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Retirement Plans and Financial Expectations: A Survey of Leading-edge "Baby Boomers"

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"Baby boomers" comprise a significant portion of the U.S. population, and the leading-edge of this group will begin retirement within a decade. These individuals, in the age range of 45 to 55 years, are currently at or near the peak of their income-earning ability and are in a stage of life where retirement planning to meet future income needs is essential. This report presents the results of a national-level survey of leading-edge baby boomers and how they plan to meet their financial needs in retirement. Using a list-sample technique, 396 individuals in the age range 45 to 55 years were interviewed by telephone about their plans for retirement, the sources of wealth they have accumulated, the sources of income that they expect in retirement, and their perceptions about the future of the economy and financial markets. Health care costs appear to dominate people's concerns and are the most important use to which they plan to put their accumulated wealth. Most individuals in this group expect to receive retirement income from multiple sources, including Social Security, employer pensions, work in retirement, and long-term investments in financial markets. The majority of individuals surveyed indicated that they have a personal portfolio of marketed securities. However, portfolio holders have much higher expectations of market performance and portfolio return than do professional financial advisors, in some cases twice as much on a ten-year average annualized basis. This optimism appears to be the result of several factors, including a buoyed sentiment about the long-term prospects for the domestic economy based on recent market performance, and a tendency toward establishing multiple income sources for retirement as a strategy for managing an uncertain future.

One of the most dramatic trends in U.S. demography in the latter half of the 20th century was the post-war baby boom that resulted in an unusually high birth rate from approximately 1946 to 1964. This period in U.S. economic history, generally characterized as a time of growth and prosperity, was accompanied by rapid technological and social change, including more available and accessible higher education, increased presence of women in the workplace, and new labor markets in high tech industries. The "baby boomers" born during this era enjoyed economic opportunities unlike those of any previous generation.

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As we enter the first years of the new millennium, the front half or "leading edge" of the baby boomer generation is approaching its retirement years. By 2010, those who are 55 years of age today will be eligible for Social Security. Many will be leaving the workforce, or participating only part time, and will need to support themselves on resources that they have built up over the past 35 to 45 years. How is the "baby boomer" generation planning to meet its financial needs in retirement? What sources of wealth have they accumulated and what sources of income are they expecting? Given the sharp increase in the past few years in the numbers of people investing directly in financial markets, what effect has this had on retirement planning? What expectations do they have about retirement, their income in retirement, and the challenges of financial management in retirement? What is the quality of their financial judgments? How do their perceptions and expectations about finances

compare with those of professional financial advisors?

This report presents the results of a national-level survey of individuals in the 45–55 year age group, often referred to as "lead-edge baby boomers." This group, generally born between 1946 and 1955 represents those members of the post-World War II generation who will enter retirement first, and for whom retirement planning is most urgent.

A difficulty in conducting this type of study is that many questions concerning people's financial lives are ones that they have had limited experience addressing, unless they have either worked closely with a financial professional or have taken a course of training and education in financial planning. However, it is precisely within the age range of the target population for this study that people must have thought most clearly and deeply about their financial future, since the course that they set themselves upon at this point in life will determine the quality of their financial health in retirement. By the time people are nearing retirement age (e.g., 60 or over) relatively little can be done to improve their financial outlook. Thus, the quality of people's financial judgment in the 45 to 55 year age range is of critical importance in assessing their prospects for meeting their financial goals and objectives, and providing for themselves adequately in retirement.

Methodology

Survey Design

The survey measured a number of factors relating to financial goals and objectives, as well as perceptions and expectations of financial markets. These included:

- Concerns about retirement;
- Plans for using accumulated wealth;
- Expected sources of income in retirement;
- Expectations about inflation and economic conditions in retirement;
- Characteristics of long-term financial holdings and portfolios;
- Perceptions of short- and long-term markets; and
- Perceptions of risks to financial markets

A complete version of the survey as administered is available from the first author upon request.

Survey Administration

The study was conducted as a telephone survey of U.S. households using a list-sample methodology. In general, list samples are produced by matching information in the U.S. white page telephone directory with other information from driver's licenses, birth certificates and marriage licenses to produce a database of households. From this database a sample is drawn based on characteristics of a desired subset of individuals, such as age range. Though list-sample methods are not as statistically precise as probability samples (i.e., RDD or "Random Digit Dialing"), constructed by sampling at random from all households, they produce reliable and valid results when care is taken in selecting the list of potential respondents. In some circumstances, list samples may be the only practical way to conduct a survey when the group of interest has one or more specific characteristics, such as a restricted age range. List sample methods are currently used in a number of surveys, including the Survey of Consumer Finances conducted by NORC on behalf of the Federal Reserve Board and the U.S. IRS.[1]

The survey was administered by the Oregon Survey Research Laboratory of the University of Oregon between April 21 and May 19, 2000, using a list sample of 1750 households obtained from Genesys Sampling, Inc. A total of 14,339 telephone calls were made, yielding a final sample of 396 individuals interviewed.[2] Because of the sensitive nature of the survey, some individuals contacted declined to participate. Approximately 36 telephone

[1] List samples are created by first developing a database of telephone numbers of potential respondents that includes a number of demographic features, such as age, gender, and income. The database is constructed to match the general demography of the U.S. population. A sample is then drawn from the database for use in conducting a survey. When surveys are targeted to a particular subgroup, such as people in the age range 45–55 years, the sample is constrained to only those individuals matching that criteria. Because the sample is drawn at random, all individuals in the database meeting the selection criteria have an equal chance of being selected. Since the database is constructed to match the overall demography of the population, results obtained from its use are highly generalizable. However, it is not exactly equivalent to a randomly drawn sample of the entire population, which in many cases is prohibitively expense to obtain with very little improvement in generalizability. This is particularly the case when sampling population subgroups (such as age ranges) where many telephone contacts need to be made to identify individuals having the appropriate characteristics.

[2] Of the 14,339 telephone calls made, 6130 (42.7%) reached answering machines. This number is higher than the typical RDD survey largely because of the demography of respondents required for this study.

calls were required for each completed interview. This number is relatively high compared to general RDD surveys of the population largely because people in the 45–55 year age group are employed and generally have busy family and community lives. Consequently, high numbers of callbacks were needed to reach heads of household. Also, many potential respondents refused to participate initially because of time considerations, but were receptive to a callback. The survey took approximately 15 minutes to complete.

Comparison of Survey Results with Professional Advisors

The results from the present survey are compared in this report with selected results from a 1998 study of 256 financial planners and advisors surveyed about their perceptions of the future of the economy and financial markets. The survey of financial advisors was conducted by mail using a convenience sample of members from the Institute of Certified Financial Planners (ICFP) and the International Association of Financial Planners (IAFP).[3] A more detailed description of the survey and its administration is available in MacGregor, Slovic, Berry, and Evensky (1999).

