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Financial Capability and Financial Literacy among Working Women: New Insights*

Executive Summary

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The following report provides a comprehensive analysis of the personal finances of working women. Using data from the National Financial Capability Study conducted in 2015, we examined the financial capability of working women and how it changed since 2012.

The study showed as the economy steadily recovered, working women's personal finances also improved. In particular, working women now find it easier to make ends meet, and are using alternative financial services less often. Further, women are less likely to carry credit card debt or engage in expensive credit card behaviors. However, several subgroups—those who are early in their careers, those with children, and those who have experienced marital disruption—still show signs of financial distress. In 2015, financial fragility decreased among working women, but one-third still state they would not be able to cover an unexpected expense of $2,000 in a month's time.

While behaviors related to short-term assets and debt improved, there has been little change in long-term behavior. In 2015, three-quarters of working women held at least one form of long-term debt, and many stated they have too much debt. In addition, working women are not prepared for retirement: The majority do not plan for it, and two-thirds are worried about running out of money in retirement.

Finally, the research shows working women have very low financial literacy, In 2015, less than one-third demonstrated a basic level of financial literacy, a percentage significantly lower than that of working men—and troubling in that such literacy is an important predictor of financial behaviors related to debt, financial fragility, and retirement planning.

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Introduction

Women are an increasingly important part of the workforce and overall economy, comprising nearly half of the labor force in the United States and a substantial portion of all U.S. economic activity. Yet data has shown working women face many financial challenges, some of which are distinct from the challenges facing men. Using data from the 2012 National Financial Capability Study (NFCS), a 2014 study (de Bassa Scheresberg, Lusardi, and Yakoboski, 2014) found that working women are heavily leveraged in both the short- and long-term, and demonstrate difficulty making ends meet. However, since 2012, the economy has improved: Unemployment has fallen, real GDP has increased, and the average hourly wage has risen. To assess whether the improving economy has translated into improvements in the personal finances of working women, the 2015 NFCS is used to update key statistics from 2012 and provide new insights. Changes over the past three years are emphasized and comparisons made among subgroups of working women, as well as between working men and working women.

The analysis finds that working women have experienced small but significant improvements in their financial capability between 2012 and 2015. In particular, working women in 2015 find it easier to make ends meet, are less likely to use alternative financial services, and are less likely to be financially fragile. Moreover, they carry credit card debt less often and engage in fewer expensive credit card behaviors. However, these gains have not been shared equally; certain subgroups of working women, such as early career women, those with children, those who have experienced marital disruption and African-American women, still show signs of financial distress. Furthermore, behaviors related to long- term debt, including student loan debt, and retirement planning have not improved. The financial literacy of working women has not improved and remains substantially lower than among men.

Literature review

American women have made substantial strides in the labor market, but their economic condition still lags behind that of men. Women face a persistent gender pay gap: women working full time earned 21 percent less than men in 2014 (Council of Economic Advisers, 2016a) in spite of progress in recent years, with the gap closing by less than 2 percentage points from 2012 to 2013, and by an additional percentage point between 2013 and 2014. The pay gap persists despite women's rising levels of education: In 2014, 37 percent of the female workforce had a college degree, up from 36 percent in 2012 (Bureau of Labor Statistics, 2015). Moreover, women still occupy a very small proportion of high-income positions, such as software developers, chief executives and lawyers, and are less likely to be involved in entrepreneurial activities or hold senior positions. The share of women among chief executive officers in the Standard & Poor's 500 companies was 4 percent in 2015 (Kochhar, Jain-Chandra, and Newiak, 2016).

Women are also much more likely than men to work part-time: In 2015, 64 percent of part-time workers were women (Department of Labor, 2016). The majority of women who work part-time do so by choice, although these choices may be constrained by factors such as their children's school hours and the cost of child care (Institute for Women's Policy Research, 2015). However, for some women, part-time work is involuntary; about one in five women who usually worked part-time in 2013 did so because they could not find full-time work, or had their hours at work temporarily reduced (Institute for Women's Policy Research, 2014).[1]

An additional challenge faced by women is they typically work fewer years than men, often taking time out of the workforce to raise children or care for elderly relatives, but have longer life expectancies. This makes women more vulnerable to financial hardship during retirement, yet research shows that women are less likely than men to plan for retirement (Lusardi and Mitchell, 2008). This finding is worrisome given that those who plan are significantly more likely to have higher amounts of wealth (Lusardi and Mitchell 2007a,b; 2009; 2011a,b; 2014). Longer life expectancies, coupled with low marriage rates and high divorce rates, also mean that women are more likely to manage their finances alone at some point in life. Thus, a detailed understanding of working women's financial capability is critical, especially in the context of rapid structural change in the economy.

1. Part-time work can be a cause of financial concern to many women due to the fact that part-time workers are less likely to receive employment benefits that are the norm for full-time employees, such as health insurance, employer contributions toward retirement savings, paid family or medical leave, and paid sick days or vacations (Society for Human Resource Management, 2011; Van Giezen, 2012).

Previous research analyzing working women's financial capability (de Bassa Scheresberg, Lusardi, and Yakoboski, 2014) found widespread presence of long-term debt in 2012, together with a lack of sound financial management and planning in both the short and long term. In particular, over-indebtedness and concerns about debt repayment were pervasive in 2012, and many working women were financially fragile due to inadequate short-term savings: Only 38 percent had precautionary savings sufficient to cover living expenses for three months in the event of an unexpected financial shock. Working women were also found to be approaching retirement carrying both long-term and short-term debt and without having planned for retirement.

Between 2012 and 2015, the economy continued to improve. GDP grew, the number of jobs in the private sector increased, and interest rates remained generally low. Moreover, the overall unemployment rate decreased from 8 percent in 2012 to 5 percent in 2015 (Federal Reserve Bank of St. Louis, 2016). In light of these macroeconomic developments, this report examines whether there have been corresponding improvements in the financial capability of working women.

Empirical work

Data

Data from the 2012 and 2015 waves of the National Financial Capability Study (NFCS) is used to analyze both working women's financial capability and financial literacy. The NFCS is a triennial survey that began in 2009 with the goal of assessing and establishing a baseline measure of financial capability among American adults.[2] The newly released 2015 wave updates key measures from 2012, and includes new questions on topics such as student loan debt and planning. The 2015 wave has over 27,000 observations across all states, serving as a representative sample of Americans. The large sample size allows for analysis of various population subgroups.

Samples of working women in 2012 and 2015

Identical specifications for "working women" were applied to both 2012 and 2015 data analysis.[3] The specified sample includes 23-65-year-old women who are either self-employed or employed part- or full time at the time of the survey. With this definition, the sample is composed of 6,684 observations. The following analysis stratifies this sample to examine subgroups of working women by career stage (early, mid, late), family status (financially dependent children or none), marital status (married, single, widowed/divorced/separated) and ethnicity (White, African-American, Asian). The analysis also compares working women to working men.

Demographics

Table 1 presents a set of descriptive statistics for the 2012 and 2015 samples of working women in. Of the 6,684 observations in the 2015 sample, 36 percent are in the early career stage (age 23–35), 34 percent are at mid-career (age 36–50), and the rest are in their late career (age 51–65). Forty-nine percent have at least one financially dependent child. The majority (56 percent) were married at the time of the survey, while 29 percent were single, and 16 percent had experienced some form of marital disruption (i.e., are widowed, divorced or separated). Over one-half of those who have experienced marital disruption are in the late-career stage. The sample of working women is largely educated: 83 percent have attended college, and 46 percent have earned at least a bachelor's degree.

Table 1 also shows that working women in 2015 are more educated, less diverse and have higher incomes than the 2012 sample. As reported in Appendix I, these differences can be explained mostly by a sharp decrease in the unemployment rate among young women. This decrease causes the 2015 workforce to be younger. Moreover, there is a slight increase in the percentage of female retirees and homemakers in the 2015 data. Similar changes are at play among men, with a relative increase in the number of young workers. In addition, some of the change may be explained by a decline in demand for less-educated, unspecialized workers, as suggested by recent research (Council of

2. FINRA Investor Education Foundation commissioned the first NFCS in 2009 in consultation with the U.S. Department of the Treasury and the President's Advisory Council on Financial Literacy. Professor Lusardi serves as academic advisor to the Study.

3. For detail, see "Working Women's Financial Capability: An Analysis across Family Status and Career Stages" (de Bassa Scheresberg, Lusardi, and Yakoboski, 2014).

Economic Advisors, 2016b). Changes in the demographic composition of the samples can influence observed variations in financial indicators between 2012 and 2015; for this reason, a series of robustness checks is included in the multivariate analysis section.

The demographics of women who are working is compared with those of women who are not working in Table 2.[4] Working women are more educated, more likely to be single, have no children, and have higher household incomes than non-working women. These differences hold true in both 2012 and 2015.

