Gender Differences in Personal Saving Behaviors

Patti J. Fisher

Gender differences in personal saving behaviors among single person households were investigated using the 2007 Survey of Consumer Finances (SCF). Determinants of short-term and regular saving behavior were found to differ by gender. Women (n = 702) were less likely to save in the short term if they were in poor health, while poor health did not significantly affect the short term saving of men. Having low risk tolerance negatively affected the likelihood of women saving in the short term and saving regularly, while each year of education made men (n = 469) more likely to save in the short-term and to save regularly. Understanding the saving behaviors of men and women can help improve the efforts of financial professionals and educators.

Key Words: gender differences, risk tolerance, saving, Survey of Consumer Finances

A number of studies have shown that the economic well-being and financial behaviors of men and women differ significantly. Women hold lower levels of wealth and have significantly lower earnings than men. In addition, women spend as many as five more years than men in retirement as a result of having longer life expectancies (Gottschalck, 2008; U.S. Bureau of the Census, 2007). Researchers and financial practitioners have reported that women invest their financial resources more conservatively and are, in general, more risk averse than men (Bajtelsmit, Bernasek, & Jianakoplos, 1996; Bajtelsmit & VanDerhei, 1997; Embrey & Fox, 1997; Faff, Mulino, & Chai, 2008; Grable, 2000; Hallahan, Faff, & McKenzie, 2004; Hinz, McCarthy, & Turner, 1997; Neelakantan, 2010; Yuh & Hanna, 1997). Researchers have also found that women have lower rates of participation in retirement plans as compared with men (Sung, 1997) and are more likely to be living in poverty during retirement (Pearce, 1989). The combination of lower earnings, lower savings, longer life spans, and higher risk aversion when investing presents women, financial educators, and policymakers with a significant challenge (Embrey & Fox, 1997). Although much is known about differences in income, risk aversion, investment behaviors, and level of wealth, little is known about how the factors related to general saving behaviors may differ between men and women.

Schmidt and Sevak (2006) reported that across many different countries, large differences in economic well-being by gender and marital status persist. The purpose of the current study was to explore gender differences in saving behaviors in order to better understand whether the gender differences found in assets and wealth may partly be due to differences in how certain factors are related to the act of saving between men and women. This study differs from other research because it focuses on differences in saving behaviors between women and men who are not married or living with a partner and live alone, so the impact of the spouse/partner or other household members on saving behaviors is not a factor. A number of studies have demonstrated that the investment and retirement saving behaviors of women and men differ (Bajtelsmit & VanDerhei, 1997; Bajtelsmit, Bernasek, & Jianakoplos, 1996; Embrey & Fox, 1997; Hinz, McCarthy, & Turner, 1997; Yuh & Hanna, 1997). Many economic researchers have focused on differences in income, poverty, and asset accumulation by gender (Blau & Kahn, 1997; O'Neill, 2003; Schmidt & Sevak, 2006; Wu, 2005), but few researchers have examined whether there are differences in general saving behaviors between men and women (Sunden & Surrette, 1998). Women have lower incomes and wealth, on average, and are much more likely to be living in poverty during retirement, so it is important to better understand the factors related to saving among women and how these may differ from those of men.

Despite the importance of saving in regards to the financial security of households, relatively few studies have exam-

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ined whether there are gender differences in saving (spending less than income) at the household level. Sunden and Surrette (1998) found that women are less likely to have a defined contribution retirement savings plan, while Agnew (2005) found the opposite. Whether women are more or less likely than men to spend less than their income or to save regularly is unknown. Observed differences in wealth holdings and portfolio allocations between men and women may reflect underlying differences in factors correlated with saving behaviors, so it is important to better understand what these differences may be. Factors influencing the act of saving may have important implications for differences in well-being between men and women among both elderly and non-elderly households. The current study extends the literature by investigating differences in the saving behaviors of men and women. Factors shown in the literature to be related to saving were examined in order to assess whether men and women differ in terms of how these factors are related to saving behaviors.

