Predictors Of Women's Involvement In Household Financial Decision-Making

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This study reports empirical results based on an original survey of household finances in which, unlike other surveys, the participants were specifically asked about their degree of involvement in financial decision-making for the household. Women's involvement in household finances is found to be significantly positively related to their share of total household income. Since the most commonly-used datasets for household financial research do not identify the household decision-maker, previous research on gender differences in financial decision-making has been limited. This research suggests that female share of total household income could be a viable proxy for female decision-makers in married couples.
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Introduction

The process by which joint financial decisions are made within married and cohabitating couple households is an issue that has plagued researchers who conduct empirical studies of gender and household savings and investment decisions. The significance of gender variables in household financial research is called into question if the women in the sample are not making decisions independently of their spouse or partner. Although this problem has long been recognized by researchers, few have presented reasonable empirical solutions. The most common solution to this problem (e.g., Jianakoplos & Bernasek, 1998; Bajtelsmit & Bernasek, 2001) has been to limit the sample to singles or to compare single women to other groups such as married couples and single men.

Although consideration of the financial decisions of singles skirts the problem of who makes the decisions in a household, it is still difficult to generalize from their behavior to the population at large since single women and men are not necessarily representative of the majority of women and men. Thus, accurate identification of the decision-maker for each household is essential for empirical work in this area. Anecdotally, men have traditionally been more likely than women to make household savings and investment decisions, but there is evidence to suggest that women's involvement in household financial decision-making has been increasing. The purpose of this paper is to empirically estimate a model of household financial decision-making to determine the factors that increase women's involvement in the process. The results of the estimation shed light on the financial decision-making process in households and suggest some guidelines that researchers can use to classify married and cohabitating couple households according the gender of the person who is most likely to be the financial decision-maker in the household.

The next two sections review two relevant areas of literature. In the last decade, several studies have purported to show that women are more risk averse than men. While these studies are subject to the same criticism noted above regarding identification of the household decision-maker, the conclusions of these studies are rapidly becoming part of financial "lore" and are thus an important impetus for this paper. We also review the literature on models of household decision-making since this literature provides the basis for our empirical model and variable selection.

Literature on Gender and Risk Aversion

Understanding people's attitudes toward risk is central to analyzing decision-making under uncertainty. Saving and investment decisions are affected by people's attitudes toward risk. There is a vast economics and finance literature focusing on the measurement and evaluation of risk aversion. Differences in risk aversion across individuals can be measured in terms of either their absolute dollar holdings of risky assets for given levels of wealth (absolute risk aversion) or their proportional holdings of risky assets for given levels of wealth (relative risk aversion). Given the important theoretical relationship between risk aversion and wealth, there have been numerous empirical studies attempting to measure how risk aversion changes with changes in wealth, originating with Friend and Blume (1975). These studies have focused on measuring changes in relative risk aversion resulting from changes in wealth. More recently, a number of empirical studies have explored the effects of socio-economic characteristics of individuals such as age and education on risk aversion (Morin & Suarez, 1983; Bellante & Saba 1986; Riley & Chow, 1992).

Researchers have only recently explored the issue of differences in risk aversion by gender. Anecdotal evidence suggests that women are more risk averse than men. A number of studies have confirmed this finding after controlling for wealth, age, education, and other socio-economic characteristics. Jianakoplos and Bernasek (1998), using the framework of Friend and Blume (1975), measured gender differences in risk aversion in the allocation of an individual's entire portfolio of assets. They used data from the Federal Reserve's Survey of Consumer Finances (1989) and estimated the coefficient of relative risk aversion by gender. They found that single women were more risk averse than single men and married couples. As an individual's wealth increased, the proportion held in risky assets increased (consistent with decreasing relative risk aversion) but, for single women, the effect was significantly smaller than for single men and married couples.