Univariate analysis and comparison with 2012

Changes in homeownership and financial assets

Understanding whether working women's financial capability has changed between 2012 and 2015 begins with examining how their assets have changed.[5] Tables 3.1 and 3.2 show that almost all working women are banked—96 percent have either a checking account or savings account. Homeownership also remained stable; over 60 percent of working women own a home. Working women are more likely to have at least one credit card (84 percent) and have a retirement account (74 percent) in 2015 than in 2012, and these changes are statistically significant. Interestingly, there is an opposite movement in working women's financial investments (i.e., stocks, bonds, mutual funds), with ownership falling 6 percentage points between 2012 and 2015, consistent with other evidence reporting that Americans' stock market participation has significantly diminished since 2007 (Stangler, 2015).

As expected, asset ownership varies widely among subgroups of women, particularly homeownership, retirement accounts, and financial investments. For example, over three-quarters of late-career women own a home, but less than one-half of those in their early career do. Those who have children and those who are married are significantly more likely to be homeowners. Similar findings hold for ownership of retirement accounts and financial investments. These variations are expected, as women later in their career (and those who are married) are more likely to have higher household incomes, giving them the means to purchase homes, invest in the stock market, and save for retirement. These variations among subgroups are found in both 2012 and 2015.

Improvements in financial capability and financial behaviors

Next, working women's financial capability and financial behavior are examined. Only statistically significant changes are discussed.[6] Given the improving economy over the past three years, improvements in working women's financial capability are expected since 2012, at least in some areas. One such improvement occurred in working women's ability to make ends meet (Tables 3.1 and 3.2). When asked how difficult it is to cover expenses every month, more than one-half (54 percent) of working women reported that they find it very or somewhat difficult to cover their monthly expenses—a 5 percentage-point decrease from 2012, but still a higher percentage than among working men. This improvement may be due to the fact that working women were also significantly less likely to report a recent drop in income. In 2015, less than one-quarter of all working women experienced such a drop, compared to 30 percent in 2012.

However, some groups still experience difficulties. Tables 3.1 and 3.2 show that younger, less-educated, and African-American working women are much more likely to report that it was difficult for them to cover their monthly expenses. Similar difficulties are faced by women with children and those who experienced marital disruption. Certain subgroups experienced improvements in income stability, but others did not; for example, 32 percent of African-American women reported that they experienced an unexpected drop in income—representing no change from 2012.

Furthermore, Tables 3.1 and 3.2 show there have been statistically significant improvements in terms of financial fragility[7] 33 percent of working women can be considered financially fragile in 2015, compared to nearly 40 percent

4. See also Appendix I for a comparison with the 2012 data.

5. In this section we do not compare working women's assets to working men's because many of the asset questions in the NFCS are asked at a household level and it is not possible to distinguish an individual is the sole owner of the asset.

6. Many changes that are small in magnitude are still statistically significant due to the large sample size.

7. Information regarding financial fragility was measured by the question: "How confident are you that you could come up with $2,000 if an unexpected need arose within the next month?" Respondents were defined as "financially fragile" if they indicated that they probably or certainly could not come up with $2,000 within a month.

in 2012. While a 7 percentage-point drop is a notable improvement over the three-year period, the absolute level is still worrisome given that that one-third of working women in the U.S. are financially fragile (versus 22 percent of working men).

In addition to examining indicators such as ability to make ends meet, income stability, and financial fragility, changes in working women's financial management behaviors since 2012 were analyzed, particularly those that have been previously identified as key issues for women. One such behavior is credit card management. Previous research has documented women's difficulty managing credit cards, especially compared to men (Mottola, 2013). Given the improvements noted above, it would be expected that the number of working women carrying credit card debt would decrease significantly. Tables 3.1 and 3.2 show that 55 percent of all working women who own a credit card reported they carried a balance for which they were charged interest—compared to nearly 60 percent in 2012. While this represents a statistically significant decrease, the absolute level of working women with credit card debt remains high—7 percentage points higher than among working men.

A similar pattern arises when examining expensive credit card behaviors: making only the minimum payment, incurring late payment fees, incurring credit-limit overage fees, and using credit cards for cash advances. Forty-five percent of working women engaged in at least one of these four behaviors—a small but statistically significant decrease since 2012—but still high when compared with working men at 39 percent. The subgroups more likely to engage in this behavior are early or mid-career women, those who have children, those who have experienced marital disruption, and those who are African-Americans.

Alternative financial services (AFS), such as auto title loans, payday loans, pawn shops and rent-to-own stores, are another source of short-term debt. Short-term lending practices found in the AFS sector are defined in related research as high cost due to the unusually high interest rates and fees they carry, (Lusardi and de Bassa Scheresberg, 2013) and use of such services is considered to be a sign of financial distress. Use of AFS among working women was 27 percent in 2012 and 26 percent in 2015, with a similar percentage for working men (Tables 3.1 and 3.2).[8] The data further shows that those who have experienced an unexpected drop in income are 23 percentage points more likely to have turned to AFS. Again, women who are early in their career, who have children, and who are African-Americans are significantly more likely to turn to AFS, further indicating that these groups of working women are the most financially distressed.

Finally, there have been substantial improvements in home mortgage debt repayment. The percentage of working women "under water" on their home (i.e., they owe more on their home than it is worth) or late with mortgage payments notably decreased between 2012 and 2015. For example, 20 percent of working women with a mortgage reported being behind on payments in 2015, down from 35 percent in 2012.

To summarize, between 2012 and 2015, working women have seen substantial improvements in key areas of financial capability. The biggest positive changes include greater income security, greater ability to make ends meet, lower financial fragility, fewer credit card behaviors that generate interest and fees, and, in general, fewer signs of financial distress. It is important to note, however, the financial situation of certain subgroups has remained mostly stagnant from 2012. These subgroups include younger women, women with children, women who experienced marital disruption, and African-American women. Compared to working men, working women overall are more financially distressed; in particular, they are more financially fragile and have more difficulty with credit card management.

Areas of concern: what did not improve

While working women have seen improvements in many aspects of their financial situation, there are still areas of concern.[9] The first is working women's saving behavior. When asked how their spending compares to their income, only 42 percent of working women reported that they spent less than their income (i.e., they were able to save) over the past year. As shown in Figure 1, this represents no change since 2012,

8. The 1 percentage point decrease in AFS use is statistically significant at the 5 percent level.

9. All statistics in this section were found to not be statistically significant improvements from 2012, when using t-tests.

and working women are 4 percentage points less likely to save than working men. Given that mean annual income is higher in the 2012 sample, and that working women now report less difficulty covering their expenses, we might have expected more to be saving. However, we see no meaningful change in spending versus saving behavior.[10]

There is also little improvement in working women's long-term financial situation. While comparisons are more difficult to make due to changes in survey questions, 74 percent of working women in 2012 reported that they held at least one form of long-term debt, such as student loans, home mortgages, home equity loans, and auto loans. Working women are still heavily indebted in 2015, with 75 percent holding at least one of form of long-term debt (Tables 3.1 and 3.2). The potential ramifications of indebtedness for working women are amplified by perception regarding their level of indebtedness. The survey asked, "On a scale from 1 to 7, how strongly do you agree with the following statement '*I have too much debt right now*" Tables 3.1 and 3.2 show that 50 percent of all working women feel they currently have too much debt , a level that is unchanged from 2012. Perceived indebtedness is lower among working men (42 percent) and decreased slightly since 2012. The multivariate analysis section provides a deeper analysis of the factors associated with debt and debt burden among working women.

Insights from new questions added to the 2015 wave

This section analyzes questions added to the survey in 2015 to cover topics that increased in relevance during recent years.

Student loan debt

Student loan debt is a growing concern for both individuals and policy makers (FINRA, 2016). Tables 3.1 and 3.2 show that, in general, working women are more likely to hold a student loan compared to working men (36 percent vs. 32 percent).[11] Beyond this, the 2015 data indicates that working women may not have fully understood their loans at the time they borrowed. Figure 2 shows that only one-third (34 percent) of working women with outstanding student loans tried to determine the future monthly payments on those loans before borrowing; the corresponding figure for working men is 41 percent. Moreover, 13 percent of both working women and men answered they do not know if their monthly payments are income based. This indicates working women had a limited understanding of how their student loan borrowing would translate into required repayment.

Uninformed and, therefore, potentially poor decisions at student loan origination may be at the root of some of the difficulty women express currently in managing their debt. One-quarter of working women with outstanding student loans report being late with payments on that debt at least once in the 12 months prior to the survey (Figure 2). Almost one-half are concerned with not being able to pay off these loans. Nearly 60 percent would make changes to the way they borrowed if given the chance to do it over. While late student loan payments are equally common among working men and working women, women are more likely to be worried about their student debt and to make changes if they could.