Review of Literature

Historically, women in the U.S. have been dependent on men for financial security (Schmidt & Sevak, 2006). Although this trend is changing, large gender differences in economic well-being persist and affect women of all ages. In 2003, 28.0% of single female-headed households were living in poverty, as compared with 13.5% of single male-headed households and 5.8% of married couple households (Schmidt & Sevak, 2006). Levine, Mitchell, and Moore (2000) found sizeable gender gaps in both current and projected retirement income. Overall, there is a substantial gender gap in all retirement income sources, including Social Security, pensions, savings, and earnings from post-retirement employment (Burnes & Schultz, 2000). According to Wu (2005), poverty rates were significantly higher among women in all but two of the developed countries included in the Luxembourg Income Study.

Sung and Hanna (1996) found single women were less risk tolerant than single men or married couples, while Sunden and Surrette (1998) found single women were less risk tolerant than single men. In addition, Bajtelsmit, Bernasek, and Jianakopolos (1996) found women were more risk averse than men when examining gender differences in defined contribution pension allocations. According to Xiao (1995), men were more likely to hold stocks and less likely to hold certificates of deposit as compared with women. The results of Bajtelsmit and Bernasek (1996) indicated that women received more conservative investment advice than men.

A large body of literature in psychology and sociology also indicated that women were more risk averse than men (Croson & Gneezy, 2004). In a study with participants of various ages, Brinig (1995) found that the gender difference in risk-taking peaked at age 30, which is consistent with evolutionary theories that men are more risk-taking during the period in which they are attracting mates, and women are more risk averse during their child-bearing years (Croson & Gneezy, 2004). Overall, the literature indicated a robust and significant gender difference in risk preferences. On the other hand, some researchers have concluded that no gender difference in investment behavior exists. For example, Zhong and Xiao (1995) found no gender difference in the dollar holdings of stocks. DeVaney and Su (1997) concluded that the determinants of retirement planning knowledge were similar for men and women, and Masters and Meier (1988) found no difference in the risk-taking propensity of male and female entrepreneurs.

Findings have been mixed regarding whether a wealth gap between male and female-headed households exists. In one study, median assets in White female-headed households were two thirds of those in similarly situated male-headed families, although this difference was not found among minority households (Lupton & Smith, 2003). Chang (2004) found that divorced women owned only 55% of the wealth of divorced men, and never married women were in the worst position with slightly less than half of the wealth of never married men. However, Schmidt and Sevak (2006) found no significant difference between the wealth holdings of single male- and female-headed households in the U.S., despite households headed by women being more likely to contain children.

Researchers have suggested several possible reasons for a gender gap in wealth (Blau & Kahn, 1997; Moore & Shierholz, 2004; O'Neill, 2003). Women typically have lower lifetime earnings than men, creating lower total wealth (U.S. Bureau of the Census, 2007). In addition, women have historically completed fewer years of education than men, which also affects earnings (U.S. Bureau of the Census, 2007). Women and men differ in their attachment to the labor force, which could lead to the observed differences in financial behaviors between men and women (Sierminska, Frick, & Grabka, 2008). Any difference in wealth may partly result from lower female labor force participation (Warren, Rowlingson, & Whyley, 2001), where women tend to have part-time work arrangements, more diversified work histories due to child bearing and child rearing, and more frequent job changes (Berger &

Denton, 2004). In addition, a persistent gender gap in earnings leads women to accumulate less wealth even when holding saving rates constant (Blau & Kahn, 1997, 2000; Moore & Shierholz, 2004; O'Neill, 2003). Evidence also suggests that gender differences in information processing may play a role in differential financial strategies (Graham, Stendardi, Myers, & Graham, 2002).

Lusardi and Mitchell (2007) found that women were generally less financially knowledgeable as compared with men, and financial literacy was found to affect both savings and portfolio choice. In their examination of the extent to which saving behavior differed among households in different marriage states, Lupton and Smith (2003) found that much of saving behavior was left unexplained even after controlling for demographic and socioeconomic characteristics of the household.

In his human capital theory, Becker (1975) stated that women rationally choose to invest less than men in human capital, including education, skills, and on-the-job-training, affecting women's employment opportunities, incomes, and ability to accumulate wealth. Women make different choices than men due to greater family responsibilities with the gender division of labor within the family, resulting in women taking primary responsibility for household work and child care (Bajtelsmit & Bernasek, 1996). Research has shown that the preferences of men and women differ, affecting the labor and consumption decisions that men and women make (Croson & Gneezy, 2004). Women have been shown to invest differently than men, but little is known about whether or how general saving behaviors differ between men and women.

