## The More Financially Knowledgeable Person in Older Couple Households

Because women generally outlive men, there is a likelihood that many women will have to manage household finances on their own later in life. There is some concern about whether they are prepared to do so. This concern appears to be based on the assumption that households adhere to traditional role patterns and men manage the household finances, leaving their wives less knowledgeable. However, little is known about the role of older women in household finances. This research investigates who is the financially more knowledgeable person in male-female couple households with a head over age 50, using datasets from four Surveys of Consumer Finances (SCF). Because the respondent in the surveys is the person the household identifies as the more financially knowledgeable, it is possible to identify the financially more knowledgeable person and analyze the characteristics of that person. This research tests hypotheses based on both the bargaining model and the unitary models of household decision making, employing logit analysis to investigate the impact of income and differences in employment, education, age, and health on predicting who is the respondent. Our analysis shows that $43 \%$ of the respondents in older couple households were female, with the proportion being about the same in 2001 as 1992. We found that education, health, income, and financial assets generally predicted which person was identified as more knowledgeable. The person who has more education is more likely to be the respondent; if one partner is in poor health, the other is more likely to be the respondent; if both are employed, the female is more likely the respondent; as income and financial assets increase, it is more likely that the male is the respondent. Both the male and female partners were present in $41 \%$ of the interviews, and the male was more likely to be the respondent if both were present.

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## Introduction

There is a general concern that women need to be more capable of managing household finances, due in part to the likelihood that married women will outlive their husbands and have to manage on their own. While additional financial education for all persons facing retirement may be needed, it is particularly important to determine whether women are prepared to manage on their own. Understanding the role women play in the household finances and their knowledge relative to their husbands or partner is a first step in determining how well they could continue to manage. If women are involved in the family finances, it is likely that they at least would be able to continue in the same manner after the death of a spouse as when the spouse was alive.

Research has shown that women often outlive their partners and suffer substantial economic decline after the death of a spouse (Burkhauser, Butler, \& Holden, 1991). This concern for the poor financial situation of older divorced and widowed women led the American Association of Retired Persons Women's Initiative in 1987 to develop the Women's Financial Information Program (DeVaney, Gorham, Bechman, \& Haldeman, 1996). Traditional roles and higher rates of labor market participation are factors related to men's greater experience with financial matters. Financial management was also viewed as an appropriate activity for husbands under traditional models of household responsibilities. While perhaps considered unenlightened today, that traditional line of thinking was contemporaneous with the household formation years and married life of many women over 50. The following statement by Lloyd (1975, p. 11) reflects the traditional view of division of labor that was prevalent during the married lives of many older couples:

Differences in the efficiency of men and women in various household activities are dependent on differences in natural abilities and differences in acquired training. Because of early conditioning as well as school and market training, men tend to specialize within the family in household repairs and family finances, whereas women are more likely to do cooking and cleaning.

Although it may seem that changing social attitudes about the roles of men and women and the increasing labor force participation of women would bring about changes in traditional roles, social change takes time. Patterns established during early years of marriage continue and little is known about the role of older women in the family finances.

This research examines the question of who is the more financially knowledgeable spouse in married couple and opposite-sex partner households, using logit regression analysis with data from the four most recent Surveys of Consumer Finances (SCF) conducted by the Federal Reserve Board (Aizcorbe, Kennickell, \& Moore, 2003). We investigate determinants of whether the male or the female is the more financially knowledgeable person, looking at the influence of explanatory factors including education, age, and health under hypotheses based on two theoretical models of household behavior, the bargaining model and the unitary model.

The Survey of Consumer Finances is particularly suited to this research because the interviews are specifically scheduled with the person the household indicates is more knowledgeable about the family's finances. The SCF takes great efforts to assure that the survey is conducted with that person, who is not necessarily the person the SCF designates as the household head. With the SCF surveys, it is possible to identify who is the household head, who is the respondent, and whether the respondent's spouse was present during the interview.

