

**The Implications of Gender Differences in
Retirement Plan Investment Patterns**

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Abstract

Women live longer than men, on average, but have lower retirement wealth, lower expected Social Security benefits, and are more likely to be single and poor in old age. Some previous studies have concluded that women's more conservative investing is a major factor leading to observed gender differences in retirement preparation. Current research does not strongly support that viewpoint. However, there is substantial evidence of gender differences in social roles, psychology, and labor market experience that make it more difficult for women to adequately save for retirement. This paper reviews the research on these differences and identifies potential policy solutions.

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Introduction

Academic and policy research has identified concerns about the adequacy of retirement savings in the United States.¹ As the expected human lifespan has increased without a corresponding increase in years of employment, the average number of years in retirement has increased. In order to meet their growing post-retirement needs, individuals must save regularly throughout their working years and invest in growth assets or, alternatively, plan to retire at much older ages. Certain groups are particularly at risk of retirement wealth shortfalls, including those without employer-sponsored retirement plans and vulnerable populations, such as widows and divorcees. On average, women spend more years in retirement, and more of those years being single or widowed. Using the EBRI Retirement Security Projection Model[®], VanDerhei (2019) projects retirement saving shortfalls (additional savings required to meet basic needs in retirement to be larger for widows and single women and for those in the lowest income quartiles. The evidence from many sources suggests that women have lower retirement wealth, lower Social Security benefits, and are more likely to end life in poverty than their male counterparts, and that the gender wealth gap has widened over time.²

One explanation that has been offered for women's lower retirement wealth is that they are more conservative investors, leading to lower wealth accumulation even at similar levels of saving. In fact, many now simply take for granted the "common wisdom" of gender differences in risk-taking and investing. Although gender differences in income and wealth are well-documented, the evidence of gender differences in investing is not as clear. Nearly three decades ago, Bajtelsmit and Bernasek (1996) summarized the limited available evidence at that time, suggested potential explanations for the observed differences in investing, and made recommendations for further research on this topic. In the intervening years, experts from a variety of fields, including finance,

economics, sociology, psychology, and genetics, have contributed to a growing body of research. We have seen great progress on gender equality in education, opportunities, and economic roles, but differences in labor supply, earnings, and representation among the top pay levels continue (Cortés and Pan, 2020). In addition to the often-cited gender pay gap, there is also a persistent “gender retirement gap” in that women have lower retirement wealth and income. This paper explores the current evidence on gender differences in investing and retirement adequacy, and identifies potential causes, consequences, and policy solutions.

More conservative investing over long periods of time is expected to result in lower wealth accumulation. For women who have lower account balances than men to begin with and longer periods of retirement to finance, investment choices have even larger consequences. Garnick (2016) estimated that a woman would need a savings rate of nearly double that of a similar-income man merely to account for her expected fewer years in the workforce, lower income, and lower average salary increases. If she also invested more conservatively, the necessary contribution would be even higher.

Evidence of Gender Differences in Investing

Gender differences in investing can manifest in several different ways, all of which could result in lower accumulations of retirement wealth:

- Women could be less likely than men to have access to an employer plan, participate in plans that are offered, or receive less generous employer matches.
- The amount invested, either in dollars or as a proportion of income, could be lower for women than men.
- Women could choose lower-risk investments than men, resulting in lower rates of return.

Previous research on each of these issues is summarized in the sections below.

Women and Employer Plans. Tax-deferred savings vehicles such as traditional Individual Retirement Accounts (IRAs) and qualified retirement plans help to maximize the amount of money being invested up front for retirement. Based on Survey of Income and Program Participation (SIPP) data in 2020, Hoffman et al. (2022) find that 43.5 percent of women and 47.8 percent of men owned some type of retirement account. Sabelhaus (2022) reconciles the SIPP data with other sources and estimates that, including current and former plans, ownership rates are 53.7 for men and 50.8 for women. In today's business environment, access to retirement plans for full-time workers within a given company is fairly gender neutral. However, disparities in career path, occupation, size of employer, part-time versus full-time work, contribution rates, years in the workforce, and investment choices still could result in a gender gap in retirement plan participation.