Retirement planning and worries about running out of money in retirement

The 2015 data shows that many working women have difficulty planning for retirement. Seventy-four percent of working women have a retirement account (Tables 3.1 and 3.2); however, fewer than one-half (45 percent) have tried to figure out how much they need to save for retirement, a figure that has not changed from 2012. This is important in light of prior research showing that planners accumulate more wealth than non-planners (Lusardi, 1999; Lusardi and Beeler, 2007; Lusardi and Mitchell, 2007a,b; 2011a,b). Moreover, only 38 percent of women who are early in their career have tried to figure out how much to save for retirement. Given the shift from defined benefit (DB) retirement plans to defined contribution (DC) retirement plans, individuals not only should start saving for retirement as soon as they enter the workforce, but they should also determine their savings needs. However, our data suggest that many early career stage working women are not adequately planning and may be financially at risk in retirement.

10. Saving and spending occurs at the household, rather than individual, level, but it is notable that women are less likely to report positive savings in their household.

11. The question asking respondents whether they have student loan debt changed in the 2015 wave; therefore one cannot compare the percentage of working women from 2012.

The data also suggests that working women who are saving for retirement have difficulty managing their retirement accounts. For example, 15 percent of all working women with a self-directed retirement account took either a loan or hardship withdrawal from their account (see Figure 3), again representing no improvement in behavior since 2012. This is especially true among working women with children, 20 percent of whom made some form of withdrawal from their retirement account. This underscores that while women's financial situation has improved in the short term, it remains vulnerable in the long term.

Responses to a new question further highlight their struggles with planning for retirement. The question asked: "On a scale from 1 to 7, how strongly do you agree with the statement? '*I worry about running out of money in retirement*.'" Figure 4 shows that two-thirds of all working women indicated they are worried about running out of money in retirement. This worry is highest among mid-career women (70 percent), those who have children (69 percent), and those who have experienced marital disruption (70 percent).

Financial literacy

Since its first wave, the NFCS has included five financial literacy questions to gauge respondents' knowledge of basic financial concepts. Three of these questions have been used in several other studies in the U.S. and abroad, and cover the topics of inflation, interest rates and risk diversification (Lusardi, 2011). Two additional questions (on bond prices and mortgages) have been included in the three waves of the NFCS. In this study, we define the respondent as having a basic level of financial literacy if she can answer three basic financial literacy questions (on inflation, interest and risk diversification) correctly, since these are the most important concepts for financial decision making.

While financial literacy for the whole U.S. population is generally low (FINRA, 2016), it is particularly low for working women. Table 4 shows that only 29 percent of working women in 2015 demonstrated a basic level of financial literacy. This represents little change from the 2012 level, and is significantly lower than among working men, 47 percent of whom were able to answer these three questions correctly.

There are several differences in financial literacy among subgroups of working women. Figure 5 shows that younger women were 14 percentage points less likely than older women to be financially literate (22 percent vs. 36 percent). Those who have children and those who are African-American are also the least likely to have answered these three questions correctly. Interestingly, these subgroups are also those who were most likely to have been lagging in terms of their financial capability. While in this study we cannot verify causality, these findings underscore the importance of having a basic understanding of financial concepts, and show that those who have more financial challenges are also those who have the greatest need for financial literacy.

Also noteworthy is working women's propensity to respond "don't know" to one or more questions. Figure 6 shows that nearly one-half (47 percent) of working women responded "don't know" to the risk diversification question and 42 percent responded "don't know" to the question on bond pricing. The corresponding response rates among working men were 29 and 27 percent. Limited financial knowledge is an important factor that may explain some of working women's financial vulnerability.

A new question about knowledge of interest compounding was added to the 2015 NFCS. The question asked respondents to estimate how long it takes for debt to double when the interest rate is 20 percent. Only 31 percent of working women answered correctly (Table 4). One-quarter of working women indicated that they did not know the answer, and nearly 40 percent overestimated the time it takes for debt to double.

Given the indebtedness of working women and the potential for rising interest rates, this last finding means that working women may be substantially at risk. More broadly, working women's poor understanding of basic personal financial concepts leaves them exposed to making poor financial decisions and being victimized by financial fraud as well.

Multivariate analysis

The univariate analysis showed that several subgroups of working women—those early in their career, those with children, those who experienced marital disruption, and African-Americans—lag behind others in terms of financial capability and literacy. Multivariate analysis is used to better understand the relationship between demographics and financial outcomes. Specifically, four main outcome variables were analyzed:[12]

- Indebtedness
- Financial fragility
- Planning for retirement
- Worry about running out of money in retirement

To measure indebtedness, a dummy variable was constructed from the question, "On a scale from 1 to 7, how strongly do you agree with the statement? *I have too much debt right now*". Responses of 5, 6, or 7 are assigned a value of one, and all other responses are assigned a value of zero. The question regarding respondents' ability to come up with $2,000 in one month in the event of an unexpected expense is used to measure financial fragility; the dummy variable takes a value of one if respondents indicate they are certainly unable or likely unable to come up with $2,000, and zero otherwise. The variable measuring retirement planning is assigned a value of one if respondents report having tried to determine how much to save for retirement, and zero otherwise. Finally, the variable representing worry about retirement is equal to values 1–7 based on respondents' answer to the question, "On a scale from 1 to 7, how strongly do you agree with the following statement? 'I worry about running out of money in retirement.'"

Two distinct regressions are estimated for each indicator. The first is a parsimonious specification that includes only demographic characteristics and indicators of income and financial literacy.[13] The second specification adds indicators of assets and debts.[14] Regression estimates are reported in Tables 5 and 6.

Regression results in Table 5 demonstrate that income level and income shocks are strong predictors of indebtedness and financial fragility. Working women who experienced an income shock within 12 months prior to the survey were 18 percentage points more likely to agree they have too much debt and 10 percentage points more likely to be financially fragile. Interestingly, they were more likely to be worried about retirement, but also nearly 10 percentage points more likely to have tried to figure out how much to save for retirement. This result is consistent with many other studies looking at different measures of retirement planning and suggests that past income shocks can motivate people to plan better for the future (de Bassa Scheresberg, Lusardi, Yakoboski, 2014).

Moreover, several demographic characteristics are determinants of indebtedness, in particular, age, ethnicity, employment type, and having financially dependent children. Certain demographic groups are more likely to be financially fragile, in particular, those who are in the middle of their career and those who are single.

Next, the regression results in Table 6 identify several characteristics that affect working women's likelihood to plan. First, both sets of regressions identify the importance of financial literacy. Even after accounting for all other variables, having a basic level of financial literacy is positively and significantly associated with planning for retirement and negatively associated with the likelihood of being worried about running out of money in retirement. More specifically, working women who demonstrate basic financial literacy are nearly 13 percentage points more likely to have tried to determine how much they need to save for retirement than those without a basic level of financial literacy. Similar findings hold for education; those with a college degree are more likely to plan for retirement and less likely to be worried. These findings emphasize the potential benefits of investing in higher education and financial literacy.

The analysis also indicates those who are later in their career are more likely to have planned, but are also more likely to be worried about running out of money in retirement. These individuals may have been planning for retirement throughout their careers, but are now concerned that they may not have saved enough. Finally, the analysis shows that income is not a statistically significant determinant of retirement concern except at the highest levels. It is not only the lowest income working women who feel unprepared and concerned that they will run out of money in retirement, but also middle and upper middle income working women.

12. To enable comparisons, the regressions used are similar to those in previous research using the 2012 NFCS data.

13. The dummy variable for basic financial literacy is related to respondents who demonstrated financial knowledge. It is equal to one if they can correctly answer three basic questions on interest rates, inflation, and risk diversification, and zero otherwise.

14. The NFCS does not report information on the levels of assets, debt and wealth.

Controlling for change in the demographic characteristics of the sample

As previously mentioned, the sample of working women in 2015 is somewhat different from the 2012 sample. In 2015, working women are younger, slightly more educated, and less diverse. As discussed above, these changes can be explained mostly by a sharp decrease in the unemployment rate between 2012 and 2015.

The change in demographic composition complicates interpretation of comparisons between 2012 and 2015 data. For example, if reported statistics for a particular financial behavior improve over the three years, is this due to a general improvement in working women's financial situation, or is it due to women entering the workforce with characteristics that are more conducive to better financial behavior? To perform robustness checks, data is pooled from the 2012 and 2015 samples. The regressions in Table 5 and 6 are repeated with the pooled sample, with the addition of a control variable for the year 2015. This control measures the variation between 2012 and 2015, net of the changes in demographics during that timeframe. Regression results show that there has been a generalized and statistically significant improvement in financial fragility of 4 percentage points between 2012 and 2015, independent changes in the demographic composition of the female workforce (Table 7). On the other hand, improvements in the percentage of respondents indicating that they have "too much debt" and who reported to be planning for retirement are not statistically significant once we account for the demographic changes in the sample. This is consistent with results from the univariate and multivariate analysis that reported only small improvements in these areas.[15]

Conclusions

This paper provides a comprehensive overview of working women's financial capability and examines how key indicators changed between 2012 and 2105. As the economy recovered, working women's financial capability has improved in several areas. Working women in 2015 are less financially fragile and find it easier to make ends meet. They are also less likely to carry credit card debt; they pay fewer fees on their credit cards; and they are less likely to use alternative financial services.

