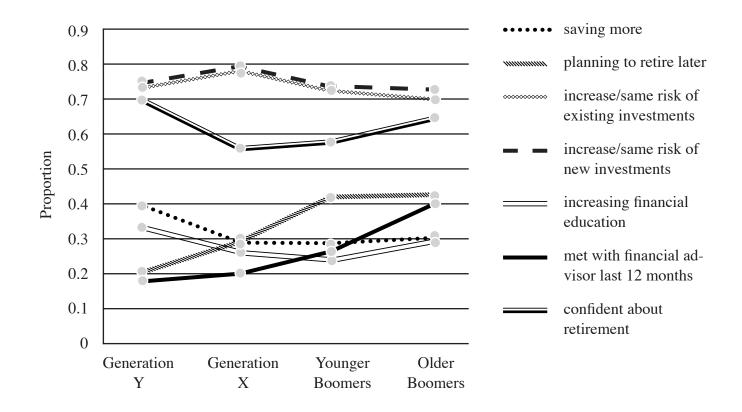
Descriptive information for the sample is presented in Table 1. Given that the sampling frame consisted of university employees, it was not surprising that the sample was higher in educational attainment, mean family income, and rate of home ownership than the national average. The respondents' financial risk tolerance (mean of 2.31 on a scale of 4) was also above the national average (calculated by the authors to be 1.82 in the pre-recession 2007 Survey of Consumer Finance). This difference could be attributable to the survey respondents' relatively high education and income (Grable & Lytton, 1999). The respondents were also typically optimistic about their chances of living to at least age 85 (i.e., above the expected longevity for the U.S. population in general), with the typical participant estimating that her/his chances were approximately 65%.

The respondents' retirement planning responses to the economic recession differed from figures reported in national surveys in some instances, but were similar in other instances. A relatively large difference existed with respect to reported recent increases in saving. Whereas a national poll found that 23% of the population reported that they were saving more in 2009 than they had been saving a year earlier (Harris Interactive, 2009a), 32% in the survey reported this behavioral change. Differences were more modest for other measures. In another 2009 national survey, 32% of respondents said they had recently taken steps to become more financially educated (MetLife Mature Market Institute, 2009), while 28% in the survey reported having increased their efforts to become financially knowledgeable. With respect to retirement confidence, a 2009 EBRI survey yielded an author-calculated mean value of 2.52 (EBRI, 2009) compared to 2.65 among the respondents.

We found that the respondents in different age groups showed marked differences in their responses to the recession as depicted in Figure 1. Begin by looking at the two lines that involve obtaining financial information and/or advice. While members of older age groups were more likely to have sought the assistance of a professional financial advisor relative to members of the younger age groups ( $\chi^2 = 107.50$ ), members of Generation Y were more likely to have increased their efforts to educate themselves than members of the other three generations ( $\chi^2 = 14.99$ ).

# Table 1. Definitions and Descriptive Statistics for the Independent Variables

Variable	М	SD	
Gender	1 = female, $0 = $ male	.66	
Education	Years of formal schooling	16.50	2.25
Marital status	1 = married, $0 = $ otherwise	.71	
Home ownership	1 = own or buying home, $0 = $ otherwise	.79	
Annual family income	In 1,000's of dollars	85.83	49.77
HPP	1 = HPP DC retirement plan, $0 = otherwise$	.20	
Standard DC	1 = standard retirement plan, $0 =$ otherwise	.51	
State retirement plan	1 = state retirement plan, $0 =$ otherwise	.28	
Risk tolerance	4 = take substantial financial risks expecting to earn substantial returns.	2.31	.70
	3 = take above average financial risks expecting to earn above average returns.		
	2 = take average financial risks expecting to earn average returns.		
	1 = not willing to take any financial risks		
Chances of living to age 85	Respondent's assessment of her/his chances of living to age 85; $0 =$ absolutely no chance, $100 =$ absolute certainty of living to at least age 85	64.81	28.24
Generation Y	Age < 34	.28	
Generation X	Age 34-43	.24	
Younger boomer	Age 44-53	.23	
Older boomer	Age 54-63	.25	
Seen an advisor in the past 12 months	1 = yes, 0 = no	.25	
Increased time spent educating self about financial topics	1 = yes, 0 = no	.28	
Saving more for retirement	1 = yes, 0 = no	.32	
Taking the same or more risk with exist- ing retirement funds	1 = yes, 0 = no	.74	
Taking the same or more risk with new retirement funds	1 = yes, 0 = no	.75	
Increasing expected retirement age	1 = yes, 0 = no	.32	
Retirement confidence	1 = somewhat confident or very confident of having sufficient funds to live comfortably in retirement	.62	
	0 = not at all confident or not too confident of having sufficient funds to live comfortably in retirement		