## Literature Review

## Financial Decision-making by Married Couples

Ferber and Lee (1974) used the term "family financial officer" (FFO) to designate the person who has the main responsibility for financial decision-making and executing financial plans. In their study of recently married couples under the age of 30 , they applied the concept to determine the extent to which husbands and wives influence the family's financial behavior. They found that during the second year of marriage, specialization took place with wives increasingly more likely to be the FFO than the husband, taking over the payment of bills and keeping track of expenditures. They also looked at factors related to whether the husband or the wife was the FFO, using multiple regression analysis. In families where one person (as opposed to the couple jointly) served as the FFO, they found that differences in education or employment status were not determinative of who served as the FFO but that attitudes toward money did relate to who served as the FFO. The percent of income saved was the most important variable related to which partner was the FFO, with the higher the proportion of income saved, the more likely the husband was the FFO. They also found that if the couple was more "venturesome" in savings, the husband was more likely the FFO, and that the household had more savings in variable dollar form than if the wife was the FFO.

Elder and Rudolph (2003) looked at the decision making of respondents in the Health and Retirement Study (HRS) conducted for the National Institute on Aging in 1992. Respondents who were age 51 to 61 and in couple households (with a spouse or partner who could be of any age) were asked "who makes the decisions" and were to indicate the male, female, or both persons as a couple. Elder and Rudolph sought to help explain whether financial behavior was better explained by a unitary model or a bargaining model of financial decision making. They theorized that in a unitary model of decision making, the primary decision maker would be the partner with the lower wage because of that person’s supposed lower opportunity cost. In a bargaining model, they proposed that the person with higher power, related to higher income, would more likely be the decision maker. They concluded that their results were consistent with the bargaining model and that "financial decisions are thought to be more likely to be made by the male when the male is financially knowledgeable, has more education, and has a higher wage." They suggested that the female would play a bigger role when she is financially knowledgeable, better educated, and has a higher wage than the male. The male was the financially knowledgeable partner in about $65 \%$ of the households. Neither age nor health status of either partner were significant in affecting who was the primary decision-maker, although the respondents represented a generally limited age range.

Rosen and Branbois (1983) looked at the roles of husbands and wives in savings and money management with a special emphasis on determining whether traditional roles were changing due to changing attitudes and increased labor force participation of women. They hypothesized that family financial role structure would be a function of the sex-role attitude, locus of control, wife's working status, and demographic variables. Their research was based on 82 couples in a single city. They found the wife tended to be in charge of financial implementation tasks when the husband and wife had more traditional sex-role attitudes and when educational level was low. Decisions were more likely to be made separately when the wife was working for financial reasons and when family
income was higher. Education was more predictive than sex-role attitude in determining which partner handled financial matters but demographic variables other than education were less predictive than sex-role attitude.

Knowledge about household finances influences who makes the decisions (Elder and Rudolph 2003), and who makes the decisions impacts the types of investments made (Ferber and Lee 1974). The types of investments a household makes has implications for long term financial well being. Although gender differences in investments and risk attitude have been documented, it is not established whether they are due to knowledge, experience, or innate differences between genders. Research on risk attitudes and investment patterns has been fairly consistent in finding differences between men and women. Yao, Hanna and Lindamood (2004) found that married women were less willing to take risk than otherwise similar married men. A study by Roszkowski, Delaney, and Cordell (2004), one of few studies to examine risk tolerance responses of husbands and wives in the same household, found that the husbands are significantly more risk tolerant than their wives. Bajtelsmit, Bernasek, and Jianakoplos (1999) found that women were more risk averse in their defined contribution portfolios than otherwise similar men. Research has consistently found that males have higher proportions of their financial assets in stocks and lower proportions in risk-free assets than otherwise similar females (Hariharan, Chapman, \& Domian, 2000). Jianakoplos (2002) found that the relationship between risk (SCF measure) and the risky asset proportion of financial assets is different for men than women, with men having a higher consistency between stated preferences and actual portfolio allocation than women. Bajtelsmit and Bernasek (1996) proposed that women may invest differently from men due to differences in wealth, income, responsibilities for dependent care, differences in socialization, and genetic factors

## Theoretical Basis

The hypotheses in this research are based on elements of two theoretical models of couple behavior employed by previous researchers - the bargaining model of family financial decision making and the unitary model. Elder and Rudolph (2003) focused on determinants of whether the male or the female is the decision maker, finding that the financially knowledgeable person and the person with more education was likely to be the decision maker. In this research, we focus on determinants of who is the more financially knowledgeable person.

The unitary model proposes that division of household tasks will be based on efficiency and household utility maximization. This theory incorporates both decision making and knowledge, in that the spouse who has a comparative advantage should specialize in financial management. More education might be related to a greater comparative advantage in the ability to perform financial management tasks as well as ability to acquire additional financial knowledge. Controlling for labor force time, we expect that the couple perceives the person with more education as financially more knowledgeable.