[3]Effective January 1, 2000, the Institute of Certified Financial Planners and the International Association of Financial Planners merged into a single organization named the Financial Planning Association. At the time of the survey the two organizations were distinct.

Results

Sample Characteristics

Table 1 shows the basic demographic characteristics of the sample of respondents. All respondents were in the age range 45–55 years, or would be within that age range, within the current calendar year.

The sample had more male respondents than female respondents. The vast majority of the sample was of white ethnicity (86.9%), with about half the African-American representation that one would expect from the U.S. population as a whole (6.1%). Almost three-fourths (72.4%) of the sample had at least some college education, while over half (51.3%) had a four-year degree or more. Over half (64.1%) had an annual household income of $50,000 or more.

With regard to retirement planning, two-thirds reported having a portfolio of long-term investments, such as stocks, bonds, and mutual funds. However, somewhat less than half (43.1%) reported using the services of a financial advisor or planner. Females who reported having a portfolio of investments were more likely to use a financial planner (68.5%) than were males (51.0%).

Table 1. *Respondent Characteristics*

Characteristic	Percentage (N = 396)	Characteristic	Percentage (N = 396)	Characteristic	Percentage (N = 396)
Gender		*Highest level of education completed*		*Income*	
Male	57.6%	Doctorate	5.3%	Under $15,000	3.5%
Female	42.4	Masters	14.4	$15,000 - $25,000	4.6
Ethnicity		Bachelors	31.6	$25,000 - $35,000	6.1
White	86.9%	Associate	5.1	$35,000 - $50,000	15.7
African-American	6.1	Some college, no degree	19.0	$50,000 - $75,000	21.2
Hispanic/Latino	1.5	High school diploma/GED	23.0	Over $75,000	42.9
Asian/Pacific	2.0	Less than high school	1.5	*Own home*	94.7%
Mixed	1.3	*Self-employed*	20.7%	*Have portfolio of long-term investments*	66.4%
Refused/DK/NA	2.3			*Use financial advisor*	43.1%

Table 2. *Importance of Wealth Uses in Retirement*

	Percent "very important"			
Use of wealth in retirement	All (N = 396)	Females (n = 168)	Males (n = 228)	Difference[a]
Basic financial support	89.7%	93.5%	86.8%	+6.7%
Health care	85.4	88.1	83.3	+4.8
Long-term nursing care	51.0	58.3	45.6	+12.7**
Education for children/grandchildren	48.5	47.0	49.6	-2.6
Leisure time	32.6	28.6	35.5	-6.9
Gifts to children	18.2	20.2	16.7	+3.5
Travel	16.2	14.9	17.2	-2.3
Education for self	10.4	8.3	11.8	-3.5
Gifts to charity	9.9	11.3	8.7	+2.6

[a] Signed difference; positive values indicate greater importance for females than for males.

** $p < .01$; χ^2 test.

Planned Uses of Wealth in Retirement

Accumulated wealth can have a number of potential uses in retirement, ranging from basic financial support to the attainment of life-long goals and objectives such as travel or education. Respondents were asked to rate the importance of a number of wealth uses on a four-category scale: very, somewhat, not very, or not at all important. These ratings are summarized in Table 2 according to the percentage of respondents who gave a rating of "very important" to each of the items. Responses are also summarized separately for male and female respondents.

The uses of wealth shown in Table 2 reflect some of the uses of wealth that people discuss with financial advisors. However, the list is not exhaustive.

"Basic financial support" and "health care" dominated planned uses of wealth in retirement. Females were slightly more inclined than males to see these two categories as very important. "Long-term nursing care" ranked third as a use of wealth, with females more likely to see this as very important than males. "Travel" was relatively low as a priority, along with "education for self" and "gifts to charity." Overall it appears that people in this age range anticipate using their accumulated wealth in retirement to meet basic living expenses and to meet health care needs.

Retirement Concerns

When people think about retirement, they often have a number of concerns such as health care costs, Social Security, and the economy. Respondents were asked to indicate their degree of concern regarding issues that people often face in retirement on a 3-category scale: low, moderate, or high concern. These responses are summarized in Table 3 according to the percentage of respondents indicating "high concern." These are concerns that are often part of clients' discussions with financial advisors. Responses are also summarized separately for male and female respondents.

"Health care costs" dominate respondents' concerns, with females more concerned about health care than males. Respondents were also concerned about "health care availability" and "pharmaceutical drug costs", though at a much lower level. Slightly less than half of the respondents (49.0%) were concerned at a high level about the Social Security system. Similar levels of concern were expressed regarding "inflation", "taxes", and "performance of financial markets." Over two-thirds of the respondents were highly concerned about "being happy."

Across almost all categories of concerns, female respondents expressed higher levels of concern than males, particularly about performance of financial markets, the Social Security system, transportation costs, and deflation.[4] In some cases these differences may reflect actual differences in exposure to loss or harm. For example, men may be less concerned than women about their financial future because they have higher levels of income, or are less reliant on single-sources of income in retirement.

[4] In other research on perceptions of health and safety risks, males (and particularly white males) are found to express consistently lower levels of concern and risk than females (e.g., Flynn, Slovic, & Mertz, 1994).

Table 3. *Retirement Concerns: Gender Differences*

	Percent "high concern"			
Retirement concern	All (N = 396)	Females (n = 168)	Males (n = 228)	Difference[a]
Health care costs	80.6%	83.9%	78.1%	+5.0%*
Having enough money	68.9	72.6	66.2	+6.4%
Being happy	68.7	68.5	68.9	-0.4
Meeting basic living expenses	67.7	70.8	65.4	+5.4
Health care availability	66.7	67.3	66.2	+1.1
Pharmaceutical drug costs	63.9	67.9	61.0	+6.9
Taxes	55.3	58.3	53.1	+5.2**
Personal safety & security	54.6	56.0	53.5	+2.5
Social Security system	49.0	54.8	44.7	+10.1
Inflation	45.5	49.0	42.5	+6.5*
Performance of financial markets	39.4	47.0	33.8	+13.2*
Availability of suitable housing	36.9	39.9	34.7	+5.2
Deflation	19.2	23.8	15.8	+8.0***
Transportation costs	10.7	27.4	15.8	+8.9**

[a] Signed difference; positive values indicate greater concern by females and than by males.
* $p < .05$; χ^2 test.
** $p < .01$; χ^2 test.
*** $p < .001$; χ^2 test.