# Figure 1. Age/Cohort Trends in Retirement Planning Resposes to the Economic Recession

There were substantial differences in the post-recession savings choices being made by the four age groups (see Figure 1). Members of Generation Y were more likely to report that they had increased their retirement savings relative to members of the other three groups ( $\chi^2 = 32.20$ ). In addition, members of the younger and older Baby Boomer generations were less likely to have reported that they had increased the risk they were taking with existing and new retirement investments relative to members of Generations Y and X ( $\chi^2 = 16.01$  and 9.08, respectively). The age groups also differed in their changes in expected age at retirement. Younger and older Baby Boomers were significantly more likely to report that they had increased their expected age of retirement than were members of Generations X and Y ( $\chi^2 = 116.00$ ).

Interestingly, retirement confidence was the one domain where members of the older Baby Boomer group appeared to be more like members of Generation Y and less like members of the younger Baby Boomer group. Both older Baby Boomers and Generation Y members were more likely to say that they were confident that they would have sufficient funds to live comfortably in retirement (mean of .65 and .69, respectively) compared to members of Generation X (mean of .56) and members of the younger Baby Boomer generation (mean of .58;  $\chi^2 = 36.78$ ). The reasons for having relatively more confidence may vary for the oldest and youngest of the cohorts, however. Older Baby Boomers likely had the largest retirement nest eggs and with a relatively short retirement time horizon, they may have remained optimistic regarding their ability to live comfortably in retirement. In contrast, members of Generation Y may have perceived that they have many years to recover from the recession and build sufficient retirement funds.

### Multivariate Results

Did the generational differences in various responses to the Great Recession continue to hold once we controlled for socioeconomic characteristics, retirement plan type, risk tolerance, and life expectancy? To answer this question, we estimated logistic regressions for all of the post-recession behavioral changes depicted in Figure 1. The results appear in Table 2. In each of these regressions, the omitted age category consisted of members of Generation Y.

	Seen an advisor in the past 12 months	Increasing time spent educating self about financial topics	Saving more for retirement	Taking more risk with existing retirement funds	Taking more risk with new retirement funds	Increasing expected retirement age	Confident of having sufficient funds to live com- fortably in retirement
Older boomer <sup>b</sup>	2.74	.70	.63	.70	.76	3.06	.56
	(2.09 - 3.61)	(.5490)	(.4981)	(.5491)	(.5899)	(2.35 - 3.98)	(.4373)
Younger boomer <sup>b</sup>	1.38	.57	.57	.86	.82	2.90	.39
	(1.05 - 1.82)	(.4473)	(.4472)	(.66 - 1.11)	(.63 - 1.07)	(2.25 - 3.74)	(.3050)
Generation X <sup>b</sup>	.92	.67	.60	1.10	1.06	1.72	.36
	(.70 - 1.22)	(.5385)	(.4775)	(.85 - 1.43)	(.82 - 1.38)	(1.33 - 2.21)	(.2846)
Standard DC <sup>c</sup>	1.17	1.10	.96	.88	.91	1.07	.95
	(.91 - 1.50)	(.87 - 1.38)	(.77 - 1.21)	(.70 - 1.12)	(.72 - 1.15)	(.86 - 1.34)	(.76 - 1.19)
HPP <sup>c</sup>	1.31	.77	1.10	.84	.90	1.18	.73
	(.99 - 1.73)	(.59 - 1.00)	(.87 - 1.40)	(.66 - 1.09)	(.70 - 1.16)	(.92 - 1.50)	(.5792)
Risk tolerance	1.32	.99	1.11	1.44	1.42	.95	1.36
	(1.15 - 1.51)	(.87 - 1.12)	(.99 - 1.26)	(1.26 - 1.65)	(1.24 - 1.63)	(.84 - 1.08)	(1.20 - 1.54)
Chances of living to age 85	1.01	1.00	1.00	1.00	1.00	1.00	1.01
	(1.00 - 1.01)	(1.00 - 1.01)	(1.00 - 1.01)	(1.00 - 1.00)	(1.00 - 1.00)	(.99 - 1.00)	(1.01 - 1.02)
$\chi^2$	210.35*	39.24*	57.25*	68.14*	66.83*	132.64*	434.56*

# Table 2. Estimated Odds Ratios (95% Confidence Intervals in Parentheses) a

\* p < .05.

<sup>a</sup> The logit equations from which these odds ratios are derived also control for the respondent's gender, education level, marital status, annual household income, and home ownership. The full set of parameter estimates is available from the authors upon request.

<sup>b</sup> The omitted group in this sequence of dummy variables are those in Generation Y.