Typically, retirement plan contributions (e.g. for 401k plans) are based on a percentage of salary. To the extent that women are in lower-paying jobs, they would need to contribute a higher percentage of pay than men to achieve comparable accumulations. Based on a large database covering over 2.5 million public employees, Gropper (2023) reports that men in public sector DC plans contribute more than women to their retirement accounts, both in terms of dollar contributions and as a percentage of pay. Mean dollar contributions were about 50 percent higher for men across all the age groups. For all but the youngest age group (20-29), the median contribution rate (dollar contributions divided by employee salary) was 0.5 to 1.3 percentage points higher for men. Not surprisingly, the Gropper study also found significant differences in account accumulations, with women's account balances averaging 70 percent of men's. For those in their 60s, women's median (mean) balance was \$33,090 (\$103,460) compared with men at \$51,734

(\$147,319). Consistent with this public plan analysis, a nationally representative study of 401(k) participants by T.Rowe Price found that the median balance for women was 65 percent lower than for men (Banerjee, 2023). In a study of nearly 2.3 million participant accounts, Vanguard (2023) found that that their female participants had 30 percent lower accumulations despite have similar overall participation rates. Elective deferral rates were slightly higher for men, but when compared to men at similar income levels, women tended to save more and have comparable account balances. However, the women were also less likely to be contributing the maximum allowed (9 percent versus 13 percent) and less likely to take advantage of catch-up contribution opportunities (11 percent versus 17 percent). All of these studies concluded that the differences in accumulation were primarily driven by lower salaries and fewer years of investing. Women also tend to have more student loan debt than men, which may make it more difficult for them to save in their early years of employment. (Banerjee, 2023)

Women and Investment Risk. There is fairly robust literature studying risk preferences, with the majority claiming that women are more risk averse than men. However, Nelson (2015) analyzes the results of 28 risk aversion studies and concludes that widespread acceptance of gender differences in risk-taking is more likely the result of confirmation bias than reality. She uses statistical measures to show that previous empirical research has overemphasized small differences and ignored similarities.

Although researchers have found statistically significant differences in hypothetical risk preferences, the evidence on gender differences in actual risky financial decisions is less clear. Risk preferences have been measured based on risky choices in an experimental setting (e.g. Charness and Gneezy, 2012; Holt and Laury, 2002; Bajtelsmit and Coats, 2023), self-assessed risk attitudes (e.g. Bajtelsmit and Jianakoplos, 1998), and individual portfolio choice (e.g. Bajtelsmit

and Bernasek, 2001; Neelakantan and Change, 2010). Charness and Gneezy (2012) reviewed 15 experimental studies and found consistent evidence of gender differences in risk taking over a hypothetical gamble.

There are three methods most commonly used for studies of actual financial decisions: individual or household surveys, laboratory experiments, and retirement plan data from brokerage firms or employer plans. Survey research is usually based on large-scale national household surveys, such as the Survey of Consumer Finances (SCF), the Health and Retirement Survey (HRS), and similar surveys in many other countries.³ These surveys have the advantage of including substantial information on household-level assets and debts, as well as individual retirement plan balances, but have limited information about asset allocation within each account. Alternative measures of actual investment risk-taking from survey data include the participant's risky asset share (risky assets/total assets) for either the whole portfolio or for certain assets (such as IRAs) or a dummy variable for stock market participation equal to 1 if the participant has any investments in stocks (e.g. Kaustia et al., 2023; Bucher-Koenen et al., 2021; and Posey et al., 2023). Retirement account information does not usually include detailed asset allocation, but it is common to classify them as part of the risky asset share. An additional issue with household-level surveys is that it is often difficult to isolate male versus female decisions for married couples who may pool assets and make joint decisions regarding asset allocation. For this reason, some studies limit their analysis to individual retirement accounts (IRAs) since these accounts are at the level of the individual (e.g. Mandal and Brady, 2020).

Surveys also commonly ask participants to summarize their risk attitudes and risk-taking related to overall investments. Both the SCF and HRS include a question that asks whether the respondent invests “mostly in stocks”, “mostly in bonds”, or “mixed” and another that asks about

the level of risk a person is willing to take relative to return. Women are somewhat less likely to say they invest mostly in stocks and more likely to answer that they are not willing to take any level of risk, but these measures are imperfect in that they are not always consistent with observed asset holdings.