Table 4. *Expected Sources of Income in Retirement*

Income source	All N = 396	Females n = 168	Males n = 228	*Income source*	All N = 396	Females n = 168	Males n = 228
Social Security	86.7%	89.3%	84.7%	Portfolio of long-term investments	65.7	64.3	67.1
Guaranteed pension or retirement	76.1	77.4	75.0	Real estate investments (other than personal home)	22.7	20.2	24.1
Work in retirement	61.7	56.6	65.8				

Sources of Income in Retirement

Many individuals planning for their retirement take into consideration income from multiple sources, such as Social Security, pension funds, and employment in retirement. Respondents were given a number of possible sources of income in retirement and asked to indicate whether they expected to receive income from each source. These responses are summarized in Table 4 for the sample as a whole, as well as by sex of respondent.

The vast majority of respondents (86.7%) anticipated receiving Social Security income in retirement. This percentage was only slightly higher for females than males (89.3 vs. 86.7%) but much higher for those *without* a portfolio than with a portfolio (42.3% vs. 23.4%). Almost two-thirds of the respondents (61.7%) expected income from some form of work or employment in retirement. However, males were significantly more likely to expect to work in retirement than females (65.8% vs. 56.6%). A large percentage of respondents (65.7%) had a portfolio of long-term investments, while less than a quarter (22.7%) had investments in the form of real estate other than their personal home.

Across the five categories of income shown in Table 4, most respondents expected to receive income from multiple categories. Figure 1 shows a breakdown of respondents according to the number of sources of income they expect to receive. Only 6.3% of respondents expected to receive income from only one of the five income sources, while 93.75% expected to receive income from two or more sources. Over three-quarters (75.8%) expected income from three or more sources, while slightly

over a third (35.5%) expected income from 4 or more sources. It appears from these results that pre-retirement individuals in the age group selected for study generally anticipate receiving income from a diverse set of sources that include traditional sources, such as Social Security and pensions, but also include self-managed investments such as marketed securities and real estate. Large numbers also expect to work in retirement.

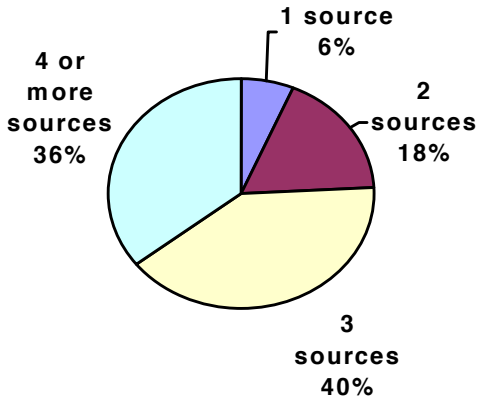

Figure 1. Number of sources of income.

Expected percentages of income from each source. For each of the five potential sources of income shown in Table 4, respondents were asked to indicate what percentage of their retirement income they expected to receive from each source. Responses were in terms of percentage estimates, and no attempt was made to insure that these percentages totaled to 100% for each respondent. Mean percentages for each of five sources of income are shown in Table 5, summarized for the sample as a whole as well as by sex of respondent, whether or not the respondent had a portfolio of long term investments, and whether or not the respondent used the services of a financial advisor or planner. The values are based on responses from only those individuals who indicated that they expected to receive income from a given source.

Those who expected to receive income in retirement from Social Security expected to receive slightly less than a third (30.0%) of their income from this source. Females expected to receive slightly more from Social Security than did males. Those without a portfolio of investments expected to receive significantly more income from Social Security than did those with a portfolio. Likewise, individuals who do not use the services of an advisor/planner expected a larger portion of their retirement income to come from Social Security than did those who use an advisor/planner. Respondents with a guaranteed pension or retirement expected almost half of their income from that source (47.3%).

Table 5. *Expected Percentage of Income from Each Source*[a]

Income source	All	Females	Males	Portfolio	No portfolio	Advisor	No advisor
Social Security	30.0%	32.6%	28.4%	23.4%	42.3%****	23.8%	34.3%****
Guaranteed pension or retirement	47.3	45.4	48.6	46.4	49.5	47.7	47.0
Work in retirement	23.2	20.5*	24.8	21.6	26.3*	23.2	23.1
Portfolio of long-term investments	40.5	41.3	39.9	40.5	—	42.9	37.2
Real estate investments (not personal home)	20.5	21.8	19.7	20.8	19.7	19.8	21.1

[a]Percentage entries by row are computed on only those respondents indicating that they expect to receive income from that source.

*$p < .05$; χ^2 test.

****$p < .0001$; χ^2 test.

Respondents who planned to receive income from employment in retirement expected about a quarter of their income to come from work (23.2%). Females who planned to work in retirement expected a slightly smaller percentage of income from employment (20.5%) than did males (24.8%).

Pre-retirees with investments expected about 40% of their income from their financial portfolio, while those with real estate expected less than a quarter of their income from that source (20.5%).

Other sources of income. While Social Security, pensions, investments and employment are the traditional sources of income that most people expect to rely on in retirement, people often consider other assets and activities as sources of potential income. To assess attitudes toward some alternative sources of income, respondents were also asked to indicate their plans regarding the use of their personal home for retirement income, as well as their expectations about support in retirement from children and other family members. In addition, respondents were asked to indicate if (and how frequently) they participated in lotteries and/or purchased collectibles for retirement purposes. Figure 2 summarizes these results for the total sample, as well as by sex of respondent, whether or not the respondent had a portfolio of long term investments, and whether or not the respondent used the services of a financial advisor or planner.

Overall, less than a quarter of the respondents (20.5%) expected to sell their personal home as a source of income in retirement. Males were significantly more likely to expect to do so (24.2%) than females (15.4%). Likewise, those with a portfolio of investments were more likely to expect to sell their home (23.9%) than were those without a portfolio (14.1%).

Very few respondents (3.8%) expected to receive financial support in retirement from children or other family members. However, females, those without a portfolio and those who do not use an advisor were slightly more likely than others to expect family members to contribute to their support.

Almost a quarter of the respondents (23.9%) had at some time or another participated in lotteries or games of chance with the thought of winning money for retirement. Males were more likely to have done so than females (26.8% vs. 19.6%), as were those without a portfolio (28.0% vs. 21.8%). Of those who had played lotteries for retirement, over half indicated doing so "occasionally" (60.0%), while a much smaller percentage (19.0%) indicated doing so "frequently." Of the "occasional" players, almost three-quarters (72.7%) were females, and slightly over half (54.1%) were males.

About 1 in 10 respondents (10.1%) indicated that they had purchased collectibles (e.g., art, antiques) as a retirement investment. Males were more likely to report doing this "frequently" (28.6%) than females (10.5%), while females were more likely to report doing it "occasionally" (68.4% vs. 52.4%).