Palsson's (1996) study of Swedish households also found evidence that women were more risk averse than men when she examined the effects of a wide range of household variables on financial risk taking. Palsson took into account the effects of variables such as education, age, gender and income. Similarly, Riley and Chow (1992) considered the effects of a broad range of individual and household variables on risk aversion and found a small but significant gender difference in risk taking, with women being more risk averse than men. In their study, never-married women were less risk averse than married women, who were less risk averse than widowed and separated women.

A number of studies have focused on risk aversion in retirement saving and asset allocation decisions. For example, Hinz, McCarthy and Turner (1997) examined the 1990 allocation patterns of federal workers in the government-sponsored Thrift Savings Plan. Plan participants were allowed to allocate up to 60% of their contributions to common stock and fixed income funds (with the remainder in a fund of Treasury securities). Only 28% of women compared to 45% of men participated in the common equity fund. Overall, 13.4% of funds were allocated to the equity fund (on average 8.9% for women and 15.3% for men). Bajtelsmit and VanDerhei (1997) used individual plan data on 20,000 employees of a single U.S. firm to study gender differences in pension asset allocation decisions. The women in their sample were significantly less likely than men to invest in employer stock and equities. Similar conclusions were made by Sundén and Surette (1998) and Bajtelsmit, Bernasek, and Jianakoplos (1999) when defined contribution pension allocations were considered within the broader context of the household's overall portfolio. In a more recent study, Bajtelsmit and Jianakoplos (2000) compared the retirement plan asset allocation patterns of women and men in 1989 and 1998 and find that, although women were still less inclined to invest in stock than men, the gap had narrowed over the decade.

It should be noted that, except for those studies which consider only single households, the failure to accurately identify the household decision-maker makes it likely that the gender effects have not been accurately estimated in these studies. However, if men are more inclined to invest in risky assets than women, and some of the women in the sample made their allocation decisions based on the advice of male family members or friends, the gender difference could be even greater than these studies imply.

Despite the growing literature on gender and risk taking, very few studies have considered the division of household financial decision-making in two-person households. A study by Dobbelsteen and Kooreman (1997) attempted to measure the degree of women's involvement in household financial decision-making. They found that higher household income from sources other than wages and salaries decreased the women's share in the management of household finances and increased the men's share. To the extent that non-labor income and wealth are positively correlated, this result is consistent with an earlier study by Pahl (1980) who found that men were more likely to control finances in high-income households.

Models of Household Decision Making

Household decision-making has been the subject of study in both economics and sociology. The economics literature provides two approaches to modeling the household from which one can draw inferences about the household's financial decision-making process. Gary Becker (1981) pioneered the neoclassical theory of the household and what has now become known as the "new home economics". In Becker's view, the household can be modeled by maximization of a household (unified) utility function by an altruistic household head. Tastes and preferences of all household members are taking into account in the household utility function and they are assumed to be exogenously determined and held constant over time. Becker avoids problems of aggregating individual utility functions by assuming that decisions are made

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by an altruistic head or "benevolent dictator". The outcome of this model of household decision-making is an efficient allocation of household resources wherein the household utility in maximized by having each person specializing to take advantage of their comparative advantage. This model does not distinguish between individual household members, nor does it recognize any systematic differences in power relations based for example on gender. The new home economics predicts that resource allocation in the household is independent of who earns the income in the household (see Grossbard-Shechtman, 2001 for a review of recent developments in the new home economics literature). The implication for household financial decision-making is that not only the outcome, but who the decision-maker is, should both be independent of who earns the income in the household.

The primary alternatives to the neoclassical view of the household models recognize that households do not operate without friction and model the household decision-making process as a bargaining process. The earliest bargaining models used cooperative game theory to model the household (e.g., Manser & Brown, 1980; McElroy & Horney , 1981). These assume that spouses have unique preferences that can be represented by individual utility functions and that individual differences and the allocation of household resources are resolved through a cooperative bargaining process. A spouse's bargaining power is determined by their threat point - the level of utility they would have outside the relationship. Relative access to income, education, and paid work outside the home would all be expected to increase the bargaining power of a household member. Empirical tests of the these models find support for certain variables that represent threat points such as an individual's assets and unearned income (Katz 1997). In the context of financial decision-making, cooperative bargaining models imply that women who work outside the home and earn an income, women with assets of their own, and women with unearned income, will have more say in household financial decisions than other women.