Framework
In a simple model of wealth accumulation, assets in period $t + 1$ (A_{t+1}) are expressed through the following equation (Sierminska, Frick, & Grabka, 2008):

$$A_{t+1} = (1 + r)(A_t + Y_t - C_t)$$

where (r) is the gross rate of return on investments, (Y_t) denotes income in period t, and (C_t) is consumption in period t. The empirical literature showed that the accumulated wealth of men and women differed significantly (Blau & Kahn, 1997, 2000; Moore & Shierholz, 2004; O'Neill, 2003), and this gap can result from differences in saving ($Y_t - C_t$), which is proposed in the current study. Household saving behaviors in this framework are dependent on level of income, age, and risk aversion in addition to an individual's preferences and consumption needs in

the presence of liquidity constraints (Sierminska, Frick, & Grable, 2008).

Methods
Sample
The data set used in this study was the 2007 Survey of Consumer Finances (SCF), which is sponsored by the Federal Reserve Board and collected in cooperation with the Department of the Treasury. The SCF provides information on individual household assets and liabilities as well as self-reported financial behaviors. The SCF sample design consists of two parts: (a) an area-probability sample, a geographically based random sample intended to provide good coverage of assets that are broadly distributed in the population, such as home ownership and (b) the list sample, a supplemental sample which disproportionately includes wealthy families who hold a relatively large share of less commonly held assets, such as non-corporate businesses and tax-exempt bonds. In the 2007 survey, 4,522 families were interviewed, where 3,007 were from the area-probability sample and 1,515 were from the list sample.

As the SCF sample is not an equal-probability design, weights play a critical role in interpreting the survey data (see Board of Governors of the Federal Reserve System, 2009). The Federal Reserve Board also employs multiple imputation techniques to deal with the problem of missing responses (Kennickell, 1997) and produces five complete data sets which are referred to as "implicates" (Board of Governors of the Federal Reserve System, 2009). The 2007 SCF consists of five complete implicates, and the number of observations in the full data set is five times the actual number of respondents. All five implicates were used for the current study.

When imputation techniques are used to fill in missing data, extra variability is found in the data due to those missing values (Montalto & Sung, 1996). This variability can be incorporated into empirical estimates by using repeated-imputation inference (RII) techniques to estimate this variability. The coefficients and estimates of variance derived by RII techniques allow for more valid inference and tests of significance, and the use of RII techniques is recommended in order to produce estimates which incorporate variability in the data due to missing values (Rubin, 1987; Montalto & Sung, 1996). RII techniques were used for the logistic regression analyses in the current study, while pooled data which does not account for the variability in the data, due to missing values, was used for the likelihood ratio tests.

Of the 4,422 households surveyed for the 2007 SCF, 1,171 were single-person households with a respondent who was not married. This sample was chosen for three reasons. First, the majority of households with a married respondent were classified as male-headed, even in cases where there were two earners and financial decision-makers in the household. Second, it was necessary to control for the impact of the financial decisions and attitudes of a spouse or partner. Third, it was likely that the presence of dependent children or other household members would substantially change the household's financial behaviors. Focusing on the current sample allows for better isolating any differences in saving behaviors that may exist between the two groups. For the married or living with a partner households in the SCF, it would be impossible to identify the primary investment decision-maker. Saving behaviors would reflect the group decision-making process of the partners, masking any gender differences that may exist.

The estimated parameters were compared across gender by examining the estimated values as an indication of significant differences in individual and collective parameter estimates. Significant differences between men and women in individual parameters were identified by estimating gender full-interaction models for the two measures of saving. The gender full-interaction models were estimated using the total sample of men and women with each independent variable in the model interacted with gender in addition to each of the non-interacted independent variables and the gender dummy variable. According to Brambor, Clark, and Golder (2005), each of the elements of the interaction term should also be included individually in the model. The coefficients of the separate gender models were considered to be significantly different if the interaction term was significant in the full-interaction model. A likelihood ratio test was used to assess differences in the collective parameter estimates, where the likelihood ratio statistic was calculated as -2 (Loglikelihood(UR)-Loglikelihood(R)). The unrestricted model was the full-interaction model described above, and the restricted model assumed all of the interaction terms in the pooled regression to be zero. The calculated likelihood ratio statistics were chi-square distributed with degrees of freedom equal to the number of restrictions (25 in this study). Further details on the testing procedures used in the current study can be found in Maddala (1992).