These results suggest a pattern of investment behavior and retirement planning that is both diverse and eclectic. While many respondents expect to receive the majority (if not all) of their retirement income from traditional sources, many individuals expect their retirement income to come from multiple sources, as many as five or more. Some of these sources involve investments and savings, while others potentially involve lotteries and collectibles. The pattern of behavior seen here suggests that the concept of retirement planning held by the professional advisor community, and that involves regular or periodic contributions to an established plan and investments in traditional financial markets, may fail to capture the full range of options that many individuals perceive are available to them (and of which they avail themselves).

Health Care Cost Expectations

In recent years, the public has become sensitized to the importance of planning for health care in retirement. A significant expense in retirement is health care and associated costs, including pharmaceuticals. Though many categories of expenses are important to consider as one plans for retirement, most are at least partially within the control of the individual, such as housing, transportation, food, utilities, and leisure activities. Health care, however, is relatively outside the control of the individual and potentially constitutes the single largest category of expenditure for some (if not most) people.

Respondents were asked to indicate the percentage of their retirement income that they expected to spend on health care costs, including pharmaceutical prescriptions and health insurance. They were also asked to indicate how much they expect to spend on health care in retirement relative to the amount they currently spend. These responses are summarized in Table 6.

On average, respondents expect to spend 14.0% of their retirement income on health care. Females expect to spend slightly more (15.2%) than males (13.1%). Those *without* a portfolio expect to spend significantly more on health care (17.1%) than those *with* a portfolio (12.2%).

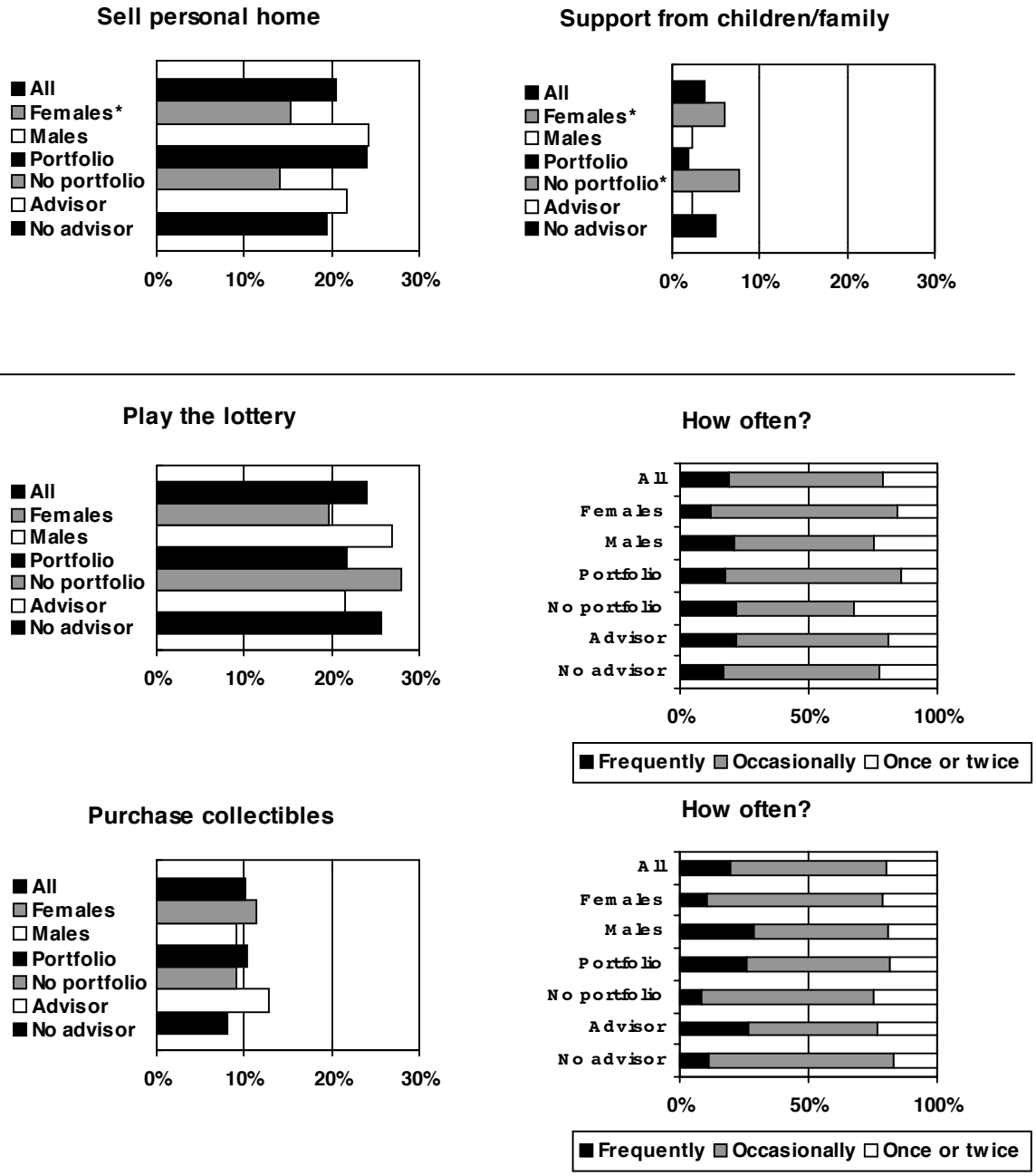

Figure 2. Other sources of retirement income. Only respondents who indicated they had "ever" played the lottery or purchased collectibles were asked to indicate how often.

*p = < .05; χ^2 test.

Table 6. *Expectations About Health Care Expenses in Retirement*

	All	Females $n = 168$	Males $n = 228$	Portfolio $n = 261$	No portfolio $n = 132$	Advisor $n = 171$	No advisor $n = 226$
"What percentage of your retirement income on a monthly basis do you expect to spend on health care, including pharmaceutical prescriptions and health insurance?"	14.0%	15.2%	13.1%	12.2%	17.1%**	13.5%	14.3%
"Considering the amount of money you currently spend on health care, when you retire do you think you will spend:"							
Less than now	5.8%	6.6%	5.3%	5.0%	7.6%	5.9%	5.8%
About the same as now	21.5	19.6	22.8	18.8	27.3	18.7	23.5
Slightly more	34.6	36.3	33.3	38.7	26.5	39.2	31.4
Up to twice as much	22.0	21.4	22.4	19.5	25.8	17.5	25.2
Over twice as much as now	13.4	12.5	14.0	15.7	9.1	15.8	11.5

** $p < .01$; *t*-test.

Relative to current health care expenses, less than a third (27.3%) expect to spend either "less than now" or "about the same as now." A little over a third expected to spend "slightly more" than their current expenditure (34.6%). Only about a third (35.4%) expect to spend twice as much or more.