To the extent that financial management is perceived as a relatively prestigious household activity, the reasoning related to the bargaining model presented by Elder and Rudolph (2003) is relevant. Under a bargaining model, power derived from education, income, and sex roles determines who has more financial power. If a person has power in a relationship, that person is more likely to exert control over finances and subsequently gain even greater experience and knowledge.

Education can increase power and ability and influence who is perceived as financially more knowledgeable. In addition to education, financial knowledge may also come from experience (Hilgert, Hogarth, \& Beverly, 2003). Elder and Ruldolph (2003) found that husbands with higher levels of education were more likely to be the decision-maker, but at lower levels of education, the wife was more likely to be the financial decision-maker. This finding is similar to the proposal by Ferber and Lee (1974), who asserted that there is a difference between financial planning tasks and financial implementation tasks. A person with higher levels of education and skill may be the planner, but the day-to-day tasks of implementation may be assigned to the less powerful or less skilled person. Even routine implementation of financial tasks, however, is likely to increase one's knowledge of details of family finances, and indicates that a person at least can manage day-to-day financial activities, and in the event of a spouse's death, could continue to manage in the same manner.

Another source of power and skill is age. A person who is older than that person's spouse is more likely to be a financial decision-maker due to the power that comes with age as well as more experience and higher levels of knowledge. Employment is another factor that increases the power and the likelihood of the employed person having more power and more experience.

## Hypotheses

The hypotheses in this research are, with everything else being equal:

1. Education. The partner with the higher level of education is more financially knowledgeable. (Consistent with both the bargaining model and the unitary model.)
2. Age. The older partner is more financially knowledgeable. (Consistent with both the bargaining model and the unitary model.)

## 3. Employment.

A. If one partner is employed and the other is not, the employed partner is more financially knowledgeable. (Consistent with the bargaining model.)
B. If one partner is employed and the other is not, the employed partner is less financially knowledgeable. (Consistent with the unitary model, assuming that the comparative advantage of time use is more important than the experience provided by employment.)
4. Income. The higher the household income, the greater the likelihood of the male being more financially knowledgeable. (Consistent with the bargaining theory if sex roles dictate that investment decisions are more appropriate male roles, and with the unitary model if males are more likely to have experience with investment decisions.)

## Methods

Data
Data in this research is obtained from the combined datasets from the four most recent cross-sectional datasets for the Surveys of Consumer Finances (SCF), sponsored by the Federal Reserve Board. We combined these four years in order to test for any time trends and also to have a large enough sample for more robust estimation of the effects of small subgroups, such as households where the female is more than five years older than the male. The SCF sample for each survey year is based on a dual sampling technique which includes an area probability sample drawn using a random technique and a "list sample" that is drawn from the list of Internal Revenue Service records of taxpayers in each geographic region in which an area probability sample is drawn. The list sample results in a disproportionate representation of wealthier households which allows making estimates of assets held by small proportions of the general population. For analyses that represent the U.S. population, the SCF provides weights for researchers to use to adjust the data for systematic differences in response rates by demographic groups and to adjust for the sample design. In order to focus on the decision-making of older male-female couples, we select married and unmarried opposite sex partner couples where the head (designated as the male by the SCF) is age 50 or older. The total combined sample size for the four years is 16,952 , of which 5435 are older couple, opposite-sex households, with $3.3 \%$ being unmarried partner couples and married couple households comprising the rest.

## Variables

We create all variables for the analysis using the SCF SAS files available on the Federal Reserve Board website (www.federalreserve.gov/pubs/oss/oss2/ scfindex.html). We code income and other variables to match the Excel file distributions posted on that website and weight all data using the recommended variable (X42001) to result in a sample representative of the U.S. population. The SCF imputes missing values by using a "multiple imputation" method that results in five complete data sets for each survey year. The SCF calls each resulting data set an "implicate." In all analyses, we combine the five implicates for each survey year, weighted to represent the actual number of households in the survey each year.