There are not, however, significant changes in working women's long-term financial situation. Three-quarters of working women still hold at least one form of long-term debt, such as mortgages, auto loans, student loans, or home equity loans; this figure has not changed since 2012. Also, one-half of working women feel they have too much debt, another figure that has not improved since 2012. Student loan debt is another worrisome factor, given that nearly 50 percent of working women with student loans reported being concerned that they may not be able to repay these loans. On the other hand, concerns about their long-term financial situation are not only linked to debt burdens, but also to a perceived lack of financial security in retirement. In 2015, two-thirds of working women reported worrying about running out of money in retirement.

It is also noteworthy that despite improvements in the economy, saving behavior has not changed meaningfully for working women. They are not saving more in 2015, even though the average income among working women has increased since 2012.

The mixed findings reported above become more nuanced when examining subgroups of working women. Certain subgroups of working women continue to be financially vulnerable. Specifically, women who are young, who have children, who have experienced marital disruption, and who are African-American are more likely to show signs of financial distress. Finally, the data shows that working women continue to be vulnerable to poor financial decision making, given their persistently low levels of financial literacy.

15. The time dummies were also interacted with all of the control variables, but most interactions terms were not statistically significant.

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Table 1. Demographics of working women in 2012 and 2015

	2012	2015
Career Stage		
Early (23-35)	30.0%	36.4%
Mid (36-50)	37.0%	34.4%
Late (51-65)	33.0%	29.2%
Ethnicity		
White	65.3%	69.6%
Asian	**4.8%**	**5.4%**
Black	15.8%	11.1%
Hispanic	10.2%	9.8%
Other	3.9%	4.2%
Marital Status		
Single	26.3%	28.5%
Married/Living with partner	55.2%	55.5%
Separated	2.2%	1.5%
Divorced	13.9%	12.4%
Widowed	2.4%	2.1%
Income		
Income <$15k	6.7%	4.4%
Income $15k-$25k	9.1%	8.5%
Income $25K-$35k	12.0%	10.7%
Income $35K-$50k	15.8%	17.0%
Income $50K-$75k	20.8%	23.4%
Income $75K-$100k	14.6%	16.5%
Income $100K-$150k	12.8%	13.4%
Income >$150k	8.3%	6.1%
Education Attainment		
No High School Degree	3.2%	0.8%
High School/GED	22.1%	15.9%
Some College	29.4%	24.5%
Associate's Degree	N/A	13.0%
Bachelor's Degree	29.1%	29.6%
Post Graduate	16.3%	16.2%
Children		
Have financially dependent children	49.9%	51.0%
Do not have financially dependent children	50.1%	49.0%
Work Status		
Self-employed	12.5%	11.4%
Work part-time	20.8%	20.0%
Work full-time	66.7%	68.6%
N	6,051	6,684

Table 2. Demographics of non-working and working women

	Non-Working	Working
Age		
23-35	28.2%	36.4%
36-50	27.8%	34.4%
51-65	44.1%	29.2%
Ethnicity		
White	70.6%	69.6%
Asian	3.9%	5.4%
Black	11.8%	11.1%
Hispanic	9.6%	9.8%
Other	4.1%	4.2%
Marital Status		
Single	20.8%	28.5%
Married/Living with partner	61.1%	55.5%
Separated	1.7%	1.5%
Divorced	11.6%	12.4%
Widowed	4.8%	2.1%
Income		
Income <$15k	19.0%	4.4%
Income $15k-$25k	14.7%	8.5%
Income $25K-$35k	13.0%	10.7%
Income $35K-$50k	16.3%	17.0%
Income $50K-$75k	18.7%	23.4%
Income $75K-$100k	9.8%	16.5%
Income $100K-$150k	5.8%	13.4%
Income >$150k	2.8%	6.1%
Education Attainment		
No High School Degree	4.2%	0.8%
High School/GED	30.2%	15.9%
Some College	30.0%	24.5%
Associate's Degree	11.5%	13.0%
Bachelor's Degree	17.8%	29.6%
Post Graduate	6.4%	16.2%

Table 2. Demographics of non-working and working women

	Non-Working	Working
Children		
Have financially dependent children	46.3%	51.0%
Do not have financially dependent children	53.7%	49.0%
Work Status		
Self-employed	0.0%	11.4%
Work part-time	0.0%	20.0%
Work full-time	0.0%	68.6%
Homemaker	44.7%	0.0%
Full-time Student	5.9%	0.0%
Permanently unable to work	14.4%	0.0%
Unemployed or laid off	14.8%	0.0%
Retired	20.1%	0.0%
N	4,861	6,684

Table 3.1 Financial capability by year, career stage, and marital status

	Year	Gender		Career Stage			Marital Status		
	2012 Working Women	2015 Working Women	2015 Working Men	Early (23-35)	Mid (36-50)	Late (51-65)	Married	Single	Marriage Disrupted
Assets									
Checking account	93.0%	94.9%	94.5%	94.7%	95.1%	94.8%	96.3%	92.9%	93.2%
Savings account	80.4%	81.7%	83.5%	82.2%	81.5%	81.2%	85.2%	79.0%	74.1%
Banked (either checking or saving account)	96.0%	96.0%	96.4%	96.1%	96.2%	95.9%	97.1%	94.8%	94.8%
At least one credit card	78.0%	83.9%	87.6%	84.1%	84.2%	83.5%	88.2%	80.3%	75.9%
Owns a home	63.0%	63.0%	68.4%	46.3%	68.8%	76.8%	77.5%	49.3%	54.7%
At least one retirement account	71.5%	74.0%		32.2%	22.9%	22.1%	81.7%	63.8%	65.0%
Other financial investments	36.2%	30.1%	42.0%	26.6%	29.1%	35.8%	36.0%	23.4%	21.5%
Making Ends Meet									
Not at all difficult to cover monthly expenses	39.6%	44.8%	56.0%	41.9%	43.8%	49.5%	50.0%	40.6%	34.1%
Somewhat difficult to cover monthly expenses	44.0%	43.2%	35.4%	45.8%	43.6%	39.5%	40.6%	45.8%	47.5%
Very difficult to cover monthly expenses	14.8%	10.7%	7.3%	10.9%	11.0%	10.0%	8.2%	12.0%	16.8%
Financial Fragility/Income shock									
Probably/certainly could come up with $2,000	57.7%	64.6%	75.6%	62.3%	63.6%	68.6%	72.9%	55.6%	51.6%
Probably/certainly could not come up with $2,000	38.6%	32.6%	21.7%	35.6%	32.9%	28.6%	24.7%	41.3%	44.6%
Had an unexpected drop in income	29.6%	24.1%	19.0%	26.1%	23.1%	22.7%	23.3%	23.6%	27.6%
Credit Card Management*									
Carried over balance and charged interest	57.4%	55.4%	47.9%	54.1%	60.6%	50.8%	53.8%	55.0%	62.5%
Made only the minimum payment	40.3%	38.6%	31.2%	44.9%	40.8%	28.2%	35.3%	42.7%	44.3%
Charged a late fee	20.6%	17.1%	13.3%	21.3%	17.9%	11.0%	16.7%	17.6%	18.1%
Exceeded their credit limit	8.9%	8.0%	8.2%	12.2%	6.9%	3.9%	7.8%	8.7%	7.1%
Took out a cash advance	9.6%	10.2%	12.3%	13.0%	9.2%	8.0%	9.6%	11.0%	11.1%
At least one of the four expensive behaviors	46.3%	44.6%	38.7%	51.2%	47.4%	33.2%	41.1%	49.0%	50.7%
Alternative Financial Services									
Took an auto title loan	8.7%	10.2%	13.1%	14.8%	9.1%	5.8%	10.4%	9.3%	11.0%
Took a payday loan	13.2%	12.8%	14.2%	16.5%	13.5%	7.5%	11.2%	14.3%	16.0%
Used a pawnshop	14.4%	14.8%	17.6%	20.6%	13.0%	9.7%	12.8%	17.4%	17.0%
Used a rent to own store	9.2%	8.4%	11.5%	14.5%	9.5%	3.8%	9.5%	9.9%	9.9%
Used at least one of the four	27.1%	25.5%	26.4%	31.9%	25.5%	17.9%	22.8%	28.1%	31.0%

Table 3.1 Financial capability by year, career stage, and marital status (continued)

	Year	Gender		Career Stage			Marital Status		
	2012 Working Women	2015 Working Women	2015 Working Men	Early (23-35)	Mid (36-50)	Late (51-65)	Married	Single	Marriage Disrupted
Long-term indebtedness									
Auto loan	40.4%	40.3%	39.9%	41.9%	43.3%	35.0%	47.3%	30.4%	34.0%
Home mortgage*	71.0%	71.0%	68.8%	76.0%	80.2%	57.9%	73.9%	61.1%	69.8%
Home equity loan*	16.4%	16.4%	18.3%	16.2%	15.8%	17.3%	18.7%	9.8%	13.8%
Student loan	43.1%	36.2%	31.9%	52.1%	33.8%	19.4%	33.9%	42.9%	32.7%
At least one source of LT debt	74.0%	75.1%	72.8%	77.7%	78.4%	68.0%	80.8%	67.0%	69.8%
Agrees with the statement "I have too much debt right now"	49.0%	50.3%	42.3%	54.8%	53.4%	41.0%	47.9%	51.7%	56.0%
Retirement preparation									
Planned for retirement	65.9%	45.0%	53.1%	40.8%	45.0%	50.4%	50.6%	38.4%	37.5%

*Note: Statistics denoted by asterisks are conditional on having the corresponding asset.