Personal Financial Management and Expected Income in Retirement

Respondents were asked a series of questions concerning how they conduct their personal financial management with respect to retirement planning, including the types of assistance they use (e.g., Internet resources). They were also asked to indicate the amount of income they expect in retirement (as a percentage of current household income) and the amount of time they expect to spend managing their finances in retirement. Table 7 summarizes these responses.

The vast majority of respondents (75.1%) indicated that they regularly save or invest money for retirement outside of Social Security or an employer pension plan. However, those respondents who do not have a portfolio of long-term investments were much less likely to save (47.7%) than were those who do have a portfolio (89.3%). Among those who do save, the average savings rate as a percentage of monthly income was approximately 13%.

On average, respondents expected to retire quite early. The average age that respondents expected to begin drawing income from retirement assets was slightly under 62 years of age. Male respondents expected to begin using retirement assets slightly sooner than females (61.6 yrs. vs. 61.4 yrs.). Respondents generally expected that their assets would have to last them approximately 23 years on average. Those without a portfolio expected their assets would have to last them less than 22 years on average (21.8 yrs.).

Respondents expressed wide ranging estimates of the amount of money they would need in retirement, as a percentage of current household income. Less than a quarter (24.8%) thought that they would need 70% or more of their current income in retirement, while a third (33.4%) anticipated needing 50% or less. The relationship between expectations about income in retirement and current annual household income was only modest. Of respondents with an annual income under $50,000, 29.6% expected 50% or less of their current income in retirement. For those with an annual income over $75,000 the percentage expecting 50% or less in retirement rose only to 31.7%. At the other end of the income distribution the relationship was only marginally stronger. Those with an income under $50,000 were more likely to expect over 70% of their current income in retirement (32.2%) than were those with an income over $75,000 (21.8%).

Table 7. *Investment Planning and Activity*

	All	Females $n = 168$	Males $n = 228$	Portfolio $n = 261$	No portfolio $n = 132$	Advisor $n = 171$	No advisor $n = 226$
Use services of a financial advisor or retirement planner							
Yes	43.1%	51.2%**	37.3%	58.2%	12.9%****	--	--
No	56.9	48.8	62.7	41.8	87.1	--	--
Regularly save/invest money for retirement							
Yes	75.1%	72.0%	77.2%	89.3%	47.7%****	51.0%	49.0%****
No	24.7	27.4	22.8	10.3	52.3	18.4	81.6
Percentage of monthly income saved/invested (%)	13.6%	13.7%	13.5%	14.1%	11.6%	14.7%	12.5%
Age expect to draw income from retirement assets (years)	61.9	62.4	61.6	61.6	62.5	61.2	62.5*
Time retirement assets will have to last (years)	23.3	23.3	23.1	23.9	21.8	23.6	23.0
Percentage of current household income expect to need in retirement:							
Less than 30%	9.9%	8.9%	10.5%	8.4%	12.9%	8.8%	10.6%
30% to 40%	7.8	8.9	7.0	6.9	9.9	6.4	8.9
40% to 50%	15.7	11.9	18.4	14.9	16.7	12.3	18.1
50% to 60%	22.2	23.2	21.5	22.6	22.0	25.2	19.9
60% to 70%	13.9	10.7	16.2	16.5	9.1	14.6	13.3
70% to 80%	13.4	14.3	12.7	15.3	8.3	15.8	12.0
More than 80%	11.4	13.0	10.1	10.3	13.6	10.5	12.0

*$p < .05$; *t*-test.
**$p < .01$; χ^2 test.
****$p < .0001$; χ^2 test.

Table 8. ***Calculated Annual Retirement Income and Health Care Expenditures***[a]

Quartile	Mean income in retirement	Estimated percent income on health care	Yearly health care expense	Monthly health care expense
Q1	$14,414	17.3%	$2,496	$208
Q2	29,218	13.2	3,851	321
Q3	44,707	13.7	6,129	510
Q4	67,189	11.5	7,707	642

[a]All estimates and calculations are in current dollars.

Respondents' income expectations in retirement can be expressed in terms of a monetary amount by multiplying their percentage estimate (see Table 7) by their current household income. The average income expected in retirement calculated by this method across all respondents was $40,181, in current dollars. However, this amount varied widely depending on both current household income and expectations about the proportion of current income needed in retirement. Dividing the calculated income distribution into four quartiles and then computing the average within each quartile reveals a high variability in retirement income expectations. Those in the lowest quartile expect on average an annual retirement income of $14,414, while those in the highest quartile expect on average $67,189. Averages for the two middle quartiles were $29,218 (Q2) and $44,707 (Q3).

The implications of these retirement income levels cannot be fully appreciated without knowing more about how people plan to spend their annual income. However, some sense of the reality of these expectations can be gleaned by calculating health care cost expenditures based on respondents' percentage estimates for health care expenses in retirement. Table 8 summarizes calculated income in retirement by quartile, and shows the average income within each quartile, the average percentage of income

expected for health care, as well as calculated expenditures on health both yearly and monthly.

At the lowest levels of expected income in retirement, those studied expect to spend only about $200 per month on health care. Even those in the second quartile expected health care expenses on the order of $325 per month. At the highest income levels, health care expenses on a monthly basis exceed $600. Firm conclusions about the adequacy of people's projections about health care costs cannot be made without more careful study of the actual amounts that health care professionals believe people will spend in retirement to meet their health care needs.

Respondents were asked about their use of the Internet as well as how much time they expected to spend managing their finances in retirement. These responses are summarized in Table 9.

Slightly over a third (38.0%) indicated they had used the Internet to help them in retirement planning and investing. Males were significantly more likely to have used the Internet than females (43.0% vs. 31.0%). Those with a portfolio were much more likely to have used the Internet (48.3% vs. 18.9%). With regard to the amount of time in retirement spent managing finances, very few respondents thought they would spend a day or more a week (11.3%). Slightly less than half (43.6%) thought they would spend 4 hrs. or less per week.

Table 9. *Personal Financial Management*

	All	Females (n = 168)	Males (n = 228)	Portfolio (n = 261)	No portfolio (n = 132)	Advisor (n = 171)	No advisor (n = 226)
Have used Internet to get information or learn more about saving, investing, or planning for retirement							
Yes	38.0%	31.0%*	43.0%	48.3%	18.9%****	50.3%	49.7%*
No	62.0	69.0	57.0	51.7	81.1	38.6	61.4
"How much time do you think you will spend in retirement managing your finances?"							
4 hrs. or less a month	43.6%	46.4%	41.7%	42.5%	45.5%	46.2%	41.6%
1 to 8 hrs. a week	42.6	41.1	43.9	46.4	34.9	45.6	40.3
1 day or more a week	11.3	10.1	11.8	9.6	4.6	8.2	18.1

* $p < .05$; χ^2 test.
**** $p < .0001$; χ^2 test.