<sup>c</sup>The omitted group in this sequence of dummy variables are those individuals in the State Retirement System DB retirement plan.

In the multivariate analyses, there continued to be striking differences between members of the Older Boomer Generation and members of Generation Y on all of our post-recession retirement planning behavior changes. Older Boomers were more likely to have sought the advice of a financial advisor in the past 12 months and were more likely to be increasing their expected age at retirement relative to members of Generation Y. In addition, they were significantly less likely to increase the time they spent learning about financial topics, intensify their saving, and take more risk with existing or new retirement investments compared to their Generation Y counterparts. Younger Boomers revealed much the same pattern of behaviors as their older Boomer counterparts, with the exception that they were no less likely than members of Generation Y to be taking more risk with existing and new retirement funds.

The focus group discussion also reflected cohort differences in reactions to the recession. These differences were perhaps most striking when the discussion focused on the participants' expected retirement age. Baby Boomers were vocal about possibly working longer as evidenced by the following quotes:

...I planned to retire from the University at 30 years because I'm in the [State] Retirement System, but

I also plan to go back to work for another 20 years. Originally I thought I could take my retirement and maybe go back to work for five or ten years, but I can't see my way past at least an additional 20 years beyond.

I don't know when I'll feel like retiring, but like you, you know, 65 [is] just getting started. But I realize that because things are unpredictable that I may end up working longer than I had planned. It's a possibility.

On issues other than expected retirement age, members of Generation X did not consistently align with either older or younger cohorts. Like their older colleagues, members of Generation X were less likely than members of Generation Y to increase their financial education and to save more for retirement. While members of Generation Y were silent on the retirement age issue, Generation X focus group members recognized the possibility of having to revise their retirement ages. The following two Generation X quotes are similar to those of the Boomers:

Oh yeah, my spreadsheets early on, in my mid to late 20s were all about retiring at 55 and could I get away with doing it at 50? Now I'm 42, it's like, I feel I'm only halfway there now.

Well I just, I just think I'm not probably going to retire.

Also like their older counterparts, members of Generation X were more likely than members of Generation Y to increase their expected age of retirement. However, the magnitude of this latter difference with Generation Y, as measured by odds ratios, was substantially smaller than that of their older counterparts (i.e., 3.07 and 2.90 for the older and younger Baby Boomers relative to 1.72 for Generation X). In contrast to instances in which members of Generation X appeared to differ from members of Generation Y, Generation X behaved like Generation Y in that they were less likely than their older colleagues to have met with a financial advisor in the past 12 months and they were more likely to be taking greater risks with their existing and new retirement funds.

The survey findings regarding age differences in risk taking were also reflected in the focus group discussions. Members of Generations X and Y seemed to be much more comfortable taking risks with their retirement investments after the stock market plunge of late 2008 and early 2009. The following two quotes from Generations X and Y members reflect this sentiment: I actually went more aggressive in my investments as the market watered down. I um, I chose to participate in a 403 plan as well, so I started contributing an extra 5% to that in addition to what the University is contributing and I reallocated my portfolio to go more into emerging markets that crashed much more significantly than developed markets and so I reallocated a portion to, a little portion, very little to real estate and some of it to energy, some of the markets that got hit the most, I actually went in there. So there's more risk, but the markets were so, you know, at the bottom that potentially it will go up significantly in the future.

I'm on the younger end of retiring so no, we are still being aggressive and same way, we bought stocks. We each named three stocks that we said, this is the time to buy and we bought six stocks total.

Indeed, the differences in investment strategies that we observed may be a function of age differences rather than birth cohort effects as suggested by the following comment from an older Baby Boomer in one focus group:

> I would say it's probably in the last three or four years I have become much more conservative in what I, even in the funds I have control over, to look for things that carry minimal risk...For right or wrong, when I first came to the University almost 40 years ago I took a very aggressive position and just let it ride. As I got closer to retirement I took a more cautious position, [to] preserve what I had accumulated.

Importantly, the multivariate analyses revealed that all three older age groups were less likely than members of Generation Y to believe they will have sufficient funds to live comfortably during retirement. This result was consistent with our finding that the three older age groups were more likely to have increased their expected retirement age relative to Generation Y.

Retirement plan type and subjective life expectancy (as captured by chances of living to at least age 85) appeared to be unrelated to changes in retirement planning behaviors. The absence of any difference between those in one of the two DC retirement plans and those in the DB retirement plan (with the exception of HPP participants and retirement confidence), was somewhat surprising given the differences in the risk and retirement eligibility requirements across the two types of plans. Recall that retirement eligibility requirements for the DB plan involve working a predetermined number of years in order to be eligible for retirement benefits whereas no such work threshold is part of the eligibility requirements for the DC plans. In addition, retirement payments under a DB plan are, in theory, unrelated to changes in the values of the assets that guarantee them. Under a DC plan, employees bear any market risk and they bear the risk that their accumulated funds will be sufficient to provide them with adequate income throughout their retirement years. For all of these reasons, we anticipated that there would be retirement plan differences in respondents' reactions to the recession.