Based on the SCF questions about who is in the household, we categorize the household as a married couple household if the respondent indicates that a spouse is in the household, and that person is of the opposite sex. We categorize a household as a partner household if it is headed by the respondent indicates a partner who is of the opposite sex. We further categorize households based on the sex of the respondent. The SCF interviewers follow a set of pre-determined rules in identifying the person to serve as the respondent in a household. During the initial contact with a household, a series of questions is asked including the number of people in the household and the number of children. The interviewer then states that "For this study, we would like to interview the head of the household or that person's spouse of partner if they are more knowledgeable about the household finances. Who would this be?" The interviewer is instructed to probe. If the person is unsure, an additional series of questions are asked about who owns the house or has a name on the lease, with the purpose of interviewing the person who is "more knowledgeable about the household finances." The default respondent if the series of question fails to
identify a person is the person who is closest in age to 45 or that person's spouse or partner "if they are more knowledgeable about the household finances."

## Dependent Variable

The respondent in the SCF is the person identified as "more knowledgeable about the household finances" and the SCF makes extensive efforts to schedule and complete an interview with that person. The dependent variable in this research is whether the female is the respondent, code as a dummy variable ( $1=$ female respondent, $0=$ not).

## Independent Variables

Demographic variables in the model include whether a related child under 18 is in the household, the respondent's race/ethnicity, and the male's age. We create four dummy variables for race/ethnicity based on the possible categories in the SCF public dataset, White, Black, Hispanic, and Other. Based on Census reports, we can infer that the SCF "Other" category includes mostly those of Asian and Pacific Islander descent, plus some Native Americans. We include dummy variables for the survey year to control for changes in risk tolerance and stock holding over time.

Because the bargaining model is based on relative power, we are interested in differences between the male and female in terms of age and education, not the absolute level of those variables. To reflect differences in education, we create 10 dummy variables that reflect the differences in the highest level of education attained. One category, for instance, is based on whether the male's highest level of education is a high school diploma and the female has less education. Age differences are based on three categories, the male being more than five years older than the female, the female being more than five years older than the male, and the difference in age being no more than five years. Employment status differences are based on four categories, female employed and male not, male employed and female not, both employed, and neither employed. Health differences are based on three categories of self-described health, both poor, neither poor, male poor/female not, and female poor/male not. We also include a variable related to whether the spouse of the respondent was present during the interview.

Economic variables include the household's level of income, level of non-financial assets, and level of financial assets. Incomes and assets are adjusted to 2001 dollars using the method the Federal Reserve Board describes for its published tables. Because the relationships between these monetary amounts and our dependent variable are not necessarily linear, we use the log of income, and of the level of non-financial and of financial assets. We create a dummy variable to indicate whether the respondent expects to receive a substantial inheritance or transfer of assets in the future, a dummy variable for whether the household owns its home, and dummy variables for the survey year to control for possible changes over time.

## Analysis

Cross tabulation and means tests for whether the female is the respondent provide descriptive information for the variables included in the model. The cross tabulation tables present the information for all older couples, older couples with a female respondent, and older couples with a male respondent.

We use logistic regression (logit), an appropriate multivariate analysis to use with a dichotomous dependent variable, to investigate the influence of household type on the dichotomous dependent variable of whether the wife/female partner was the respondent.

Table 1.
Characteristics of Older Couple Households by Respondent (proxy for financially more knowledgeable)

| Characteristic | All <br> Couples | Female <br> respondent | Male <br> respondent |
| ---: | ---: | ---: | ---: | ---: |
| Weighted \% of combined samples | $100.0 \%$ | $42.7 \%$ | $57.3 \%$ |
| Hold stocks $\ddagger$ | $51.7 \%$ | $44.4 \%$ | $57.1 \%$ |
| Willing to take some risk $\ddagger$ | $55.4 \%$ | $47.5 \%$ | $61.2 \%$ |
| Mean household income $\dagger$ | 82,117 | 64,763 | 95,057 |
| Net worth $\ddagger$ | 655,480 | 443,588 | 813,476 |
| Mean value of financial assets $\dagger$ | 300,970 | 185,597 | 386,997 |
| Mean value of equity assets $\ddagger$ | 151,849 | 86,297 | 200,727 |
| Mean value of non-financial assets $\dagger$ | 404,385 | 298,909 | 483,033 |
| Mean age of male $\dagger$ | 63.6 | 63.1 | 64.0 |
| Mean age of female $\ddagger$ | 59.8 | 58.9 | 60.4 |
| Male has college degree $\ddagger$ | $34.0 \%$ | $25.0 \%$ | $40.7 \%$ |
| Female has college degree $\dagger$ | $26.1 \%$ | $23.7 \%$ | $27.9 \%$ |
| Spouse present during interview $\ddagger$ | $40.6 \%$ | $34.5 \%$ | $45.2 \%$ |
| Actual number of households | 5,435 | 1,835 | 3,600 |

All dollar amounts are adjusted to 2001 dollars. Analyses are weighted, based on all five implicates of 1992, 1995, 1998, and 2001 SCF datasets.
$\dagger$ Households with female respondent significantly different at 0.01 level from households with male respondent based on F test.
$\ddagger$ Households with female respondent significantly different at 0.001 level from households with male respondent based on F test.