Table 10. *Expectations About Economic Inflation and Portfolio Performance*

	All	Females n=168	Males n=228	Portfolio n=261	No portfolio n=132	Advisor n=171	No advisor n=226	Financial advisors N=256
Expected inflation rate:								
"next year"	4.6%	6.9%**	3.6%	4.0%	5.8%	4.1%	5.0%	2.4%
"average annual rate next 10 years"	6.0	8.0	5.2	5.0	8.6	5.2	6.7	3.4
Expected rate of return on portfolio:								
"next year"	15.8[b]	17.6	14.9	—	—	16.7	14.7	9.2[c]
"average annual rate next 10 years"	16.6[b]	20.8*	14.6	—	—	18.1	14.7	10.5
Net rate of return on portfolio adjusted for inflation:								
"next year"	14.4[b]	15.2	14.0	—	—	14.3	14.4	—
"average annual net rate next 10 years"	15.5[b]	18.3	14.4	—	—	16.3	14.2	—

[a] From: Survey of Financial Planners and Advisors (see MacGregor et al., 1999).
[b] Only those respondents indicating that they "expect to receive income from a portfolio of long-term investments such as stocks, bonds, or mutual funds" (n = 261).
[c] Financial advisors were asked to estimate the "percent growth in the S&P 500" for both time periods.

* $p < .05$; t-test.
** $p < .01$; t-test.

Expectations about economic inflation and personal portfolio performance. Making plans for retirement involves, in part, projecting how well the general economy will perform, including the long-term rate of inflation and the returns that one will achieve on an investment portfolio. These judgments are summarized in Table 10 and compared with those of professional financial advisors.

Respondents and professional advisors were asked to make two estimates of the inflation rate: one for the next year and another for the average annual rate over the next 10 years. Near-term inflation estimates made by survey respondents were much more conservative on average (4.6%) than estimates made for 10 years out (6.0%). Males estimated inflation to be significantly higher than females for both the near and long-term. Those with portfolios were more conservative in their inflation estimates than were those without portfolios. All categories of survey respondents made higher estimates of inflation than did professional financial advisors, particular for long-term inflation. In some cases, advisors' estimates of inflation were half or less those of survey respondents, particularly in the long-term and for respondents without a portfolio.

Respondents and professional advisors were asked to make estimates as well of the expected rate of return on long-term investments. For survey respondents these estimates were made only by those indicating that they had a portfolio. Estimates of portfolio return were made for both the next year and a ten-year average annualized rate of return. In addition, the same estimates were made adjusting for inflation. Compared to financial advisors, respondents were on average quite optimistic about both short-term and long-term investment rates of return. Ten-year average annualized rate of return estimates for all respondents combined was 16.6%, with the average rate for females exceeding 20%. Financial advisors estimates of the ten-year growth in the S&P 500 barely exceeded 10%.[5] Surprisingly, respondents indicating that they have a financial advisor made higher estimates of return (18.1%) than those without (14.7%). Portfolio return estimates accounting for inflation typically were attenuated by only about 1% from those made without specific inflation discounting, rather than the 3% to 4% that they should have been.

Respondents' and advisors' estimates of growth and inflation are also shown in Table 11 in terms of the distributions of their responses. The values in the table are interquartile ranges and correspond to the 25th, 50th, and 75th percentiles of the distribution of estimates, shown as Q1, Q2, and Q3 respectively.

In general, estimates of growth and inflation made by financial advisors were much less variable than were those made by survey respondents, particularly for portfolio rates of return. For 10-year annualized average rates of return, the difference between the 25th and the 75th percentile for financial advisors was 2%, while for survey respondents the difference was 7%. Survey respondents were also much less variable in their 10-year estimates of inflation.

[5] Financial advisors' estimates of the 10-year annualized average growth in stock mutual funds averaged 10.43%.

Table 11. *Distribution of Estimates of Inflation and Portfolio Performance: Interquartile Ranges*

	Survey respondents			Financial advisors		
	25th percentile	50th percentile	75th percentile	25th percentile	50th percentile	75th percentile
Expected inflation rate:						
"next year"	2.0%	3.0%	4.0%	2.0%	2.0%	3.0%
"average annual rate next 10 years"	3.0	4.0	6.0	3.0	3.0	4.0
Expected rate of return on portfolio:						
"next year"	10.0%	13.0%	20.0%	6.0%	10.0%	12.0%
"average annual rate next 10 years"	10.0	12.0	17.0	10.0	10.0	12.0
Net rate of return on portfolio adjusted for inflation:						
"next year"	8.0%	10.0%	17.0%	--	--	--
"average annual net rate next 10 years"	8.0	10.0	15.0	--	--	--

Table 12. *Characteristics of Personal Portfolios and Market Trading Activity*

	All[a]	Females (n = 108)	Males (n = 153)	Advisor (n = 151)	No advisor (n = 110)
Frequency monitor portfolio					
Daily or weekly	36.6%	18.9%****	49.5%	31.2%	44.2%
Monthly or quarterly	52.5	65.8	42.9	57.8	45.0
Yearly	9.1	10.8	7.8	8.4	9.9
Frequency change portfolio					
Daily or weekly	3.0%	1.8%	3.9%	3.3%	2.7%
Monthly or quarterly	37.0	33.3	39.6	38.3	35.1
Yearly	50.6	55.9	46.8	50.0	51.4
"With regard to financial markets in general, would you classify yourself as Bullish, Bearish, or Neutral?"					
Bullish	26.0%	15.3%****	33.8%	25.3%	27.0%
Bearish	5.7	4.5	6.5	5.8	5.4
Neutral	64.5	71.2	59.7	65.0	64.0
"In the next year, do you anticipate increasing or decreasing the percentage of your investment portfolio that you have in stocks and mutual funds?"					
Increase	48.7%	52.3%	46.1%	48.7%	48.7%
Decrease	5.3	3.6	6.5	5.8	4.5
No Change	41.1	37.8	43.5	38.3	45.1

[a] Only those respondents indicating that they "expect to receive income from a portfolio of long-term investments such as stocks, bonds, or mutual funds" (n = 261).

****$p < .0001$; χ^2 test.

It appears that while survey respondents were more pessimistic about inflation than were financial advisors, they were much more optimistic about long-term rates of return in the markets. However, their estimates of net portfolio return accounting for inflation were not as conservative as they should be given their high inflation estimates. Overall, survey respondents appeared very optimistic about the long-term prospects for their portfolio to yield high returns (about 50% more than professional advisors would counsel), even taking inflation into consideration.

Somewhat surprisingly, respondents who indicated that they have a financial advisors expected higher portfolio returns that those who did not, and higher than financial advisors in general estimate can be achieved through growth in the S&P 500. One might expect that individuals who have an advisor would be less likely to harbor unrealistic expectations about future financial growth. On the other hand, individuals with portfolios, but no advisor, may be more attuned to the day-to-day realities of financial markets, resulting in perceptions of future returns that are tempered by the experience of outcomes.