Empirical Model

Saving can be considered the result of a decision-making process and to save as the act of regularly setting aside resources for a goal (Lewis, Webley, & Furnham, 1995; Wärneryd, 1999). Two measures of saving were used in the current study. The first was a short-term measure of saving based on whether SCF respondents indicated that their spending (excluding investments) exceeded income, was about the same as income, or was less than income over the previous year. The response to this question has been used in Federal Reserve Board reports as the measure of saving and was used in the current study to create a dichotomous dependent variable, coded as 1 if spending (excluding any investments) was less than income over the previous year (indicating the household had the potential to save over the past year) and 0 if spending was equal to or more than income over the previous year (indicating the household did not have the potential to save). The use of this dependent variable allowed for examining variables that affect short-term saving.

The second measure of saving was based on a question SCF respondents were asked about their saving habits. If respondents indicated that they save regularly by setting money aside each month, the dichotomous dependent variable was coded as 1 and 0 otherwise. This save regularly variable was used as an indicator of general saving since saving may represent a complicated task requiring careful planning and self-control (Thaler & Shefrin, 1981). This was a longer-term measure and was expected to reflect self-reported typical behavior.

The independent variables included in the current study were based on the model of wealth accumulation, where saving is affected by income, age, risk tolerance, preferences, and consumption needs, in addition to socioeconomic control variables. Income was measured as a continuous variable. Dummy variables were created for the relation of current income to normal income and expected income growth, as many researchers have shown that households save when income is high and dissave when income is low, assuming consumption needs are constant. The measure regarding the relation of current income to normal income was based on a question SCF respondents were asked about whether income in the previous year was unusually high or low relative to income in a normal year. There were four categories for the age variable based on the quartiles of age for the total sample since the women in the sample were older than the men on average: < 43 years old (reference group), 43-56 years old, 57-73 years old, and > 73 years old.

Three dummy variables were created to measure risk tolerance: low risk tolerance, average risk tolerance (reference

group), and above average to high risk tolerance. Saving horizon was included as a proxy for preferences, with three saving horizon groups: short (reference group), medium, and long. Employment status was also included as a measure of preferences where households were employed (reference category), retired, or unemployed. An indicator was also included for self-employment.

Dummy variables were created for two factors related to uncertainty, as these have been shown to affect current and future consumption needs: income uncertainty and health uncertainty. Income uncertainty was based on whether the respondent had a good idea of income in the next year, where the dummy variable was equal to 1 if the respondent indicated that they did not have a good idea of income in the next year. Respondents were asked a question regarding their health status, and this question was used to create two dummy variables for health uncertainty, with good to excellent health for the respondent serving as the reference category: fair health and poor health. Socioeconomic variables included dummy variables for marital status (never married is the reference category), race of respondent, being a homeowner, and continuous control variables for years of education and wealth.

Results
Descriptive Statistics
There were a total of 1,171 single-person households in the sample, with 59.9% female ($n = 702$) and 40.1% male ($n = 469$). Table 1 shows the descriptive statistics for the total sample as well as for the two groups (men and women), while Table 2 shows significant differences between the two groups. The saving behaviors of men and women appear to differ based on the univariate results, as do the factors related to saving. The groups were significantly different in the majority of characteristics, but no significant difference was found in the proportion of women and men saving regularly, having a medium saving horizon, experiencing income uncertainty, being in poor health, or being separated or divorced. There was also no significant difference in the proportion of women and men who were White, Black, Hispanic, or other.

Almost 61% of men saved over the previous year, while only 47% of women saved. The proportion of men and women indicating that they save regularly was very similar, with 40.1% of men and 37.5% of women. The average income of women in the sample was $33,670, which is more than $20,000 lower than the average income of men ($55,046). This finding was not unexpected since a greater

proportion of the women in the sample were retired. Over one quarter of men had income that was either higher or lower than normal, while only around 17% of women reported higher or lower income than normal. The average age of women was more than 10 years greater than that of men (62.5 years and 50.1 years, respectively). The majority of men fell into the lower two age categories (< 43 years and 43-56 years), while the majority of women fell into the upper two age categories (57-73 years and > 73 years). Women and men in the sample differed significantly in the risk tolerance distribution. Over half of women (58.1%) indicated that they were not willing to assume any financial risk, as compared with 39.8% of men. About 30% of women and 37% of men indicated that they were willing to assume average financial risk, with 12% of women and 24% of men falling into the high-risk tolerance category. The saving horizon distribution also differed between men and women. About 43% of women reported a short saving horizon, as compared with 31% of men. The proportion falling into the medium saving horizon category was similar for women and men (46% and 48%, respectively). About 12% of women reported having a long saving horizon, as compared with 21% of men.