## Results

Descriptive Results.
The respondent is female in $43 \%$ of the older couple households (Table 1). Households in which the female (wife/female partner) is the respondent are different from households in which the male is the respondent, especially in terms of income and assets. Couple households with a male respondent have a higher mean income than those with a female respondent ( $\$ 95,057$ versus $\$ 64,763$ ) and higher net worth ( $\$ 813,476$ versus $\$ 443,588$ ) (Table 1). There is no consistent time trend in the proportion of couples with female respondents, with the highest level (47\%) reached in 1995, and the rate in 2001 being about the same as the rate in 1992 (Table 2).

Households with males as the respondent are more likely to own stocks directly and/or indirectly, with $57 \%$, compared to $44 \%$ for households with a female respondent (Table 1). There is also a large difference in the willingness to take risk, with $61 \%$ of male respondents willing to take some risk with investments, compared to $48 \%$ for female respondents. The mean value of equity holdings for married couples with male respondents is $\$ 200,727$, compared to $\$ 86,297$ for couples with female respondents.

Table 2. Percent of Older Couple Households with Female Respondent, by Survey Year

| 1992 | $41.7 \%$ |
| :--- | :--- |
| 1995 | $47.3 \%$ |
| 1998 | $39.6 \%$ |
| 2001 | $42.3 \%$ |

Analyses are weighted, based on all five implicates of 1992, 1995, 1998, and 2001 SCF datasets.

## Logit Results

Table 3 shows the logit results for the probability that the female is the respondent, with the logit coefficients and the marginal effects of each variable on the predicted probability. Controlling for other variables, the chance of the female being the respondent was 4.9 percentage points higher in 2001 than in 1998, and 7.9 percentage points higher in 2001 than in 1992, suggesting that there has been a trend to females being the more knowledgeable partner. Being an unmarried partner couple was not significantly related to the chance the female was the respondent.

The older the male, the less likely the female was the respondent. At the mean value of other variables, as age changes from 50 to 80, the predicted probability of the female being the respondent decreases by nine percentage points (Figure 1). Age differences of more than five years did not significantly influence the chance the female was the respondent. If the spouse/partner was present during the interview, the female was 10 percentage points less likely to be the respondent than otherwise similar households where the spouse/partner was not present (Figure 2).

The effects of education are generally consistent with the more highly educated person being the more financially knowledgeable. There is a fairly consistent pattern of the female being more likely to be the respondent if she has more education than her male partner, and vice versa (Figure 3). For instance, if the female’s highest education level is a high school diploma, and her partner has less education, the predicted probability that the female is the respondent is $60 \%$. If the male has a high school diploma and the female has less education, the probability that the female is the respondent is $38 \%$. The lowest predicted probability of the female being the respondent, $27 \%$, is when the male has some college and the female has less education.

The person in better health is more likely to be the respondent. If the male is in poor health and the female is not, the probability that the female is the respondent is $57 \%$, but if the female is in poor health and the male is not, the probability that the female is the respondent is $31 \%$ (Figure 4). The probability that the female is the respondent is not related to the employment status of the couple.

The likelihood that the female is the respondent decreases as income increases and as the level of financial and non-financial assets increases (Figure 5). Homeownership is related to a higher chance of the female being the respondent. Expecting a substantial inheritance is not related to the chance of the female being the respondent.

Table 3
Logistic Analysis of the Female Being Respondent in Older Couple Households