Another strand in the household bargaining literature challenges the assumption used in cooperative bargaining models and models households in terms of a non-cooperative bargaining process. Their main objection to the cooperative bargaining models is the problems they have with enforcement. Cournot-Nash models (e.g., Lundberg & Pollack, 1993) have been suggested as a preferable alternative to the Nash bargaining models used in cooperative bargaining models. Individual's access to income is important in determining their power in the bargaining process. The implications for financial decision-making in the household are also that the higher a woman's income is relative to her husband's, we would expect the greater her participation to be in that decision-making process.

The dominant theory offered in the sociology literature is more consistent with bargaining models of the household but is somewhat less sophisticated. This literature developed from seminal research by Blood and Wolfe (1960) in which decision-making power within the household was hypothesized to be determined by the individual partner's command over financial resources. Subsequent studies have concluded that the balance of power in the family is dependent upon relative access to resources such as income, education, and paid work outside the home. On the whole, sociologists have not elaborated on the nature of power within the household. In this respect, economists have suggested that the key factor is influence in household decision-making, allowing for the possibility that spouses and partners are likely to have different preferences when it comes to spending household income.

The prediction that comes from both the power and influence models of sociology and the bargaining models of economics is that women's involvement in household financial decision-making will be positively related to their share of total household income and wealth. The prediction of the models of new home economics is that there will be no relationship between these variables. In the empirical estimation that follows we examine the relationship between women's involvement in household financial decision-making and their share of income and the level of household wealth (given our inability to determine household members' shares of wealth).

Data and Methodology

The data used in this paper are from a Spring 2000 survey of university faculty employed at five Colorado universities.[a] Respondents completed a detailed and comprehensive questionnaire on the household's financial position, the financial decision-making process within the household, attitudes toward financial risk of household members, and demographic characteristics of the household. There were 319 respondents who provided complete information on all variables included in this analysis, and of those, 121

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(38 %) were women and 198 (62 %) were men Since the survey respondents were academic faculty, they all had at least a college education, most had a PhD, and some had other graduate degrees (MDs, JDs, and masters). All of the respondents were employed in a similar work environment and had positive earnings. Thus, this dataset provide a natural control for education and employment.

Although income levels vary across the sample due to the different academic disciplines represented, age, and years of experience, the respondents' households are concentrated in the top 50% of the U.S. income distribution. Although this sample clearly is not representative of the U.S. population, the quality of data on decision-making in conjunction with data on household education, income, and employment is superior to that of most large datasets.[b]

The purpose of this study is to examine the factors that increase women's participation in household saving and investment decisions. Respondents were asked to identify whether savings and investment decisions were primarily made by the respondent, her/his spouse , or jointly. Following Dobbelsteen and Kooreman (1997) the model estimated in this study is an ordered probit where the order Yi represents increasing involvement of the woman in savings and investment decision-making:

Y_i = 1 if a man is the primary savings and investment decision-maker
= 2 if savings and investment decisions are made jointly
= 3 if a woman is the primary savings and investment decision-maker