A greater proportion of women were retired (42.5%) relative to men (20.8%). A greater proportion of men were unemployed (14.7%) as compared with women (5.4%). Men were also more likely to be self-employed rather than working for an employer (11.0% versus 3.2%).

The proportion of women and men without a good idea of income in the next year was similar (28% and 31%, respectively). About one quarter of women reported to being in fair health, with about 8% in poor health. About 18% of men reported to being in fair health, with about 7% in poor health. A greater proportion of the women in the sample were widowed (41%), while almost half of men in the sample were never married.

A larger proportion of women than men reported owning a home (62.3% versus 52.9%, respectively). The number of years of education was significantly different for women and men, with an average of 12.9 years of education for women and 13.6 years for men. The average wealth of women was also significantly lower than that of men, with an average wealth of $294,351 and $389,395 for the two groups, respectively.

Logistic Regression Analyses
Multicollinearity in the model was assessed using the variance inflation factor (VIF) method (O'Brien, 2007). All

Table 1. Characteristics of All Single Person Households and by Gender

Variables	Total Sample (N = 1,171)		Women (n = 702)		Men (n = 469)	
	Mean/ Frequency	%	Mean/ Frequency	%	Mean/ Frequency	%
Short-term saving	615	52.5	330	47.0	285	60.8
Save regularly	452	38.6	263	37.5	188	40.1
Income	Mean 42,237		Mean 33,670		Mean 55,046	
Higher income than normal	93	7.9	46	6.5	47	10.1
Normal income	927	79.2	585	83.3	342	73.0
Lower income than normal	151	12.9	72	10.2	79	16.9
Age	Mean 58		Mean 63		Mean 50	
< 43 years	275	23.5	110	15.7	165	35.1
43-56	302	25.8	141	20.1	161	34.4
57-73	287	24.5	206	29.3	81	17.3
> 73	307	26.2	245	34.9	62	13.2
Low risk tolerance	595	50.8	408	58.1	187	39.8
Average risk tolerance	382	32.6	210	29.9	172	36.7
High risk tolerance	194	16.6	84	12.0	110	23.5
Preferences						
Short saving horizon (next few months to next year)	445	38.0	300	42.7	145	31.0
Medium saving horizon (next few years to 10 years)	547	46.7	321	45.7	226	48.2
Long saving horizon (longer than 10 years)	179	15.3	81	11.6	98	20.9
Unemployment within past year	107	9.1	38	5.4	69	14.7
Retired	396	33.8	298	42.5	98	20.8
Self-employed	74	6.3	22	3.2	52	11.0
Consumption needs						
Income uncertainty	343	29.3	197	28.0	146	31.2
Good health	813	69.4	463	65.9	350	74.7
Fair health	328	22.8	182	25.9	85	18.1
Poor health	91	7.8	58	8.2	34	7.2
Socioeconomic characteristics						
Never married	392	33.5	159	22.6	234	49.8
Separated or divorced	427	36.5	256	36.5	172	36.7
Widowed	350	29.9	287	40.9	63	13.4
White	896	76.5	541	77.1	355	75.7
Black	137	11.7	84	11.9	53	11.3
Hispanic	93	7.9	55	7.8	38	8.1
Other	46	3.9	22	3.2	23	4.9
Years of education	Mean 13		Mean 13		Mean 14	
Own home	685	58.5	437	62.3	248	52.9
Wealth	Mean 332,444		Mean 294,355		Mean 389,401	

Note. The ordering of variables is based on the study framework.