In an experimental setting, researchers can do a better job of eliciting reliable risk preferences, particularly if the experiments include economically meaningful incentives as in Bajtelsmit and Coats (2023). However, experiments typically have small sample sizes that are not representative of the population. Also, the researchers do not have many details about the participants' household finances.

In contrast to experiments and research based on national surveys, financial services firms have detailed information on investment decisions and accumulations for their participant accounts, but do not have information on their participants' other assets or demographics (beyond gender, marital status, and income at their primary employer). This can lead to incorrect conclusions about risk-taking if, for example, a plan participant invests very conservatively in their 401(k) because the rest of their portfolio is in risky assets. However, data suggests that most people do not have a lot of savings outside of home equity and retirement plans, so risk findings based on retirement plan account data are likely to be a good proxy for overall financial risk-taking. In the Vanguard study discussed above, men and women had similar average equity allocations, but the women traded about 50 percent less frequently than men,⁴ in part because they were also more likely than men to hold a single target-date fund. VanDerhei (2021) analyzes asset allocation across fund categories in a databased of public employee plans and finds that, for those with at least some target-date-fund allocation, there are no gender differences in equity proportion for any of the age groups. Women have higher allocations to the target date funds (which include equities) and lower

allocations than men to the other categories of equity funds. For those without any target-date fund allocation, women have lower equity exposure than men across all age groups. This suggests that the increasing prevalence of target-date funds is helping women to take more risk in their retirement plan investments than was observed in earlier studies (e.g. Bajtelsmit and VanDerhei, 1997; Bajtelsmit, et al. 1999)

The research described above suggests that observed gender differences in wealth accumulation is less likely to be due to differences in risk aversion as has commonly been thought. The following section offers some alternative explanations.

Factors that Influence Investment Risk-taking

Research in a wide variety of disciplines over the last several decades has identified potential explanations for gender differences in investing decisions and wealth outcomes. These include gender differences in employment, biology, psychology, socialization, and decision making. **Figure 1** provides a graphical representation of the potential factors and their interactions with each other. Inherent differences in risk preferences are only one possible explanation. A compelling factor is that women have lower lifetime earnings than men. The gender wage gap is often attributed to discrimination,⁵ but is more likely the result of a complex set of factors detailed in the diagram. For example, despite the increased percentage of college-educated women, women are still more likely to be in lower-paying and part-time employment and more likely to be the stay-at-home parent, all of which result in reduced years of paid employment (Blau and Kahn, 2017). The sections below summarize research related to each of the factors that are relevant to gender differences in investing.

[Insert Figure 1: here]

Differences in biology. Gender differences in biology include longevity, genetics, and hormones, all of which may impact financial decisions. With an additional three years of life expectancy, women need to finance a longer period of retirement. Married women, who are often younger than their husbands are likely to outlive their spouses by a decade or more, and may see household assets depleted to pay for their spouse's final years. In theory, women's greater longevity should allow them to take on more investment risk.

With improvements in science and the mapping of the human genome, scientists have been able to make connections between biology and behaviors. Higher levels of testosterone and cortisol in men have been linked to risk-taking and the desire for immediate gratification,⁶ most likely a holdover from primitive times in which risk-taking was biologically necessary to the man's roles as hunter and protector. In genetic research, researchers initially looked at single genes, but the current methodology uses genome-wide association studies which scan large numbers of genetic variants across millions of people looking for correlations with certain traits or diseases. For example, Linner, et al. (2019) link the polygenic score for risk tolerance to various financial behaviors and Posey et al. (2023) find that the genetic propensity for neuroticism is associated with a lower likelihood of stock investing and a lower asset allocation to stocks, whereas the genetic propensity for openness increases the likelihood of stock investing. The genetic propensity for educational attainment is positively associated with labor income and household wealth as well as the likelihood of stock ownership and allocations (Barth, et al. 2020).

Differences in psychology. In addition to risk preferences discussed above, there are several psychological and behavioral differences between the genders. Personality types, financial self-efficacy, financial literacy, and gender roles have been shown to influence career paths, confidence, and financial decisions.