Based on the theoretical literature, we hypothesize that the level of female involvement in household decision-making is a function of the age, income, and educational attributes of each spouse and certain household attributes. More specifically, the model to be estimated takes the form:

$$Yi = \alpha i + \beta_{1i} AGE + \beta_{2i} PRDEG + \beta_{3i} PHD + \beta_{4i} BUS + \beta_{5i} ARTS + \beta_{6i} SPWORKS + \beta_{7i} SHARE + \beta_{8i} FINED + \beta_{9i} SGRISK + \beta_{10i} ARISK + \beta_{11i} AGE*FEMALE + \beta_{12i} PRDEG*FEMALE + \beta_{13i} PHD*FEMALE + \beta_{14i} BUS*FEMALE + \beta_{15i} ARTS*FEMALE + \beta_{16i} SPWORKS*FEMALE + \beta_{17i} SHARE*FEMALE + \beta_{18i} FINED*FEMALE + \beta_{19i} SGRISK*FEMALE + \beta_{20i} ARISK*FEMALE + \gamma_{1i} KIDS + \gamma_{2i} HOME + \gamma_{3i} NETWORTH + \gamma_{4i} PFA + \varepsilon \quad (1)$$

where: AGE is the man's age, PRDEG is a dummy variable equal to one if his highest degree is a professional degree, PHD is a dummy variable equal to one if he has a PhD, BUS is a dummy variable equal to one if his degree is in business, ARTS is a dummy variable equal to one if his degree is in the liberal arts, SPWORKS is a dummy variable equal to one if his spouse/partner works part-time or full-time, SHARE is the man's share of household income, FINED is a dummy variable equal to one if he has formal financial education, SGRISK is a dummy variable equal to one if he stated that he is willing to take substantial or greater than average risk for substantial of greater than average return on investment, ARISK is a dummy variable equal to one if he stated he is willing to take average risk for average return in investments. The female interaction terms provide the same information for the women in the sample. At the household level, KIDS is a dummy variable equal to one if there are children under 18 years of age living in the household, HOME is a dummy variable equal to one if the household owns its primary residence, WEALTH is the household's networth (excluding the equity value of the primary residence), and PFA is a dummy variable equal to one if the household has consulted a professional financial planner. Descriptive statistics on the explanatory variables are presented in Table 1 by decision-making category.

The majority of households (62%) reported that savings and investment decisions were made jointly. Men were the primary decision-makers for 26% of households, and 12% of households had female primary decision-makers. Of those who reported that they made joint savings and investment decisions, 42% were women, and 58% were men.

Based on the descriptive statistics, the average characteristics of men who are primary decision-makers are strikingly different from the average characteristics of those who make decisions jointly with their spouses. For example, 10% of the men who identify themselves as the primary financial decision-maker in the household have business degrees, whereas only 5% of male joint decision-makers have business degrees. In contrast, liberal arts degrees are more prevalent in joint decision-maker men (13.6% compared with 8.3% for primary decision maker men). Fewer of the men who are the primary decision-makers have employed spouses (69% compared to 80.8%), their share of household income is higher on average (79.5% compared to 66.0%), and more of them have formal

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financial education (45.2% compared to 22.7%). Self-professed risk-taking propensity is more common for the male primary decision-makers with 64.3% reporting that they are willing to take substantial or greater than average risk for substantial or greater than average return compared to 47.0% of the joint decision-makers. Perhaps most striking among the descriptive statistics is the difference in net worth between these groups. The average household net worth for joint decision-makers is $500,684 as compared to $873,390 for the households in which the man was the primary decision-maker. These wealthier men are also less likely to have consulted a professional financial advisor than those who are joint decision-makers.

Table 1
Variable Means (Standard errors in parentheses)