|  | Coefficient | Marginal effect** |
| :---: | :---: | :---: |
| Intercept | 2.2246 |  |
| Year of survey: reference category = 1998 |  |  |
| Year 1992 | -0.1239 | -3.0\% |
| Year 1995 | 0.1116 | 2.7\% |
| Year 2001 | 0.1975* | 4.9\% |
| Married (versus Partner Couple) | 0.0609 | 1.6\% |
| Age of male | -0.0123† | $\begin{gathered} -9.0 \% \\ (50 \text { to } 80) \end{gathered}$ |
| Age of male relative to age of female: reference category is 5 year difference or less |  |  |
| Male more than 5 years older | 0.0855 | 2.1\% |
| Female more than 5 years older | 0.2155 | 5.3\% |
| Spouse/partner present during interview | -0.4187 $\ddagger$ | -10.1\% |
| Health: reference category = neither in poor health |  |  |
| Husband in poor health, wife not | $0.5742 \ddagger$ | 14.3\% |
| Wife in poor health, husband not | $-0.4964 \dagger$ | -11.5\% |
| Both in poor health | -0.0676 | -2.0\% |
| Employment status: reference category = neither employed |  |  |
| Both employed | $0.2770 \dagger$ | 6.8\% |
| Only husband employed | -0.0831 | -2.0\% |
| Only wife employed | 0.1142 | 2.8\% |
| Highest education of husband and wife: reference category=both less than high school diploma |  |  |
| Wife has H.S. diploma, husband less | $0.5881 \dagger$ | 14.5\% |
| Husband has H.S. diploma, wife less | -0.3203 | -7.8\% |
| Both have H.S. diploma | -0.0214 | -0.5\% |
| Wife has some college, husband less | $0.5519 \dagger$ | 13.7\% |
| Husband has some college, wife less | -0.8094 $\ddagger$ | -18.4\% |
| Both have some college | 0.0507 | 1.2\% |
| Wife has BS degree, husband less | 0.2367 | 5.9\% |
| Husband has BS degree, wife less | -0.5396 $\ddagger$ | -12.8\% |
| Both have BS degree | -0.2847 | -6.9\% |
| Homeowner (versus renter) | 0.5853 $\ddagger$ | 13.6\% |


|  | Coefficient | Marginal effect** |
| :--- | :---: | :---: |
| Expect to inherit a substantial amount in the future | -0.0287 | $-0.7 \%$ |
| Racial/ethnic group of respondent: reference category = white |  |  |
| Black | 0.1432 | $3.5 \%$ |
| Hispanic | -0.2523 | $-6.0 \%$ |
| Other race, including Asian | -0.2706 | $-6.5 \%$ |
| Log (Non-financial assets) | $-0.0584 \ddagger$ | $-9.0 \%$ |
| Log (Annual household income) | $-0.0827 \ddagger$ | $(\$ 1,000$ to $\$ 500,000)$ |
| Log (Financial assets) | $-0.0710 \ddagger$ | $-9.6 \%$ |
|  |  | $(\$ 500$ to $\$ 500,000)$ |

Concordance Ratio 68.6\%
$\mathrm{p}<0.05, \dagger \mathrm{p}<0.01, \ddagger \mathrm{p}<0.001$.
Multivariate analyses are unweighted, using RII.
Estimated by authors based on analysis of 1992, 1995, 1998, and 2001 Surveys of Consumer Finances.
** Marginal effects calculated at the mean values of all other variables, and represent percentage point differences in the predicted probability of the wife being the respondent.

## Results of Hypotheses

Hypothesis 1. The partner with the higher level of education is more financially knowledgeable. This hypothesis is consistent with both the bargaining model and the unitary model.

The hypothesis is confirmed. If one person has a higher level of education than the other, that person is more likely to be the financially more knowledgeable. However, at equal levels of education, the male is more likely to be the respondent (Figure 3).

Hypothesis 2. The older partner is more financially knowledgeable. This hypothesis is consistent with the bargaining model and the unitary model.

This hypothesis was not confirmed, measuring "older" as being more than five years older. The variables for the two age difference variables (male more than five years older, female more than five years older) were not significantly related to the female being the respondent.

Hypothesis 3 A. If one partner is employed and the other is not, the employed partner is more financially knowledgeable. This hypothesis is consistent with the bargaining model

Hypothesis 3 B. If one partner is employed and the other is not, the employed partner is less financially knowledgeable. This hypothesis is consistent with the unitary model, assuming that the comparative advantage of time use is more important than the experience provided by employment.

Neither hypothesis is confirmed, as neither of the variables representing only one spouse being employed (male employed female not, and female employed male not) were significantly related to the female being the respondent. However, both spouses being employed had a significant effect on the female being the respondent.

Hypothesis 4. The higher the household income, the higher the likelihood the male is more financially knowledgeable. This hypothesis is consistent with the bargaining theory if sex roles dictate that financial decisions made by higher income persons, such as investment decisions, are a more appropriate male role, and with the unitary model if higher income males are more likely to have experience with investment decisions .