Personality. Psychologists have developed a set of five personality traits, the “Big Five,” which include neuroticism, extroversion, openness, agreeableness, and conscientiousness.⁷ Neuroticism describes the tendency to experience negative emotion and anxiety, which can also translate to being more careful and attentive to detail. Extraversion reflects sociability, assertiveness, and reward-motivation. Openness refers to creativity and how open one is to new experiences. Agreeableness is characterized by being trusting and cooperative. Higher scores for conscientiousness are associated with self-discipline and organization. Studies have found that women score higher on all traits except openness and conscientiousness, although men score higher on certain trait aspects, such as assertiveness, self-confidence, and sensation-seeking (Weisberg, et al., 2011). Jiang et al. (2024) find that those with high neuroticism are pessimistic about future stock returns and expect higher inflation. Individuals with higher openness are more willing to take risks and those who are high on both neuroticism and extraversion are more likely to engage in current investment trends.

Self-efficacy. There are also significant gender differences in financial self-efficacy (FSE), or confidence in one’s ability to make financial decisions. Farrell, et al. (2016) show, after controlling for education, risk preferences, age and income, FSE is the strongest predictor of the type and number of financial products that a woman holds. Those with high FSE are more likely to hold investment and saving products and less likely to hold debt products. Adebodo, et al. (2019) finds that personality traits and FSE both indirectly support saving behavior. FSE is a different construct than general overconfidence, i.e. overestimation of abilities relative to objective measures, but the two measures are correlated. Adamecz-Völgyi and Shure (2022) find that overconfidence is a strong predictor of the gender gap in top job employment. Gender differences in confidence have

also been linked to the gender wage gap in that women are less likely to negotiate starting salaries, ask for raises, and switch jobs for higher pay.

Differences in employment. Women's labor market experience continues to diverge from that of men. Lower earnings, fewer years in the workforce, and lower incidence of pension and retirement plan coverage are all issues that affect their retirement preparation. Women, on average, earn \$0.73 cents for every dollar earned by white men, and black and Latina women even less. Some of the wage gap is due to the greater prevalence of part-time and low-wage work by women,⁸ but even comparing just full-time workers, women in every age range earn less than men, with the largest wage gaps for older workers.⁹ Given that retirement plan contributions are usually a percentage of pay, lower average wages imply lower average dollar contributions. Women have made progress in educational attainment and are more represented in previously male-dominated professions, but white men are still more likely to be in the highest-paying occupations and women are over-represented in the lowest paying occupations and in the lower ranks of other occupations.¹⁰ There is also evidence of growing income inequality among women which worsens the relative situation for the lowest-income women (Hoffman, et al. 2020).

Labor force participation rates for women have trended upward over time, while men's have been relatively flat or declining (Copeland, 2023b). Women are also staying in the workforce far beyond the norm a few decades ago (Brown, et al., 2016). Nevertheless, women still spend fewer years in the workforce than men, on average, mostly due to time out for caregiving.

Cortes and Pan (2023) note that the labor market trajectories of men and women diverge sharply after the arrival of children. Fathers do not experience the same reduction in employment. Men without children are 5 percentage points more likely to be employed than women but, for those with a child under age 5, fathers are 39 percentage points more likely to be employed than

mothers (Almeida and Salas-Betsch, 2023). The motherhood penalty results from both reduced years of work and a decline in wage rates resulting from shifts to more family-friendly occupations and employers. With greater longevity, many women experience a reduction in labor force participation in their later working years due to caregiving responsibilities for aging parents. Ten percent of working caregivers in a recent survey reported having to give up work entirely or retire early to accommodate their caregiver responsibilities, and 61 percent said they had experienced at least one work-related impact, including going in late, leaving early, or taking time off to accommodate care (AARP, 2020). As women reduce work hours for caregiving, they may lose eligibility for employer-paid insurance benefits, thereby reducing the amount they are able to save for retirement.