Variable	Man is primary (n=84)	Joint decision-making (n=198)		Woman is primary (n=37)	Sample (n=319)	
	Men	Men (n=114)	Women (n=84)	Women	Men (n=198)	Women (n=121)
Age	51.535 (11.090)	50.18 (9.670)	46.833 (8.371)	46.541 (8.477)	50.113 (10.009)	46.744 (8.370)
Professional Degree	0.047 (0.214)	0.045 (0.209)	0.036 (0.187)	0.081 (0.277)	0.050 (0.219)	0.050 (0.218)
PhD	0.833 (0.375)	0.869 (0.339)	0.833 (0.375)	0.784 (0.417)	0.850 (0.360)	0.818 (0.387)
Business Major	0.100 (0.300)	0.051 (0.220)	0.048 (0.214)	0.027 (0.164)	0.060 (0.237)	0.041 (0.200)
Liberal Arts Major	0.083 (0.280)	0.136 (0.344)	0.143 (0.352)	0.190 (0.397)	0.129 (0.335)	0.157 (0.365)
Spouse Works	0.690 (0.465)	0.808 (0.395)	0.893 (0.311)	0.865 (0.347)	0.784 (0.412)	0.885 (0.321)
Share of HH Income	0.795 (0.203)	0.660 (0.214)	0.550 (0.193)	0.696 (0.180)	0.700 (0.215)	0.595 (0.200)
Formal Finance Educ.	0.452 (0.501)	0.227 (0.420)	0.250 (0.436)	0.351 (0.484)	0.301 (0.459)	0.281 (0.451)
High Risk Taker	0.643 (0.482)	0.470 (0.500)	0.429 (0.498)	0.405 (0.498)	0.508 (0.501)	0.422 (0.496)
Avg. Risk Taker	0.310 (0.465)	0.500 (0.501)	0.536 (0.502)	0.514 (0.508)	0.451 (0.498)	0.529 (0.501)
Children Under 18	0.845 (0.364)	0.753 (0.433)	0.619 (0.489)	0.460 (0.505)	0.743 (0.438)	0.570 (0.497)
Homeowner	0.964 (0.187)	0.985 (0.123)	0.988 (0.109)	0.946 (0.229)	0.975 (0.157)	0.975 (0.157)
Household Wealth	$873,390 (1,088,583)	$500,684 (592,525)	$474,191 (618,864)	$405,027 (503,036)	$587,731 (765,242)	$453,041 (584,671)
Consulted Financial Advisor	0.548 (0.501)	0.652 (0.478)	0.691 (0.465)	0.649 (0.484)	0.624 (0.485)	0.678 (0.469)

Compared to the differences noted in the previous paragraphs, women who report that they are primary financial decision-makers exhibit less striking differences from the joint decision-maker women. On average, more of the joint decision-makers than the primary decision-makers have business degrees (4.8% compared to 2.7%). The average share of income for primary decision-makers is 69.6% compared with the

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55% share of income for joint decision-maker women and more primary decision-makers have a formal financial education (35% compared to 25%). Joint decision-makers are more likely to have children under the age of 18 living in the home (61.9% compared to 46%). Average household net worth is lower than in households in which women are joint financial decision-makers.

In most respects, the women and men who were joint financial decision-makers in their households exhibited similar characteristics, on average. Compared with the joint decision-maker men, more women had working spouses, they had a lower average share of household income (55% compared with 66% for men), fewer had children under 18 years of age living at home, and their households were less wealthy on average.

Unlike the joint decision-makers, women who were primary savings and investment decision-makers had average characteristics that were quite different from men who are the primary decision-makers. The women were on average younger (average age 46.5 compared to 51.5 for the men), more of the women had professional degrees (8.1%) compared to the men (4.7%) and fewer had PhDs (78.4% compared to 83.3% of the men). Eighty-seven % had an employed husband whereas only 69% of the male primary decision-makers had employed wives. Their average share of household income was lower (70% compared with 80% for men) and fewer women had formal financial education. The percentage of female primary decision-makers who stated a willingness to take substantial or greater than average risk for substantial or greater than average return was considerably lower than men (40.5% compared to 64.3% of the male primary decision-makers) and, on average, this group of households had less than half of the net worth of the men's households.

To more closely examine the data in light of the theoretical model predictions, Table 2 delineates the decision-making status of the households by quintiles of female share of household income. In this sample, none of the 96 women in the lowest income share category (0-20%) are primary financial decision-makers for the household. As female income share increases, the percentage of households in which the male is the primary decision-maker correspondingly decreases. Of the 22 households in which the woman earns 81-100% of household income (representing 7% of households in this sample), only one household has the man as the primary financial decision-maker. Although the table does not report column percentages, these also demonstrate the symmetry of relationships. Approximately half (46 out of 96) of the households with a primary male earner have a male financial decision-maker and, similarly, half (11 out of 22) of the households with a female primary earner have a female primary decision-maker. Among the households with greater distribution of income (the middle three quintiles on Table 2), approximately two-thirds use joint decision-making.