This hypothesis is confirmed, as household income has a negative and significant impact on the likelihood of the female being the respondent. The level of financial assets also has a significant negative effect on the female being the respondent (Figure 5).

Figure 1
Predicted Probability of Female Being Respondent in Older Couple Households by Age of Male Spouse/Partner, At Mean Values of Other Variables


Based on Table 3

Figure 2
Predicted Probability of Female Being Respondent in Older Couple Households by Whether Spouse/Partner is Present During Interview, At Mean Values of Other Variables


Based on Table 3

Figure 3
Predicted Probability of Female Being Respondent in Older Couple Households by Education of Couple, At Mean Values of Other Variables


Based on Table 3

Figure 4
Predicted Probability of Female Being Respondent in Older Couple Households by Health of Couple, At Mean Values of Other Variables


[^0]Figure 5
Predicted Probability of Female Being Respondent in Older Couple Households by Level of Financial Assets, At Mean Values of Other Variables


Based on Table 3

## Discussion

## Female More Knowledgeable

There has been no consistent trend over the years of the SCF included in this research (1992 to 2001) in the actual proportion of respondents in couple households that are females, though the multivariate logit results show some increase for 2001 compared to 1998 and 1992. Age differences do not have significant effects on whether the female is the respondent. The female is more likely to be the respondent if she has a high school diploma and the male has less education, and is much less likely to be the respondent if the male has a college degree and she has less education. The effects of education differences are consistent with Rosen and Branbois (1983), who found that education was better than sex role attitudes in predicting who made the financial decisions.

If the female is employed she is more likely to be the respondent, whether or not her husband/partner is employed, which is consistent with the unitary model only if experience makes women more productive in financial management. Household income and levels of assets have negative effects on the female being the respondent. These findings are consistent with the Ferber and Lee (1974) results about factors related to being the Family Financial Officer. The effects of employment differences are not consistent with Elder and Rudolph's (2003) discussion of the bargaining model, in which they proposed that the spouse not employed would make financial decisions due to that person's lower opportunity cost.

The results suggest that the SCF may be reasonably successful in getting the more knowledgeable partner to respond, given that the person with more free time (not employed) is not more likely to be the respondent, and the effects of greater education predicting the likelihood that the female is the respondent.

## Implications

Even though females are the respondents, and thus presumably the financially more knowledgeable partner, in $43 \%$ of couple households with the head age 50 or older, males are still more likely to be considered the knowledgeable spouse/partner for households in the target market for financial planners, such as households with higher incomes or with financial assets greater than $\$ 100,000$. Households with incomes over $\$ 100,000$ per year are very likely to use a financial advisor, with one recent study reporting that $84 \%$ of people age 55 to 70 in that income range use financial advisors ("Retirees go it alone," 2005). Among older couple households who may be less served by the financial services industry at the present, those with lower incomes and lower levels of assets, the female is more likely to be the more financially knowledgeable.

The traditional concept of the male as decision maker is not valid in the design of services to meet the needs of the broader population of elderly persons. In higher income families, where there would be more complex investments and assets, the male is more likely to be more financially knowledgeable. While this finding does not mean that the female is not knowledgeable, it is a possibility and further investigation is warranted to determine the knowledge level of older women in different income groups. In moderate and lower income households, the female is more likely to be the more knowledgeable person, and while that person might not be fully knowledgeable about finances from an objective perspective, at least the person would be able to continue to manage should a spouse die.

Financial management is one household task where specialization between partners, even though seemingly efficient, may prove problematical in the long run. For instance, older women who lack knowledge about family finances might have to quickly learn financial management upon the death of a husband/partner. Financial educators and advisors in financial service companies should attempt to work with both partners in couple households, as death or divorce may leave the less informed partner in a bad situation. The nature of advice would have to be different based on income and assets and familiarity with the household's finances.

This research shows that the female in households with higher income and higher levels of assets is less likely to be the financially knowledgeable spouse. Educational and service efforts should be directed to these households to increase the female's familiarity with the household's finances and to gain skill and confidence in making financial decisions. Financial institutions and educators should also be aware that the female is more likely to be the financially knowledgeable person in households with lower incomes and lower asset levels. They should work with these households to assure that there will be adequate resources if one spouse dies and to increase understanding of the financial difficulties of both retirement and the loss of a spouse.

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## Endnotes

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[^0]:    Based on Table 3