Differences in Socialization. As mentioned above, women's labor market experience differs from that of men in time in the workforce and occupational choice, leading to worse financial outcomes. These choices are also the result of gender roles (e.g. child rearing expectations), household economics (e.g. mother earns less than father), and gendered professional paths (e.g. education and nursing). In addition, societal changes, such as lower marriage rates and higher prevalence of late-in-life divorces, are worsening the financial situations of older women.

Caregiving. Caregiving roles have a significant negative financial impact on women. Reduced employment affects wage growth, seniority, savings, retirement income, and Social Security benefits. Analysis of data from the 2018 American Time Use Survey by Hess et al. (2020) shows that women spend 37 percent more time on unpaid household and care work than men, and twice as much time during child-rearing years, resulting in reduced earnings.¹¹ Johnson, Smith, and Butrica (2023) use microsimulation methodology to estimate the average lifetime costs of family care to be nearly \$300,000. Rutledge (2017) estimates that the lifetime earnings of mothers with

one child are 28 percent less than the earnings of childless women, and each additional child reduces lifetime earnings by another 3 percent. For women who are not eligible for spousal benefits, social security benefits are 17 percent less for mothers than for non-mothers due to lower average indexed earnings.

Marital status. Women's economic security is also affected by changes in society that have led to lower rates of marriage and higher divorce rates, particularly at older ages. Marriage is beneficial in that it allows pooling of resources (including survivor pensions and spousal social security benefits), sharing of financial skills and knowledge, and reduced variability of household income. GAO (2020) reports that between 1980 and 2016, the unmarried proportion of the adult population (including never married, divorced, and widowed) increased from 39 to 48 percent, and this trend is more common among the lower-income and less-educated. For individuals aged 65+ in 2021, 5.8 percent of married women were living in poverty, as compared with 15.5 percent for widows, 17.1 percent for divorced women, and 19.5 percent for never married women (Congressional Research Service, 2022). Using several waves of the HRS, Streeter (2020) documents that, after the death of a spouse, women lose 12 percent of income and 10 percent of wealth in the first two years, whereas men's financial situations are unaffected by the death of a spouse.

Divorce. Although the overall divorce rate has declined in recent years, in part the result of fewer marriages among younger people, the rate of "gray divorces" (after age 50) has increased, now representing about 1/3 of all divorces. Lin and Brown (2021) found that women in the HRS who divorced after age 50 experienced a 45 percent decline in their standard of living compared with divorced men's 21 percent decline. Social roles can also negatively impact women's finances in divorces because women in child-rearing years often negotiate away pension and retirement assets

in favor of maintaining primary custody rights and keeping the family home (Joseph and Rowlingson, 2012).

Financial literacy. In recent years, significant attention has been paid to the role financial literacy plays in financial wellbeing and retirement preparation. With the shift to participant-directed 401(k) plans, individuals are increasingly responsible for their own retirement planning and investment decisions. Findings of significant gender differences in financial literacy (Lusardi and Mitchell, 2008), and particularly for less-educated and single women (Behrman, et al., 2012), therefore have important implications for financial decisions. Higher financial literacy is associated with higher net worth (van Rooij, et al., 2012), greater financial wealth (Bannier and Schwartz, 2018), retirement readiness (Yakobowski et al., 2023), better investment outcomes (Fisch, et al. 2016), stock market participation (Bucher-Koenen, 2021, Yeh and Ling, 2022), and planning for retirement (Lusardi and Mitchell, 2011). Higher financial literacy and financial knowledge may also temper poor financial decisions driven by risk and time preferences (Bajtelsmit and Coats, 2022).

Conclusion

Recent studies have shown a spotlight on gender differences in retirement adequacy. Women can expect to live longer than men, but they have less retirement wealth and lower social security benefits to finance their longer retirement periods. Despite the “common wisdom” that women are more conservative investors than men, the actual reasons for lower retirement wealth are largely driven by gender differences in labor markets and household responsibilities.

The research shows that women exhibit higher risk aversion than men when measured by self-assessment and hypothetical survey questions and, in the past, this may have translated into lower-risk investment choices. However, more recent asset allocation studies suggest that investment choices are not substantially different by gender for those of similar age and income. Instead, the differences in retirement wealth accumulation result from women having fewer years in the workforce, lower income trajectories, and higher incidence of part-time work, all of which result in fewer years of saving. Despite social security spousal protections, benefits are still lower for women. With declining marriage rates, this differential could even increase in the future.