Table 3.2. Financial capability by year, gender, family status, and ethnicity

	Year	Gender		Family Status		Ethnicity		
	2012 Working Women	2015 Working Women	2015 Working Men	No Financial Dependents	Has Financial Dependents	White	Black	Asian
Assets								
Checking account	93.0%	94.9%	94.5%	94.8%	94.9%	95.0%	95.8%	95.6%
Savings account	80.4%	81.7%	83.5%	82.2%	81.1%	82.3%	77.3%	87.2%
Banked (either checking or saving account)	96.0%	96.0%	96.4%	96.2%	96.0%	96.8%	91.4%	96.4%
At least one credit card	78.0%	83.9%	87.6%	84.3%	83.6%	85.1%	72.5%	93.2%
Owns a home	63.0%	63.0%	68.4%	55.9%	70.3%	68.2%	48.6%	58.1%
At least one retirement account	71.5%	74.0%		72.3%	75.7%	23.7%	35.0%	21.9%
Other financial investments	36.2%	30.1%	42.0%	28.8%	31.5%	31.3%	22.2%	45.1%
Making Ends Meet								
Not at all difficult to cover monthly expenses	39.6%	44.8%	56.0%	50.4%	38.9%	46.0%	38.1%	35.6%
Somewhat difficult to cover monthly expenses	44.0%	43.2%	35.4%	38.9%	47.6%	42.8%	44.6%	35.6%
Very difficult to cover monthly expenses	14.8%	10.7%	7.3%	9.0%	12.4%	10.0%	15.0%	6.7%
Financial Fragility/Income shock								
Probably/certainly could come up with $2,000	57.7%	64.6%	75.6%	65.1%	64.0%	67.4%	49.0%	76.1%
Probably/certainly could not come up with $2,000	38.6%	32.6%	21.7%	31.9%	33.3%	30.2%	46.2%	19.4%
Had an unexpected drop in income	29.6%	24.1%	19.0%	20.5%	27.8%	22.2%	32.4%	20.0%
Credit Card Management*								
Carried over balance and charged interest	57.4%	55.4%	47.9%	51.3%	59.7%	55.3%	64.3%	31.6%
Made only the minimum payment	40.3%	38.6%	31.2%	32.5%	45.0%	36.3%	49.1%	26.8%
Charged a late fee	20.6%	17.1%	13.3%	12.8%	21.7%	15.1%	24.8%	15.5%
Exceeded their credit limit	8.9%	8.0%	8.2%	5.0%	11.1%	6.3%	13.0%	9.5%
Took out a cash advance	9.6%	10.2%	12.3%	7.1%	13.4%	8.3%	19.8%	10.7%
At least one of the four expensive behaviors	46.3%	44.6%	38.7%	37.3%	52.4%	41.8%	59.3%	32.4%
Alternative Financial Services								
Took an auto title loan	8.7%	10.2%	13.1%	6.9%	13.6%	8.9%	14.8%	14.5%
Took a payday loan	13.2%	12.8%	14.2%	9.1%	16.7%	10.1%	24.9%	14.2%
Used a pawnshop	14.4%	14.8%	17.6%	11.0%	18.7%	12.1%	24.5%	15.5%
Used a rent to own store	9.2%	8.4%	11.5%	5.6%	13.9%	7.9%	16.4%	13.1%
Used at least one of the four	27.1%	25.5%	26.4%	20.1%	31.4%	22.1%	40.3%	23.6%

Table 3.2. Financial capability by year, gender, family status, and ethnicity (continued)								
	Year	Gender		Family Status		Ethnicity		
	2012 Working Women	2015 Working Women	2015 Working Men	No Financial Dependents	Has Financial Dependents	White	Black	Asian
Long-term indebtedness								
Auto loan	40.4%	40.3%	39.9%	33.8%	47.1%	42.9%	35.0%	31.4%
Home mortgage*	71.0%	71.0%	68.8%	64.3%	76.6%	71.5%	66.0%	64.1%
Home equity loan*	16.4%	16.4%	18.3%	13.6%	18.7%	16.3%	15.7%	23.9%
Student Loan	43.1%	36.2%	31.9%	32.1%	40.6%	33.9%	50.7%	23.9%
At least one source of LT debt	74.0%	75.1%	72.8%	68.7%	81.7%	76.8%	73.7%	37.2%
Agrees with the statement “I have too much debt right now”	49.0%	50.3%	42.3%	46.1%	54.7%	50.6%	54.9%	38.2%
Retirement preparation								
Planned for retirement	65.9%	45.0%	53.1%	43.9%	46.2%	45.9%	42.9%	41.7%

*Note: Statistics denoted by asterisks are conditional on having the corresponding asset.

Table 4. Financial literacy

	Working Women 2012	Working Women 2015	Working Men 2015
Financial Literacy Questions			
Inflation question correct	59%	55%	70%
Interest question correct	77%	77%	82%
Risk diversification question correct	46%	43%	59%
Bonds question correct	26%	25%	36%
Mortgages question correct	80%	80%	82%
Compound interest question correct	N/A	31%	44%
Basic Financial Literacy (first 3 correct)	31%	29%	47%
N	**6,051**	**6,684**	**7,051**

Table 5. Regressions: Indebtedness and financial fragility

	(1)	(2)	(3)	(4)
	"I have too much debt right now"	"I have too much debt right now"	Probably/certainly could not come up with $2,000	Probably/certainly could not come up with $2,000
Basic financial literacy	-0.0280**	-0.0179	-0.0735***	-0.0670***
	(0.0139)	(0.0135)	(0.0123)	(0.0121)
Mid-career	0.00490	0.0300**	0.0409***	0.0610***
	(0.0147)	(0.0144)	(0.0130)	(0.0130)
Late career	-0.0941***	-0.0342**	-0.0231	0.0210
	(0.0160)	(0.0161)	(0.0141)	(0.0145)
African-American	-0.00221	-0.0151	0.0794***	0.0659***
	(0.0198)	(0.0193)	(0.0176)	(0.0175)
Hispanic	-0.0576***	-0.0572***	0.0198	0.0136
	(0.0205)	(0.0200)	(0.0181)	(0.0180)
Asian	-0.128***	-0.0972***	-0.0426*	-0.0381
	(0.0270)	(0.0264)	(0.0241)	(0.0239)
Other	0.0279	0.0213	0.0793***	0.0642**
	(0.0301)	(0.0294)	(0.0268)	(0.0266)
Single	0.0892***	0.0756***	0.0643***	0.0446**
	(0.0220)	(0.0215)	(0.0194)	(0.0194)
Marital disruption	0.0131	0.0112	0.0207	0.00729
	(0.0155)	(0.0152)	(0.0137)	(0.0137)
At least one child	0.0622***	0.0528***	0.0303***	0.0363***
	(0.0130)	(0.0128)	(0.0115)	(0.0115)
Self-employed	-0.0518***	-0.0244	-0.0409**	-0.0330*
	(0.0195)	(0.0191)	(0.0173)	(0.0173)
Employed part-time	-0.0775***	-0.0645***	-0.0165	-0.0109
	(0.0160)	(0.0156)	(0.0142)	(0.0141)
Some college education	0.0365**	0.0198	-0.0304*	-0.0330**
	(0.0177)	(0.0172)	(0.0157)	(0.0156)
At least a bachelor's	0.0390**	0.0178	-0.0852***	-0.0887***
	(0.0186)	(0.0181)	(0.0165)	(0.0164)
Income $25k-$35k	0.0150	0.00672	-0.0927***	-0.0878***
	(0.0251)	(0.0245)	(0.0225)	(0.0223)
Income $35k-$50k	0.0101	0.00853	-0.183***	-0.168***
	(0.0232)	(0.0228)	(0.0207)	(0.0206)
Income $50k-$75k	0.00473	0.00435	-0.324***	-0.298***
	(0.0229)	(0.0228)	(0.0204)	(0.0206)