The analyses revealed that risk tolerance was positively associated with the odds of taking greater risks with both existing and new retirement funds. Risk tolerance also predicted the likelihood of having consulted a financial advisor in the past 12 months, but not the other behavioral change measures. Finally, those who were more risk tolerant were also more likely to be confident that they would have sufficient funds to live comfortably in retirement. It appears that risk tolerant individuals were more likely to have reacted to the recession in ways that retirement planners would advocate, viewing the Great Recession as an opportunity to expand their retirement portfolios and thus increase their retirement confidence.

# **Discussion and Conclusions**

Our research findings heighten the importance of financial counselors and planners recognizing that there may be client differences in reactions to financial turmoil by age. While Older Baby Boomers are likely to dominate the headlines regarding retirement in America for the foreseeable future, in the current study, their reactions to the Great Recession were different than those of other age cohorts. Boomers responded to the Great Recession by seeking safety for their retirement assets and, because Boomers were not sure that even "safe" investments would increase in value, they failed to boost their overall savings. Instead, they resigned themselves to working longer before retirement. Fortunately for the workers examined in this study, working longer is feasible given the relatively low physical demands of their work, the lack of any mandatory retirement rules, and the protections afforded by tenure that apply to the sub-set of respondents who were faculty members. While many of these older workers had established relationships with professional financial advisors who can guide their final years of retirement preparation, they seemed reluctant to change any of their investment strategies at this point in time.

Financial planners and counselors should take note that Younger Boomers generally resembled Older Boomers in their reactions to the Great Recession, but with one important exception. We found that Younger Boomers parted company with Older Boomers and more closely resembled Generation Y when it came to increasing the risk of their retirement investments (both existing funds and new contributions). This raises the possibility that, if financial markets are favorable over the next decade, some of the Younger Boomers may become "Last Chance Millionaires" (Douglas, 2007).

What about members of Generations X and Y? Concern about the lasting effects of the Great Recession may be justified in the case of the former. Research by EBRI suggested that Generation X was slightly worse off in terms of retirement readiness than Younger Boomers (VanDerhei & Copeland, 2010). Our own study found no case in which members of Generation X were responding more confidently or more constructively, and sometimes less so, than members of Generation Y. Compared to Generation Y, members of Generation X were less likely to have boosted their saving and their retirement planning educational efforts, less confident about their retirement security, and more likely to have pushed back their anticipated retirement age. All of which suggests that this may be a group that would especially benefit from more financial education.

Generation Y may be the brightest spot in the map of the generations. With the exception of having seen a financial advisor in the last year, members of Generation Y were the most likely of the four cohorts to have emerged from the Great Recession with some positive new behaviors (e.g., increased saving) and their retirement plans and confidence intact. Our findings support the possibility offered that the Great Recession, rather than being a permanent source of trauma for Generation Y, may be functioning as a salutary rite of passage for this generation (Chang, 2009). By virtue of their age and their behaviors, this group clearly has the potential to benefit greatly from thoughtful financial planning in the aftermath of the recession. The challenge for financial planners is to educate the members of Generation Y regarding the value of seeking financial advice early in their work careers.

The age-related differences in retirement planning reactions to the most recent recession are striking and should help financial educators tailor their retirement planning materials. For instance, while Older Boomers in our study seem to have been scared by the Great Recession, members of Generation Y demonstrated considerable retirement planning resiliency. Left unanswered, however, is the question of whether these age-specific reactions to this most recent recession are unique to these birth cohorts in this specific time period.

The conclusions drawn from the current study should be viewed in the context of the strengths and limitations of the empirical analyses. Perhaps the most important contribution of this study is that we examined how the Great Recession altered a range of retirement planning behaviors, including risk taking, funds devoted to retirement, retirement confidence, and soliciting help from a financial planner. A second strength is the fact that the data were gathered in the aftermath of a deep recession when individuals are more likely to have reviewed and possibly made changes in their investment behaviors.

Generalizations based on the findings of the current study must be made with caution as all survey respondents worked for the same employer. Comparisons of attitudinal responses in this survey to the responses given in national surveys when the same questions were asked suggest that external validity concerns should be modest. Yet, differences in the socio-demographic characteristics (e.g., educational attainment) and retirement plans (i.e., all employees have an employer provided retirement plan and many have an SRA) suggest that one should use caution in extrapolating from this study.

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