While these descriptive statistics do not indicate statistically significant differences between the groups, they do raise some interesting empirical questions. The results of our estimation of the Equation (1) model of female involvement in household financial decision-making in the next section allows us to distinguish between the competing models of household behavior and to identify significant factors in this process.

Empirical Results

The results of the estimation of Equation (1) are reported in Table 3. The significant effects of the income share variables support a bargaining model of household decision-making. The negative sign on the coefficient for male share of household income and the positive sign on the coefficient for female share of household income indicate that the household moves toward lower female involvement in financial decision-making as the man's share of income increases, and higher female involvement as the woman's share of income increases. Although the coefficient on wealth is quite small, indicating that the change in decision-making occurs with relatively large changes in wealth, the results show that wealthier households show significantly less female involvement in financial decision-making. A formal financial education significantly increases the responsibility of the person with the education and decreases his/her spouse's involvement in decisions. The other two variables that are significant refer to the effect of a man having either a PhD or professional degree, compared with having a Master's or Bachelor's degree. A female spouse or partner will tend to be more involved in financial decision-making if her husband has a PhD or professional degree rather than a Master's or Bachelor's degree.

Conclusions

The purpose of this paper was to investigate the determinants of women's involvement in household savings and investment decisions within married and

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cohabitating couple households. The predominant economic model of household behavior, as well as common wisdom, has typically identified this as the domain of men in the household. However, the recent literature on gender differences in investing has made inferences about differences in risk aversion by reference to specific individual and household financial decisions such as investment and retirement plan allocations. Given

Table 2
Degree of Female Participation in Household Decision-making by Female Share of Household Income

	Female Share of Household Income (Percent of Row Category)					
Household decision-maker	0-20%	21-40%	41-60%	61-80%	81-100%	Total
Male - primary	46	21	14	2	1	84
	(54.76)	(25.00)	(16.67)	(2.38)	(1.19)	(100)
Joint	50	49	67	22	10	198
	(25.25)	(24.74)	(33.84)	(11.11)	(5.05)	(100)
Female - primary	0	1	13	12	11	37
	(0.00)	(2.70)	(35.13)	(32.43)	(29.72)	(100)
Total	96	71	94	36	22	319

Prob > Chi^2 =0.0000 Pseudo R^2 = 0.3574
* Significant at the 1 % level
† Significant at the 5 % level

Table 3
Results from Estimation of the Ordered Probit
(Dependent Variable is Women's Involvement in Savings and Investment Decisions)

Independent Variable	Coefficient	Standard error
Age	0.0063	0.0097
Professional Degree	1.0326	0.5749
Has PhD	0.7070	0.3779
Business Major	0.2138	0.4030
Liberal Arts Major	0.2078	0.3492
Working Spouse	-0.1144	0.2573
Share of Household Income	-1.1132	0.6310
Formal Financial Education	-0.6583†	0.2289
Substantial Risk Taker	-0.3640	0.5214
Average Risk Taker	0.1407	0.5271
Age x Female	0.0108	0.0148
Professional Degree x Female	0.4426	0.7231
Has PhD x Female	-0.8606	0.5410
Business Major x Female	-1.2620	0.8777
Liberal Arts Major x Female	0.0002	0.5012
Working Spouse x Female	0.6031	0.4462
Share of House Inc x Female	4.4832*	0.9945
Financial Education x Female	0.6569	0.3966
Substantial Risk Taker x Female	0.2823	0.7136
Average Risk Taker x Female	-0.6153	0.7371
Has Children Under 18	-0.0343	0.2033
Homeowner	0.0344	0.4806
Household Wealth	$-3x\ 10^{-7}$†	1×10^{-7}
Consulted Financial Advisor	0.1819	0.1649