Characteristics of personal portfolios and market trading activity. Respondents with portfolios were asked about their management activities as well as their general orientation toward financial markets. These responses are summarized in Table 12.

A large percentage of respondents with portfolios (36.6%) indicated that they monitor their portfolio either daily or weekly. This percentage was much higher for males than females (49.5% vs. 18.9%), and higher for those without an advisor than for those with (44.2% vs. 31.2%). Typically, less than 10% of respondents monitored their portfolios yearly. Despite this high level of monitoring, changes in portfolios occurred most often on a yearly basis. Females were more likely to change portfolios yearly than males (55.9% vs. 46.8%).

Respondents were asked to express their sentiment about the market by classifying themselves as either Bullish, Bearish, or Neutral. Most respondents saw themselves as Neutral (64.5%); relatively few (5.7%) saw themselves as Bearish. Females were more likely to report themselves as being Bullish than were males (33.8% vs. 15.3%). However, despite the less Bullish attitude among males, females were more likely to

report increasing the percentage of stock in their portfolio over the next year; males were more likely to report making no change in the year.

Respondents were asked to give the composition of their portfolios in terms of the proportion of cash, bonds (or bond funds), and stock (or stock funds). Table 13 shows the portfolio breakdowns by asset class.

Typically, respondents were heavily invested in equities (67.9%), with very little difference between genders or advisor category. Across all respondents, the proportion with more than 60% of their portfolio in equities was 58.5%.

Table 13 also shows the distribution of equities in portfolios in terms of the interquartile range values. Here again, the high level of investment in equities is quite apparent: 25% of the respondents had 90% or more of their portfolio in stocks; while 75% of the respondents had 50% or more in stocks. Why might respondents be so heavily weighted in equities? One possibility is that their weighting reflects their level of optimism about the general economy. High returns have been achieved in the near-past, and they may tend to perceive that high returns will be received in the future. Thus, conservatism in investment is a potential opportunity loss. A second possibility is that people in this age group are expecting retirement income from multiple sources, some of which are in the form of guaranteed benefits (e.g., Social Security, pensions); thus, they can afford to be more speculative in the area of their personal portfolio and "budget" a higher portion of their risk to stocks. Indeed, of the 396 survey respondents, only *two* anticipated retiring on income from their investment portfolio alone; only *seven* expected retirement income only from Social Security and investments.

Attitudes about the economy and financial markets. Perceptions of financial risk and return are based, in part, on broad attitudes about the economy and markets. Respondents who indicated that they have a personal portfolio of stocks and bonds were also asked to indicate their views on a number of topics relating to both the economy and to their personal financial goals. Responses are summarized in Table 14 and compared with those of professional financial advisors.

Respondents were much less inclined than financial advisors to see current market fluctuaions as greater than in the past. This perception of volatility may be in part due to the increased media coverage of financial markets and the increased attention people pay to financial news. Holding a portfolio of investments may also make those who do so more inclined to pay closer attention to financial matters in the media, thereby sensitizing them to market variability.

Financial advisors were much more inclined to view economic conditions in other countries as significant for the U.S. stock market than were survey respondents. In general, survey respondents had a somewhat isolationist view of the U.S. economy compared to the economies of other countries, were fairly confident that the fate of other economies bore little relationship to their own.

Table 13. *Composition of Investment Portfolios*

	All[a]	Females (n = 108)	Males (n = 153)	Advisor (n = 151)	No advisor (n = 110)
Portfolio composition (% in asset class):					
Cash or equivalents	20.5%	18.6%	21.6%	20.2%	20.9%
Bonds	11.8	13.6	10.7	13.2	9.9
Stocks	67.9	68.1	67.8	67.5	68.5
Percent of portfolio in stocks or stock funds:					
25th percentile	50.0%				
50th percentile	73.0				
75th percentile	90.0				
Investment style: % of portfolio in stocks or stock funds[b]:					
<30%	9.4%	8.1%	10.4%	9.7%	9.0%
30% to 60%	21.1	21.6	20.8	20.8	21.6
>60%	58.5	52.3	63.0	56.5	61.3

[a] Only those respondents indicating that they "expect to receive income from a portfolio of long-term investments such as stocks, bonds, or mutual funds" (n = 261).

[b] Classification of respondents according to percentage of portfolio in asset class.

Table 14. *Attitudes About the Economy and Financial Markets*

Item	All	Females (n = 108)	Males (n = 153)	Financial advisors (N = 256)
"On a percentage basis, the day-to-day fluctuations in the stock market are greater now than ever before."				
Strongly disagree/disagree	25.3%	25.2%	25.3%	77.3%
Strongly agree/agree	71.3	69.4	72.7	17.2
"I am reasonably confident that the U.S. stock market will do well no matter what happens to the economies of other countries."				
Strongly disagree/disagree	37.4	38.8	36.4	67.2%
Strongly agree/agree	61.1	57.7	63.6	29.3
"Within the time frame that I am planning for my financial future, deflation is not likely to have an effect on my financial goals and objectives." [a]				
Strongly disagree/disagree	34.3	43.2****	27.9	24.2%
Strongly agree/agree	60.4	46.8	70.1	66.8
"Assume that over a three-day period the Dow Jones Industrial Average dropped 10%. Would you look at this as an opportunity to buy or as a time to sell?"				
Probably/possibly buy	68.3	61.3	73.4	74.2
Unsure	23.0	27.9	19.5	22.3
Probably/possibly sell	1.9	0.9	2.6	3.1
"In general, are stocks and mutual funds (overvalued/ undervalued) with regard to their potential earnings."				
Very/slightly overvalued	69.1	63.1	73.4	63.7 [b]
Very/slightly undervalued	16.2	13.5	18.2	27.8
Neither	7.2	9.0	5.8	—
"I can tolerate the risk of large losses in my stock and mutual fund portfolio in order to increase the likelihood of achieving high returns."				
Strongly disagree/disagree	53.6	59.5	49.4	— [c]
Strongly agree/agree	42.6	34.2	48.7	—

[a] Asked of financial advisors in terms of "my clients' goals and objectives."

[b] Financial advisors were asked whether they agreed or disagreed that stocks are overvalued relative to potential earnings.

[c] Not asked of financial advisors.

****$p < .0001$; χ^2 test.

In general, respondents overall were not particularly concerned that deflation was a factor likely to effect their financial goals and objectives. Likewise, financial advisors were not concerned that deflation would effect their clients. However, among survey respondents, females were much more concerned about deflation than males by a considerable margin. This somewhat odd result may be related to females having greater generalized concern about economic matters than males (see Table 3).