Table 2. Univariate Differences in Model Variables by Gender

Variables	χ^2	F	p
Short-term saving	21.746		.000***
Save regularly	0.845		.358
Income		9.230	.002**
Higher income than normal	5.014		.025*
Normal income	17.955		.000***
Lower income than normal	11.080		.001**
Age			
< 43 years	58.569		.000***
43-56	29.992		.000***
57-73	21.660		.000***
> 73	68.417		.000***
Low risk tolerance	37.839		.000***
Average risk tolerance	5.925		.015*
High risk tolerance	27.035		.000***
Preferences			
Short saving horizon (next few months to next year)	16.314		.000***
Medium saving horizon (next few years to 10 years)	0.664		.415
Long saving horizon (longer than 10 years)	18.617		.000***
Unemployment within past year	29.356		.000***
Retired	59.204		.000***
Self-employed	29.334		.000***
Consumption needs			
Income uncertainty	1.392		.238
Good health	10.397		.001**
Fair health	9.750		.002**
Poor health	0.432		.511
Socioeconomic characteristics			
Never married	93.375		.000***
Separated or divorced	0.918		.338
Widowed	101.208		.000***
White	0.276		.599
Black	0.120		.729
Hispanic	0.019		.889
Other	2.357		.125
Years of education		63.680	.000***
Own home	10.271		.001**
Wealth		3.940	.047*

Note. The ordering of variables is based on the study framework.

* $p < .05$. ** $p < .01$. *** $p < .001$.

of the VIF measures were less than four, falling below the cutoff of five suggested by O'Brien (2007). The results of the likelihood ratio test indicated that including the interaction variables (gender with each independent variable) added additional explanatory power to the model where short-term saving was the dependent variable ($p < 0.001$; $R^2 = 27.58$ in model with interactions versus $R^2 = 23.35$ in model without interactions). Including the interaction variables also added additional explanatory power to the model with "save regularly" as the dependent variable ($p < 0.001$; $R^2 = 21.29$ in model with interactions versus $R^2 = 18.02$ in model without interactions). Table 3 shows the results of the models when estimated separately for men and women. The first two columns show the results when using the short-term measure of saving (saving over the past year) as the dependent variable, while the third

Table 3. Logit Parameter Estimates for Determinants of Saving

	Short-term saving		Save regularly	
Variable	Women	Men	Women	Men
Income (in $100,000)	0.1525	0.2842	-0.0448	-0.0001
Higher income than normal	0.3450	0.0945	-0.0587	-0.0257
Lower income than normal	-0.3845	-0.5724	-0.3801	-0.2991
43-56 years old	-0.2052	-0.0344	-0.2374	0.3123
57-73 years old	0.4220	0.1238	0.3203	-0.0949
> 73	0.0057	1.1617	**-0.8435**	**0.6725**
Low risk tolerance	**-0.7216****	**0.1193**	-0.6184*	-0.2940
High risk tolerance	-0.3145	-0.7765*	0.3594	-0.1023
Preferences				
Medium saving horizon (next few years to 10 years)	**-0.0642**	**0.6552***	0.7603**	0.5191
Long saving horizon (longer than 10 years)	0.4803	1.1665**	1.1228**	0.8968*
Unemployment within past year	0.2199	-0.1487	0.2972	-0.0794
Retired	0.0461	-0.3290	-0.3426	-0.6501
Self-employed	0.0941	0.3133	-0.1888	0.2248
Consumption needs				
Income uncertainty	-0.4563	-0.4214	-0.3045	-0.7311**
Fair health	-0.2860	-0.3890	-0.2193	0.1700
Poor health	**-1.4032****	**-0.2580**	-0.7135	-0.4689
Socioeconomic characteristics				
Separated or divorced	-0.1501	-0.5514	-0.4713	-0.1218
Widowed	-0.2530	-0.3788	0.0647	-0.0147
Black	0.0786	-0.0100	0.6043	-0.0344
Hispanic	-0.5872	0.1360	0.1131	-0.2357
Other	-0.0421	1.6341	-0.2187	-0.0030
Education	**0.0260**	**0.1994*****	**0.0027**	**0.1886*****
Own home	0.3406	0.1661	0.4548	0.0757
Wealth (in $1,000,000)	-0.0307	0.0041	0.0258	-0.0073

Note. The ordering of variables is based on the study framework. Coefficients in bold lettering differed significantly between men and women at $p < .10$. Significant individual coefficients indicated by * $p < .05$. ** $p < .01$. *** $p < .001$.

and fourth columns show the results when using "save regularly" as the dependent variable.