Table 5. Regressions: Indebtedness and financial fragility (continued)

	(1)	(2)	(3)	(4)
	"I have too much debt right now"	"I have too much debt right now"	Probably/certainly could not come up with $2,000	Probably/certainly could not come up with $2,000
Income $75k-$100k	-0.0372	-0.0434*	-0.398***	-0.368***
	(0.0258)	(0.0258)	(0.0229)	(0.0233)
Income $100k-$150k	-0.0964***	-0.106***	-0.477***	-0.444***
	(0.0277)	(0.0277)	(0.0245)	(0.0250)
Income >$150k	-0.176***	-0.156***	-0.498***	-0.454***
	(0.0335)	(0.0331)	(0.0296)	(0.0299)
Income shock	0.194***	0.175***	0.111***	0.101***
	(0.0143)	(0.0140)	(0.0127)	(0.0126)
Owns a home		-0.167***		-0.139***
		(0.0144)		(0.0130)
No health insurance		0.0327		0.0502***
		(0.0209)		(0.0190)
2+ Sources of LT debt		0.240***		0.0827***
		(0.0131)		(0.0118)
Constant	0.478***	0.478***	0.621***	0.637***
	(0.0280)	(0.0280)	(0.0248)	(0.0253)
Observations	6,624	6,624	6,496	6,496
R-squared	0.071	0.123	0.200	0.216

Note: Coefficient estimates from OLS regression. The variable for indebtedness is equal to one if respondents agreed with the statement "I have too much debt right now" and zero otherwise. The variable for financial fragility is equal to one if respondents reported that they probably or certainly could not come up with $2,000 if the sudden need were to arise within the next month. Each regression excluded respondents who answered "don't know" or "prefer not to say" for the questions related to the dependent variables. Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 6. Regressions: Preparing for retirement

	(1)	(2)	(3)	(4)
	Tried to figure out how much to save for retirement	Tried to figure out how much to save for retirement	Worried about running out of money in retirement	Worried about running out of money in retirement
Basic financial literacy	0.132***	0.128***	-0.142***	-0.133***
	(0.0137)	(0.0136)	(0.0497)	(0.0496)
Mid-career	-0.00250	-0.0159	0.309***	0.329***
	(0.0145)	(0.0145)	(0.0528)	(0.0532)
Late career	0.0851***	0.0561***	0.159***	0.213***
	(0.0157)	(0.0162)	(0.0574)	(0.0593)
African-American	0.0315	0.0420**	-0.486***	-0.499***
	(0.0194)	(0.0194)	(0.0716)	(0.0716)
Hispanic	0.00131	0.00665	0.0281	0.0325
	(0.0203)	(0.0202)	(0.0739)	(0.0739)
Asian	0.0154	0.0196	-0.0644	-0.0326
	(0.0268)	(0.0268)	(0.0963)	(0.0965)
Other	-0.0394	-0.0227	-0.294***	-0.305***
	(0.0298)	(0.0297)	(0.108)	(0.108)
Single	-0.0347	-0.0173	0.161**	0.151*
	(0.0215)	(0.0216)	(0.0792)	(0.0796)
Marital disruption	-0.0140	-6.11e-05	0.0851	0.0845
	(0.0153)	(0.0153)	(0.0557)	(0.0561)
At least one child	0.00692	-0.00297	0.154***	0.143***
	(0.0128)	(0.0129)	(0.0467)	(0.0472)
Self-employed	-0.0231	-0.0174	-0.152**	-0.145**
	(0.0192)	(0.0192)	(0.0699)	(0.0703)
Employed part-time	-0.0635***	-0.0629***	-0.167***	-0.162***
	(0.0158)	(0.0158)	(0.0576)	(0.0576)
Some college education	0.0422**	0.0384**	-0.0887	-0.0978
	(0.0174)	(0.0173)	(0.0635)	(0.0636)
At least a bachelor's	0.112***	0.106***	-0.171**	-0.181***
	(0.0183)	(0.0183)	(0.0667)	(0.0669)
Income $25k-$35k	0.0768***	0.0637***	-0.116	-0.109
	(0.0247)	(0.0247)	(0.0906)	(0.0907)
Income $35k-$50k	0.114***	0.0919***	-0.0891	-0.0740
	(0.0228)	(0.0229)	(0.0836)	(0.0842)

Table 6. Regressions: Preparing for retirement (continued)

	(1)	(2)	(3)	(4)
	Tried to figure out how much to save for retirement	Tried to figure out how much to save for retirement	Worried about running out of money in retirement	Worried about running out of money in retirement
Income $50k-$75k	0.192***	0.156***	-0.106	-0.0862
	(0.0225)	(0.0229)	(0.0823)	(0.0840)
Income $75k-$100k	0.268***	0.225***	-0.292***	-0.278***
	(0.0253)	(0.0259)	(0.0925)	(0.0949)
Income $100k-$150k	0.339***	0.291***	-0.490***	-0.479***
	(0.0271)	(0.0278)	(0.0991)	(0.102)
Income >$150k	0.374***	0.325***	-1.071***	-1.034***
	(0.0328)	(0.0333)	(0.120)	(0.122)
Income shock	0.0850***	0.0937***	0.681***	0.653***
	(0.0141)	(0.0141)	(0.0515)	(0.0517)
Owns a home		0.0949***		-0.130**
		(0.0145)		(0.0531)
No health insurance		-0.0979***		0.215***
		(0.0210)		(0.0773)
2+ Sources of LT debt		-0.0126		0.227***
		(0.0131)		(0.0482)
Constant	0.148***	0.144***	5.269***	5.219***
	(0.0275)	(0.0281)	(0.100)	(0.103)
Observations	6,444	6,444	6,542	6,542

Note: Coefficient estimates from OLS regression. The variable for retirement planning is equal to one if respondent has tried to figure out how much to save for retirement, and zero otherwise. The variable for worried about retirement is a continuous variable equal to 1-7 based on respondents answer to the question: “On a scale from 1 to 7, how strongly do you agree with the following statement? ‘I worry about running out of money in retirement’”. Each regression excluded respondents who answered “don’t know” or “prefer not to say” to the questions related to the dependent variables. Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Table 7. Robustness check. Pooling the 2012 and 2015 samples

	(1)	(2)	(3)	(4)	(5)	(6)
	Fragile	Fragile	Too much debt	Too much debt	Planned for retirement	Planned for retirement
Year=2015	-0.046***	-0.039***	0.010	0.010	0.013	0.007
	(0.008)	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)
Basic financial literacy	-0.074***	-0.069***	-0.021**	-0.019*	0.124***	0.122***
	(0.009)	(0.009)	(0.010)	(0.010)	(0.010)	(0.010)
Mid-career	0.016*	0.037***	-0.025**	-0.015	0.013	-0.000
	(0.010)	(0.010)	(0.011)	(0.011)	(0.011)	(0.011)
Late career	-0.052***	-0.009	-0.118***	-0.100***	0.102***	0.077***
	(0.011)	(0.011)	(0.012)	(0.013)	(0.012)	(0.012)
African-American	0.069***	0.059***	0.013	0.008	0.039***	0.045***
	(0.012)	(0.012)	(0.013)	(0.013)	(0.013)	(0.013)
Hispanic	0.014	0.007	-0.050***	-0.055***	0.006	0.011
	(0.013)	(0.013)	(0.015)	(0.015)	(0.015)	(0.014)
Asian	-0.058***	-0.060***	-0.145***	-0.150***	-0.003	0.001
	(0.018)	(0.018)	(0.020)	(0.020)	(0.020)	(0.020)
Other	0.042**	0.028	0.038*	0.030	-0.013	-0.003
	(0.020)	(0.020)	(0.022)	(0.022)	(0.022)	(0.022)
Single	0.015	-0.003	0.002	-0.010	-0.009	0.003
	(0.011)	(0.011)	(0.012)	(0.012)	(0.012)	(0.012)
Marital disruption	0.049***	0.031***	0.035***	0.025*	-0.004	0.008
	(0.012)	(0.012)	(0.013)	(0.013)	(0.013)	(0.013)
At least one child	0.048***	0.055***	0.069***	0.074***	-0.007	-0.013
	(0.008)	(0.008)	(0.010)	(0.010)	(0.009)	(0.009)
Self-employed	-0.069***	-0.067***	-0.063***	-0.063***	-0.007	-0.000
	(0.012)	(0.012)	(0.014)	(0.014)	(0.014)	(0.014)
Employed part-time	-0.007	-0.005	-0.068***	-0.068***	-0.029***	-0.026**
	(0.010)	(0.010)	(0.011)	(0.011)	(0.011)	(0.011)
Some college education	-0.038***	-0.036***	0.043***	0.044***	0.085***	0.082***
	(0.011)	(0.011)	(0.012)	(0.012)	(0.012)	(0.012)
At least a bachelors	-0.094***	-0.086***	0.030**	0.032**	0.142***	0.134***
	(0.011)	(0.011)	(0.013)	(0.013)	(0.012)	(0.012)
Income $25k-$35k	-0.083***	-0.071***	0.025	0.032*	0.089***	0.076***
	(0.016)	(0.016)	(0.017)	(0.017)	(0.017)	(0.017)
Income $35k-$50k	-0.171***	-0.150***	0.029*	0.042**	0.114***	0.092***
	(0.015)	(0.015)	(0.016)	(0.016)	(0.016)	(0.016)