The general optimism and confidence in financial markets seen elsewhere in the results of the survey are evident as well in how respondents viewed a 10% drop in the Dow Jones Industrial Average (DJIA) over a three-day period. The vast majority regarded such a drop as a potential opportunity to buy (68.3%) rather than to sell (1.9%). This pattern of responses tended to be mirrored by those of financial advisors, who also saw a hypothetical market downturn as a buying opportunity. Among survey respondents, males were more likely to see downturns as a time to buy than females.

Despite a general orientation toward buying on market downturns, both respondents and advisors tended to view stocks and mutual funds as

overvalued. Males were more likely to perceive overvaluation (73.4%) than females (63.1%), even though males expressed a greater willingness to buy on downside variability. With regard to risk tolerance, survey respondents were slightly inclined to disagree that they can tolerate the risk of large losses to achieve high returns. Females were much less inclined to indicate that they could tolerate such losses than males.

Overall, the pattern of results appears inconsistent and at times conflicted. On the one hand, survey respondents appeared to see market variability as greater than ever before and perceived stocks as overvalued. On the other hand, they tended to see the U.S. economy as insulated from the economies of other countries, deflation as not a significant risk for the future, and regarded market variation as presenting them with opportunities. This pattern of results is generally consistent with a perception on the part of individual investors that they "know" the markets and that through diligence and careful attention to market variation, they can capitalize on stocks that would otherwise be overvalued. However, many of their views and perceptions about the markets are quite discrepant from those of financial advisors, particularly regarding the importance and impact of global economic conditions on their financial future.

Conclusions And Policy Implications

This survey posed many detailed and challenging questions to respondents about their financial future. It is tempting to conclude (or even predict) that people cannot be expected to answer questions about such complex and tenuous matters as the future of the economy and what proportion of their income in retirement will derive from various sources. Nonetheless, answers to such questions (or at least reasonable speculations) are the essence of a long-term strategy for meeting one's financial needs in retirement. That they are difficult issues does not make them any-the-less important. Indeed, we would argue that an individual's financial health is, like their physical health, the result of attitudes and habits built up over time and that take into consideration the long-term implications of actions one takes today.

While this study could have asked even more detailed questions about respondents' financial lives, there is a level of probing beyond which extraordinary cooperation and trust is needed to obtain responses. Likewise, there are limits to which people are able to produce answers to complex financial matters over the telephone. We believe that this survey reached that limit and yielded responses that are very revealing of how lead-edge baby boomers view the financial aspects of retirement.

We see within the results a general pattern for women to be more concerned about their finances in retirement than men, but also more likely to use the services of a financial advisor. At least for some women, increased concern about finances may lead to a greater tendency to seek professional assistance.

General concerns about retirement were strongly weighted in the direction of health care, particularly among women. Beyond basic financial support, this group of pre-retirees plans to use their accumulated wealth to meet health care expenses. However, the reality of their budgeting for future health care costs is questionable. While some individuals have planned carefully for future health care expenses, many appear not to be sufficiently aware of what future costs might be to sufficiently factor them into the amounts of income they expect in retirement.

We see in the results of this study a tendency to expect retirement income from multiple and diverse sources. Unlike previous generations for whom one or two sources of retirement income was the modality, most boomers of today are anticipating income from three or more sources. Very few, however, are expecting to rely on children and family as a source of support. A surprising number, approximately a quarter, at one time or another extend their income sources to playing lotteries and games of chance. This trend toward a highly diverse portfolio of income sources is relatively new in society and, we believe, may be reflective of beliefs about the inadequacy of guaranteed benefit programs such as Social Security, as well as a social trend toward self-determinacy in meeting one's financial needs in retirement.

A source of income that many people in this age group expect in retirement is based on returns from a portfolio of long-term investments in marketed securities. Two-thirds of this age group appears to have such a portfolio, but very few anticipate retiring either on that portfolio alone, or with only one other source of income. Portfolio income appears to be regarded more commonly as an income supplement beyond that guaranteed by Social Security and/or some other form of pension. We see within those who have portfolios a high level of optimism about the future of the economy and potential returns on investment, and a large "expectations gap" between lay investors and professional financial advisors.

To their credit, many respondents in this study were essentially practicing risk diversification with

regard to retirement income by anticipating and creating multiple income sources. On the other hand, a sizable proportion of respondents planned to rely at least in part on Social Security, but did not have a portfolio of other investments. However, while those who do have portfolios generally overestimate their long-term growth, they are also more likely to be directly involved in planning and preparing for their financial future. It is somewhat troubling that the tendency toward portfolio development leans in the direction of those with larger incomes, since everyone can benefit from the long-term growth of the economy. Indeed, to hold a portfolio is to view oneself as a participant and stakeholder in that economy and thereby develop a stronger view toward economic self-sufficiency. Those who fail to do so are more likely to be at risk in their retirement years, when the personal development of financial management abilities is most difficult.

Policy Implications. As the demographic profile of the US population shifts toward larger numbers of retirees, concerns arise over how best to assist people in meeting their financial needs beyond their peak working years. The results of the present study suggest that many people who are one or two decades away from retiring have taken significant steps toward helping secure their financial future by savings and investment. However, many others have not and greater effort may need to be expended on creating broader awareness of the value of establishing a personal savings and investment program outside of guaranteed benefit programs such as Social Security. This may be particularly challenging for individuals in the lower half of the income distribution, who may perceive long-range financial planning as not relevant to their lives because they have limited amounts of money to invest. Research on judgment and decision making has repeatedly shown that people do not readily appreciate the effect of compounding on wealth accumulation, and underestimate the growth in one's fortunes that can accrue from a regular program of saving and investment, even in small amounts. Education in financial literacy needs to begin at a sufficiently early stage for people to gain the full benefits of a life-long investment program.

The results of the present study point toward a very positive perception on the part of investors of the long-term returns that can be expected from investments in financial markets. However, the returns that many of the investors studied here anticipate receiving are not consistent with the more conservative returns that financial professionals deem likely. While the past few years have seen very good market returns, the effects may have been to attenuate investors' perceptions of the risks of investing. Give the returns-oriented recent market history, many investors may not have a balanced perspective on market variations over longer time periods, and have relatively little experience managing their finances through market downturns. This may carry important implications for future efforts to give investors greater control over their financial future through such measures as privatization of (at least some part of) Social Security. Careful thought may need to be given to the circumstances under which individuals could or should be given personal control over part of what is now a guaranteed benefit program and which serves as a financial safety net for many people. For example, under a partially privatized Social Security, investment portfolios may be made more resilient by requirements that encourage relatively conservative management strategies (e.g., buy and hold) thereby discouraging speculation and increasing the likelihood that individuals will benefit from long-term market rates of return. Investors education needs and requirements should also be explored and considered.

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