Log Likelihood = -183.9327. LR Chi^2 (24) = 204.59

the importance these decisions have for well-being in the longer run, particularly in retirement, and given women's greater probability of being poor in their older age, it is
important for us to understand the factors that make it more likely that women will be involved in those decisions. Presumably greater involvement in financial decision-making implies greater influence on financial outcomes. So far, this is an area of research that has received little attention, but in the light of findings that women differ from men in their attitudes toward risk, it is an area of increasing importance as we seek to ensure income security in old age.

The empirical analysis undertaken in this paper employs survey data taken from a sample of academics employed at universities in Colorado. Some of the peculiarities of this data set are that all of the respondents are employed, the majority have PhDs, and the majority are white. Using an ordered probit in which the dependent variable is the increasing involvement of women in the decision making process, we find that women's involvement in household

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financial decisions increases with their share of household income and their formal financial education, and decreases with their spouses share of income and formal financial education. Women's involvement also decreases with the wealth of the household.

The results on share of income and formal financial education support a bargaining approach to modeling the household. Power in the household in terms of involvement in making important financial decisions is greater the more command an individual has over financial and educational resources. The decreasing involvement of women in household finances as wealth increases is interesting and is consistent with what has been found in other studies such as Dobbelsteen and Kooreman (1997) who found that higher household non-labor income decreased women's share in the management of household finances and increased men's share. To the extent that income and wealth are positively correlated, our results are also consistent with Pahl (1980) who showed that men were more likely to control finances in high-income households.

Presuming a connection between influence and involvement in savings and investment decisions, these results imply that women are more likely to have an influence on financial decisions when they contribute a larger income share to the household. However, since women's earnings are lower on average than men's, the results suggest that women are less likely on average to be heavily involved in making household level savings and investment decisions. Similarly since women are less likely to have a formal financial education than men, this result also implies a smaller involvement of women in the household finances on average.

Some caution needs to be used in attempting to generalize too much from these results. The sample from which they are derived is very specialized - high income, reasonably wealthy, highly educated, academics. Even among the couples in this group, women were more likely to be involved in financial decision-making if their spouse or partner had a professional degree or PhD compared with a Master's or Bachelor's degree. More research will need to be done to see if there is confirmation of these findings among the population more generally.

Given the lack of information about who makes the financial decisions in large data sets such as the Survey of Consumer Finances, it would be convenient to have some way to proxy that with information that is more generally available. Based on bargaining models of the household, income shares would be a possible proxy. The results obtained in this study provide some support for income shares as a proxy for household decision-making power. Future research may focus on estimating some thresholds for when it is most likely that decisions are made by the women, made jointly, or made by the men. Future research may also focus on the nature of the joint decision-making process and whether decisions made jointly differ in systematic ways from decisions made by individuals, both with a spouse or partner, and without. Although the majority of economic research assumes individual agency in decision-making, the majority women and men in our society live in households with a spouse or partner. Thus, better understanding of financial well-being depends upon understanding how decisions are made in the households in which they live.

Endnotes

a. *Surveys were mailed out to a stratified random sample of faculty members at five universities in Colorado: Colorado State University, University of Colorado -- Boulder, University of Colorado -- Denver, University of Northern Colorado, and Denver University. All female faculty members at the five universities were included in the sample and a randomly selected group of male faculty members, accounting for approximately one fourth of all male faculty members was also included. Of the 1,600 surveys mailed out, 515 surveys were completed and returned, which represents a response rate of 32.18%.*

b. *An additional disadvantage of the data set is the racial and ethnic homogeneity of the participants. This largely reflects the racial/ethnic composition of the state of Colorado but is also the result of limiting the sample to academic faculty, a group that has little diversity nationwide.*

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