Table 7. Robustness check. Pooling the 2012 and 2015 samples (continued)

	(1)	(2)	(3)	(4)	(5)	(6)
	Fragile	Fragile	Too much debt	Too much debt	Planned for retirement	Planned for retirement
Income $50k-$75k	-0.288***	-0.253***	0.017	0.038**	0.203***	0.171***
	(0.014)	(0.015)	(0.016)	(0.016)	(0.016)	(0.016)
Income $75k-$100k	-0.381***	-0.337***	-0.029	-0.003	0.267***	0.228***
	(0.016)	(0.016)	(0.018)	(0.019)	(0.018)	(0.018)
Income $100k-$150k	-0.468***	-0.420***	-0.068***	-0.039*	0.335***	0.293***
	(0.017)	(0.018)	(0.019)	(0.020)	(0.019)	(0.020)
Income >$150k	-0.493***	-0.438***	-0.161***	-0.131***	0.398***	0.354***
	(0.020)	(0.020)	(0.023)	(0.023)	(0.022)	(0.023)
Income shock	0.144***	0.133***	0.184***	0.181***	0.053***	0.061***
	(0.009)	(0.009)	(0.010)	(0.010)	(0.010)	(0.010)
Owns a home		-0.156***		-0.068***		0.085***
		(0.010)		(0.010)		(0.011)
No health insurance		-0.064***		-0.012		0.072***
		(0.012)		(0.014)		(0.013)
2+ Sources of LT debt		0.067***				-0.020**
		(0.009)				(0.010)
Constant	0.665***	0.725***	0.475***	0.504***	0.093***	0.030
	(0.018)	(0.019)	(0.020)	(0.022)	(0.019)	(0.021)
Observations	12,321	12,321	12,598	12,598	12,263	12,263
R-squared	0.229	0.247	0.074	0.077	0.129	0.136

Note: Coefficient estimates from OLS regression. The sample includes observations on working women from both the 2012 and 2015 data. The dependent variables and independent variables are defined in the same way as in the previous two tables. A dummy variable has been included in the regressions to account for time factor. 'Year 2015'=1 if the observation is in the 2015 sample, 0 otherwise. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Figure 1. Over the past year, would you say your spending was less than, more than or about equal to your income?

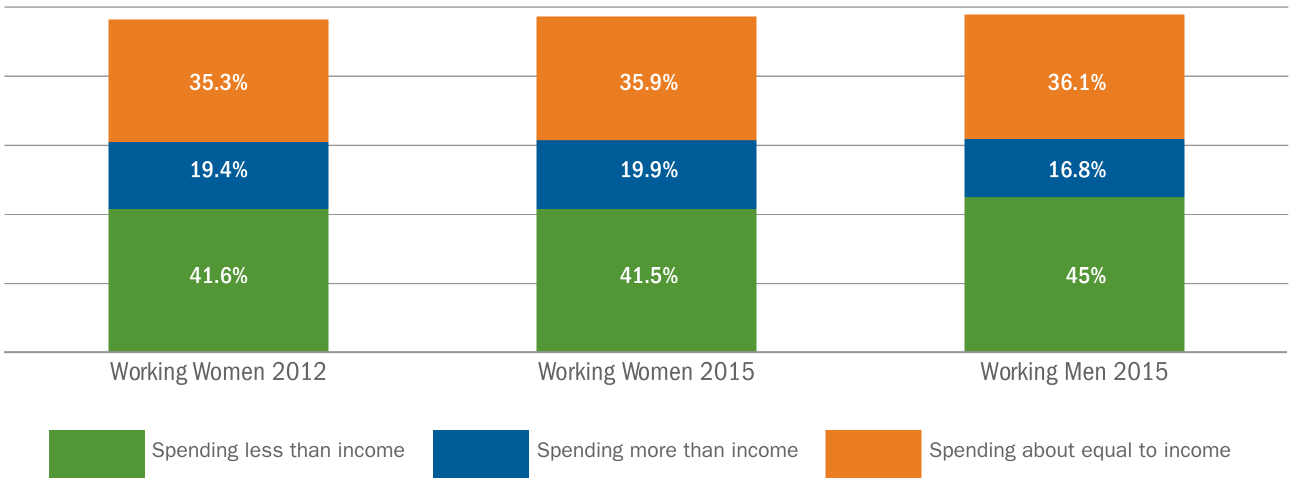
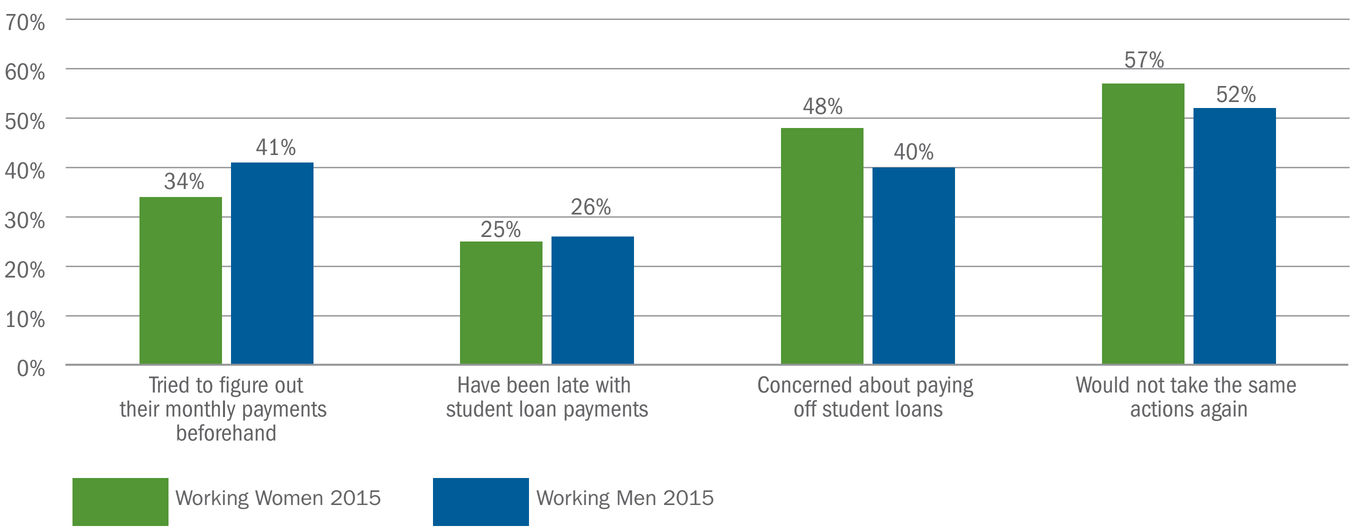
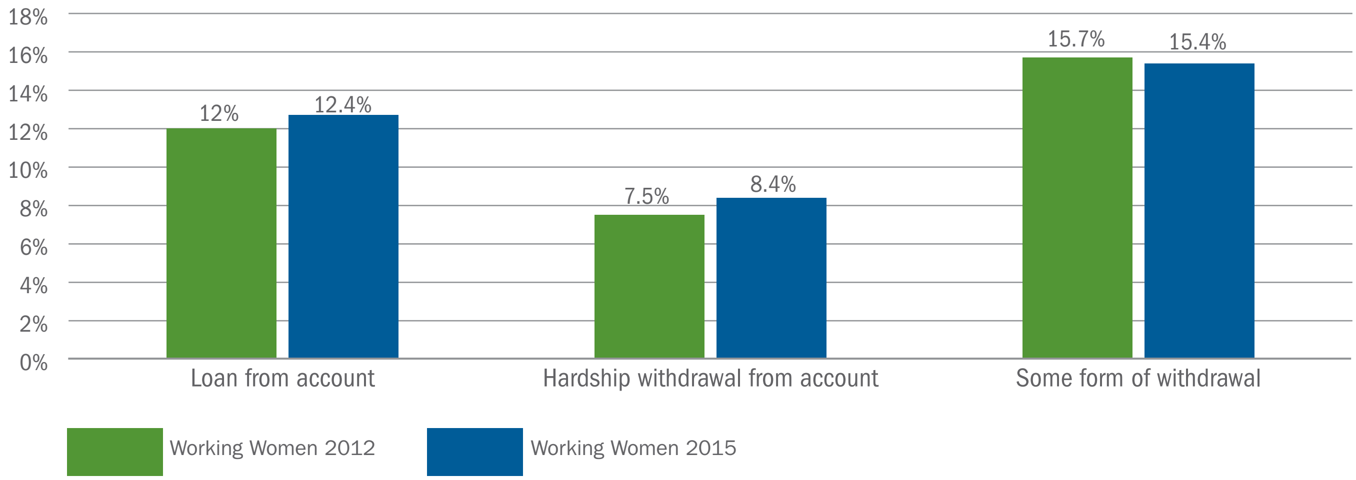


Figure 2. Student loan debt and respondents' concerns by gender



Note: Statistics are conditional on having a student loan.