Women continue to be burdened with a higher proportion of family caregiving, which influences their career trajectories, and leads them to occupations that allow them to work part-time. Although women have made inroads into previously male-dominated professions, occupational segregation still exists, particularly in lower-paying career paths. From an investments perspective, time out of the workforce in early adulthood puts women at a big disadvantage in wealth accumulation. Further, women often find themselves in caregiving roles for aging parents later in their lives, again putting them at a disadvantage in their careers and their savings. Women's lower average levels of financial literacy and confidence in their financial knowledge and ability to make important financial decisions may also play a role.

Based on academic and professional research, it seems clear that solutions for reducing the gender retirement gap must focus on women's income and savings. In addition to a continued commitment to equal pay for equal work, we should work to reduce income and career penalties for time out of the workforce, both at the company level and in social security benefit calculations. Family-friendly work policies, common practice in other OECD countries, can make it easier for caregivers to stay in the workforce. These include extended paid family and medical leave,

scheduling flexibility, options for remote work, and workplace solutions for quality child-care, and improved public investment in eldercare alternatives. Equal treatment of part-time and full-time workers with respect to prorated paid time off and other employee benefits can reduce out-of-pocket costs (e.g. for health insurance), freeing up funds for savings. Continued investment in financial tools and services that employees can use for budgeting, retirement planning, and investing can help empower employees to make better long-term decisions.

Federal reforms could also help women's retirement finances by recognizing the value of unpaid caregiving in social security benefit calculation. Social security is a major income component for elderly women and, as more women have entered the workforce, a growing percentage of retired women are receiving social security benefits based on their own earnings history. However, average benefits are much lower than for men and are insufficient to cover basic expenses. Many other countries recognize unpaid caregiving in their benefit formula by giving a caregiver credit so that women are not penalized for those years out of the workforce. This would especially benefit lower-income single mothers who will not be eligible for a spousal benefit.

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** = TBD

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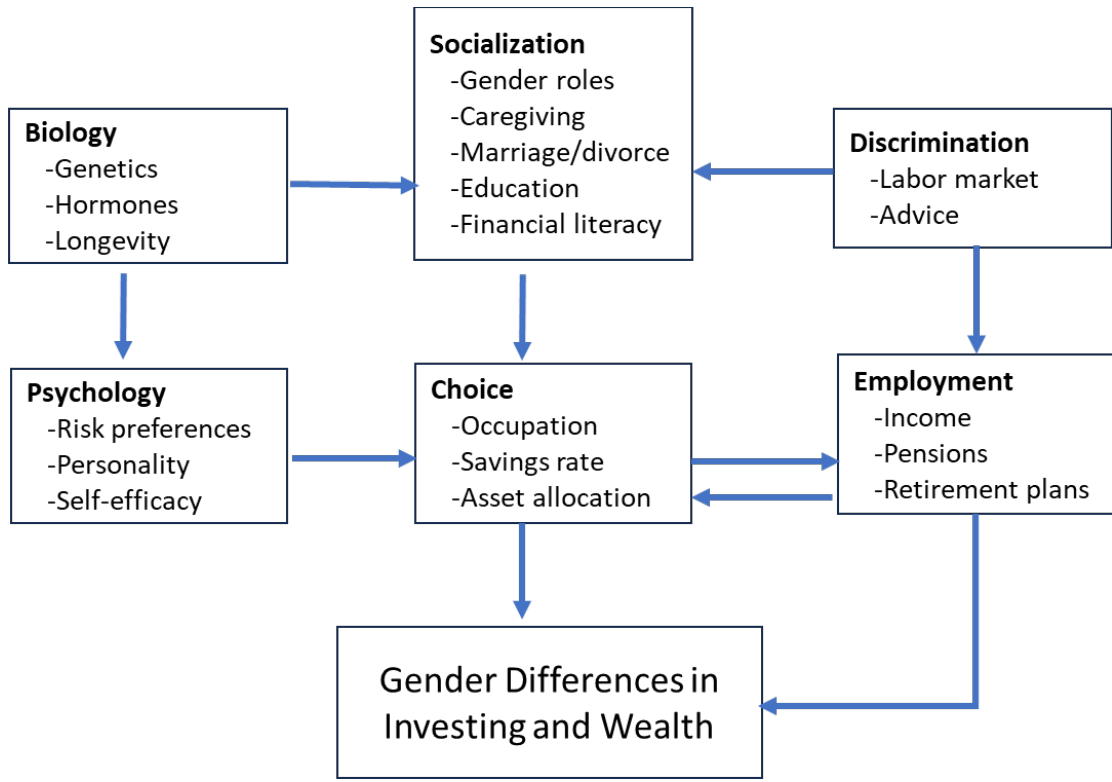