Women with low risk tolerance or in poor health were significantly less likely to save in the short term, and the effect of this variable on short-term saving was significantly different for women and men. Men were less likely to save in the short term if they reported having a high risk tolerance, while having a long saving horizon made men more likely to save. However, these factors were not found to differ significantly between men and women. Having a medium saving horizon also made men significantly more likely to save in the short term, and the effect of this variable was significantly different for men and women. Each additional year of education made men more likely to save in the short term, which was significantly different from the effect of this variable on short-term saving for women.

Women with low risk tolerance were significantly less likely to save regularly, but the effect of this factor was not significantly different for women and men. Having a medium saving horizon significantly increased the likelihood of women saving regularly, although this factor was not found to differ significantly for men and women. Having a long saving horizon increased the likelihood of saving regularly for both men and women. Not having a good idea of income in the next year significantly decreased the likelihood of men saving regularly, although there was not a significantly different effect of this factor on saving regularly for men and women. As with short-term saving, each year of education made men significantly more likely to save regularly, and the effect of this factor differed for women and men.

The results of the current study indicate that differences in saving behaviors between men and women exist. In regards to short-term saving, women and men differ in how low risk tolerance, a medium saving horizon, poor health, and education are related to the likelihood of saving. When investigating whether a respondent saves regularly, the factors that differ between men and women include being in the over 73 years of age category and years of education.

Conclusions and Implications

The current study supports existing literature showing that the financial behaviors of men and women differ. The descriptive analysis of men and women in the sample shows that women were less likely than men to have saved over the previous year, while the proportion of the male and female samples reporting to save regularly was similar. The

descriptive analysis also shows that women in the sample were older, had lower risk tolerance, had a shorter saving horizon, were more likely to be retired and less likely to be unemployed or self-employed, were more likely to be in fair health, had fewer years of education, were more likely to own a home, and had less wealth on average. A future study where the women and men in the sample are more similar in terms of age, employment status, and other characteristics may further our understanding of any gender differences in saving behavior that exist.

Women and men have been shown repeatedly in the literature to differ in terms of risk tolerance, which has then been shown to affect women's financial decisions and behaviors. The current results show that risk tolerance also affects men and women in terms of whether they engage in saving. Interestingly, women reporting low risk tolerance were significantly less likely to save over the short term as well as to be regular savers, while this effect does not apply to the sample of men. In fact, although not found to be statistically different for men and women, high risk tolerance significantly decreased the likelihood of short-term saving for men. Poor health also decreased the likelihood of short-term saving for women but not men. Each year of education made men significantly more likely to save in the short term and to save regularly, but this effect does not apply to women.

The current sample includes only unmarried respondents living alone, which limits the application of the findings to households of other types. However, the findings provide information that financial professionals can use when working with unmarried individuals living alone, as well as to better understand some of the differences that may exist between two partners in a household. Financial professionals need to be aware of the effect of risk tolerance and education on general saving behaviors for men and women.

Income has been shown in previous studies to have a positive relationship with saving. However, after adjusting for the variables in the current study, income was not significant in explaining the likelihood of short-term saving or the likelihood of saving regularly. Wealth was also insignificant in the models, which was somewhat unexpected.

The finding that low risk tolerance decreased the likelihood of saving among women has many implications for the financial well-being of this group. Women with low risk tolerance are less likely to save in the short term as well as to save regularly, extending the findings of previ-

ous studies related to the effect of risk tolerance on the financial behaviors of women. Women with low risk tolerance may be unwilling to take a chance on losing any of their income by investing in risky assets. This is particularly important for women with no retirement saving plan as well as those with a defined contribution retirement plan. Women with low risk tolerance may be less likely to save, and when they do save, are less likely to choose assets that have greater growth over time, leaving them financially unprepared for retirement. The finding that low risk tolerance is negatively related to the likelihood of being a regular saver is interesting because at first thought it would seem that those who are less willing to take financial risks would be more cautious and save regularly in order to have protection from unexpected expenses or income losses.

As single women live longer in retirement, often have fewer working years and have lower earnings in many cases, it is critical to educate this group on saving and investing. The relationship between risk tolerance and saving behaviors requires further research, but the current findings indicate that financial professionals may need to consider risk tolerance levels in basic financial plans in addition to more involved financial plans including investments. In addition, poor health is shown to negatively affect the short-term behaviors of women, indicating the importance of health insurance and emergency funds for women.

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