Figure 3. Withdrawals from retirement account in the 12 months prior to the survey



Note: Statistics conditional on having a self-directed retirement account.

Figure 4. Agree with the statement " I am worried about running out of money in retirement"

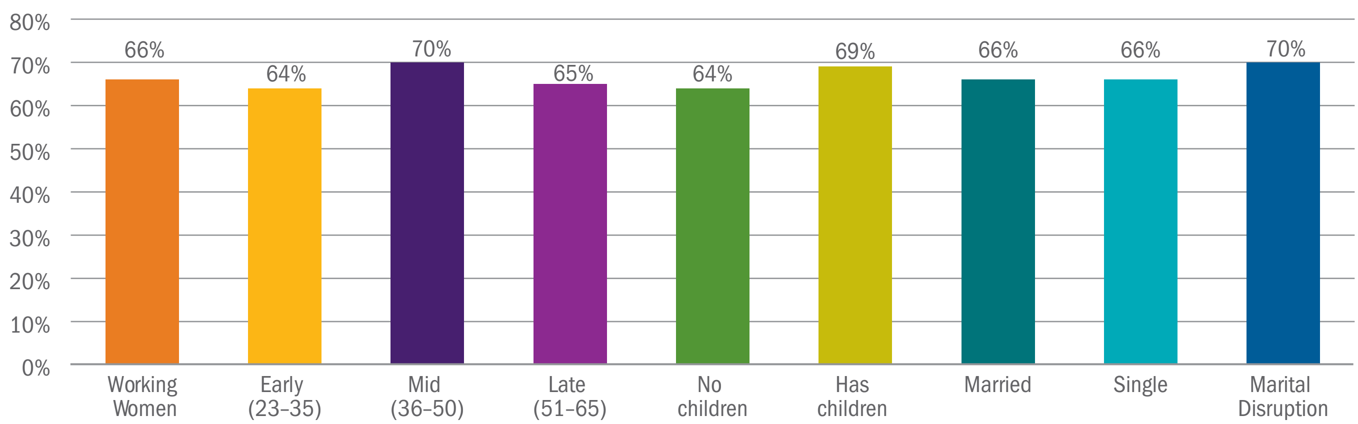


Figure 5. Financial literacy by gender

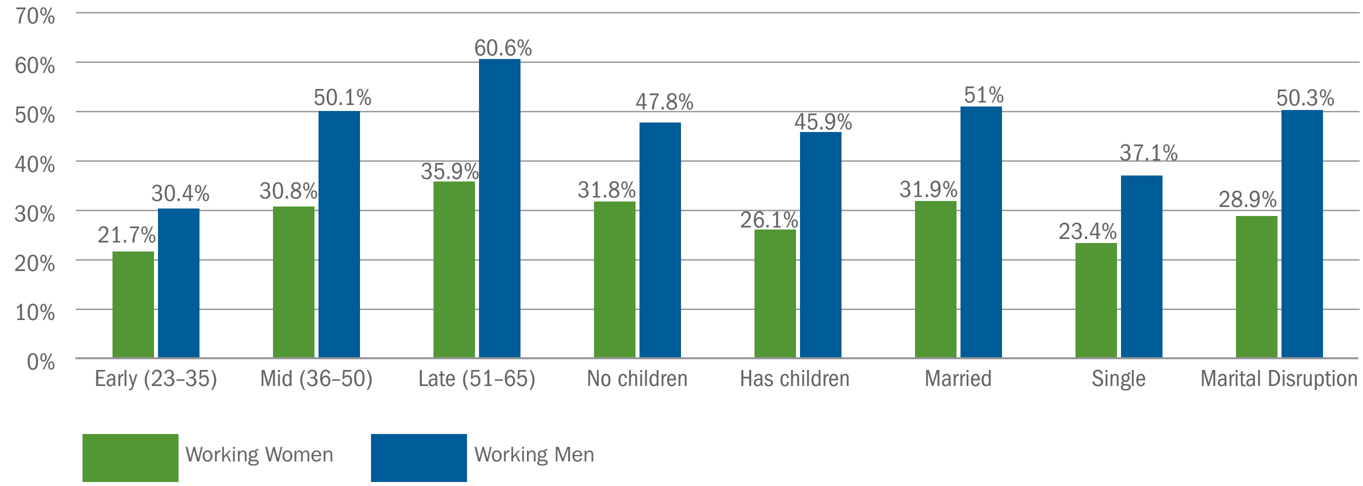
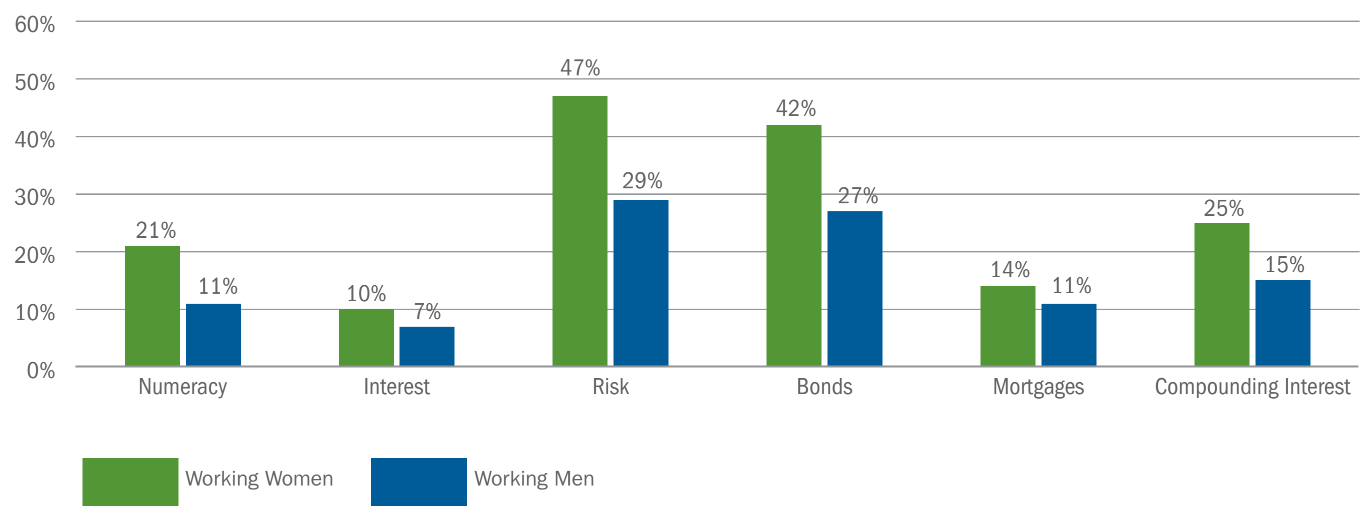


Figure 6. Percentage of respondents who answered "Don't know" to the six financial literacy questions



Appendix I

Demographics of non-working and working women in 2012		
	Non-Working Women	Working Women
Age		
23-35	28.1%	29.8%
36-50	28.5%	37.5%
51-65	43.4%	32.7%
Ethnicity		
White	71.4%	65.3%
Asian	3.2%	4.8%
Black	11.9%	15.8%
Hispanic	9.3%	10.2%
Other	4.2%	3.9%
Marital Status		
Single	18.9%	26.3%
Married/Living with partner	61.5%	55.2%
Marital disruption (separated, divorced, widowed)	19.5%	18.5%
Income		
Income <$35k	50.7%	27.7%
Income $35K-$75k	30.6%	36.6%
Income $75k+	18.8%	35.7%
Education Attainment		
High School degree or less than High School	45.7%	25.2%
Some college	30.7%	29.4%
College degree	23.6%	45.3%
Work Status		
Self-employed	0%	11.4%
Work part-time	0%	20.0%
Work full-time	0%	68.6%
Homemaker	43%	0%
Full-time student	5.2%	0%
Permanently unable to work	14.3%	0%
Unemployed or laid off	18.3%	0%
Retired	19.2%	0%