Figure 1. Factors Influencing Gender Differences in Investing and Wealth

Endnotes

¹ See Bajtelsmit and Rappaport (2018) for a summary.

² For example, analyzing the Survey of Income and Program Participation for households aged 65 and older, Brown, et al. (2016) found that women had 26 percent less household income than men and are 80 percent more likely than men to be living in poverty. Lee (2022) analyzes data from the Survey of Income and Program Participation and finds that, although the gender income gap narrowed, the gender wealth gap widened from the mid-1990s to the mid-2010s. Women's median wealth as a percentage of men's dropped from 90 percent to 60 percent over that time period. [s](#)

³ International evidence of gender differences in investing is also based on either household survey data or experiments. For example, women have been shown to invest more conservatively than men in Australia (Watson and McNaughton, 2007), Germany (Oehler and Horn, 2023), Sweden (Almenberg and Dreber, 2015), Finland (Halko, et al., 2012) and Norway (Bucher-Koenen et al., 2021), among others. Kaustia et al. (2023) analyze stock market participation data in 19 European countries and find that men are more likely to participate in the stock market, but conditional on holding stocks, they do not find a gender effect for equity share.

⁴ This tendency to passive investing is consistent with an oft-cited study of mutual fund investors which found that men traded more frequently in their brokerage accounts than women (Barber and Odean, 2000).

⁵ Although some experimental research has identified discrimination in hiring, it is more difficult to clearly identify pay discrimination. In an interesting study, Kerwin et al (2018) used a survey to identify regional sexism against women working outside the home. In the areas with higher sexism, the gender pay gap was larger.

⁶ See Herbert (2018) for a review of the literature on the effect of hormones on risk-taking.

⁷ Factor scores for each of the Big Five are developed from questionnaires on up to 33 self-rated behaviors or tendencies (McCrae and Costa, 2003).

⁸ Although women make up nearly half of the overall workforce, the lower paid the job, the greater the overrepresentation of women, nearly 70 percent of those earning minimum wage (Tucker and Patrick, 2017). The US Department of Labor estimates that 43 percent of full-time workers and 63 percent of part-time workers are women. Women's Bureau (2020)

⁹ Based on data for full-time workers in the Current Population Survey, women's median weekly earnings were 8 percent lower than men for those ages 16-24, 16 percent less than men for ages 25-54, 22 percent less than men for ages 55-64, and 27 percent less than men for ages 65 and older. (Almeida and Salas-Betsch, 2023).

¹⁰ Based on Census data, Zhavoronkova et al. (2022) report that white men are 40 percent of the total workforce, but are 65 percent of CEOs, 81% of engineering managers, 86 percent of pilots, 86 percent of financial advisors, 56 percent of physicians, and 61 percent of computer and information systems managers. Although women are 47 percent of the total workforce, they represent 95 percent of secretaries and administrative assistants, 94 percent of child-care workers, and 90 percent of receptionists and information clerks. The five most common occupations for women (school teachers, nurses, secretaries, customer service, and cashiers) have an average annual wage of \$38,304, whereas the average wage for the five most common male occupations (construction, truck driving, management, retail sales and management) is \$59,670.

¹¹ Hess, et al. (2020) found that a 1 percent increase in time spent on unpaid work is associated with a 0.062 percent decrease in women's weekly earnings after controlling for age, education, race/ethnicity, marital status, and family income. Unpaid work has no effect on men's earnings.