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# **Mind the Gap! Decomposing Gender Differences in Subcomponents of Financial Wealth**

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**Sheffield Economic Research Paper Series**

SERPS no. 2026007

ISSN 1749-8368

22 July 2026

# MIND THE GAP! DECOMPOSING GENDER DIFFERENCES IN SUB-COMPONENTS OF FINANCIAL WEALTH

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**Abstract:** This paper explores the gender gap in sub-components of financial wealth using data from the Wealth and Assets Survey for Great Britain (GB). Detailed sub-categories of financial wealth are investigated with the existing literature typically only exploring total overall financial wealth or specific types of assets – predominantly stocks. The analysis considers the gap in different types of financial assets at both the extensive margin (i.e., the probability of holding a given component of financial wealth, e.g. stocks and shares ISAs) and the intensive margin (the proportion of financial wealth held in each asset, conditional on ownership), using decomposition techniques. The results reveal that females hold a higher (lower) proportion of their financial wealth in liquid (illiquid) assets such as savings accounts (stocks and bonds). A range of covariates influence the explained gap at the extensive margin, such as time preference and financial literacy for the likelihood of owning stocks and/or bonds; whilst total annual income and home ownership reduces the gender gap for each type of asset. However, in common with the existing literature the majority of the gender gap for each component of financial wealth remains unexplained.

**Keywords:** Financial wealth; gender gap; decomposition

**JEL:** D14; D31; G11; G51; J16

**Acknowledgements:** This paper has benefited from insightful comments and suggestions from Jesse Matheson and Alberto Montagnoli. The author is grateful to the UK Data Archive for providing access to the Wealth and Assets Survey. Any remaining errors are the sole responsibility of the author.

## 1. INTRODUCTION

### *Motivation*

Exploring differentials in economic outcomes between men and women is an important concept to consider, whether it is for labour market outcomes (e.g., participation or salary) where discrimination may be prevalent, or wealth accumulation, where a growing body of research has found that women do not accumulate as much wealth as their male counterparts over the life-cycle (e.g., Ruel and Hauser, 2013). Exploring such differences across alternative domains is of importance for several reasons, e.g., Deere and Doss (2006): equality between the sexes; well-being and mental health; female empowerment, and; the link between asset accumulation and the reduction of poverty (e.g., Sherraden, 2005). Moreover, identifying what characteristics can explain gender gaps may be insightful for policy response to help alleviate gender inequality, with differentials in financial wealth between the sexes being a common finding across countries on both sides of the Atlantic (see Section 2).

A large literature has explored the gender gap in wages, e.g., see the overview of Blau and Kahn (2017) and Bryson et al. (2020) for Great Britain (GB). However, in comparison there is a lack of research which has considered gender differentials in financial wealth, where the existing literature has typically only focused on particular types of financial assets, predominantly stocks (e.g., Merkoulova and Veld, 2022), or more commonly overall financial wealth (e.g., Sierminska et al., 2010). Exploring financial wealth is important as it provides income flows from investments, where the liquidization of assets can help to smooth consumption in the case of exogenous shocks such as job loss or the onset of poor health. Furthermore, financial wealth is also a means of provision during old age and for intra-generational transmission (e.g., Charles and Hurst, 2003; Gregg and Kanabar, 2023). Examining liquid and illiquid assets is imperative given that in the UK 32% of households had no savings in 2022, Resolution Foundation (2022), which is a highly liquid asset and the most

prevalent type of financial wealth held. Moreover, the Money and Pensions Service (MaPS) found that a quarter of UK adults have less than £100 in savings.<sup>1</sup> Hence, for those with insufficient finances to fall back on the ability to accommodate adverse events is severely impaired.

In the UK total wealth is defined by the Office for National Statistics (ONS) as the sum of pension wealth, property wealth, physical wealth, and financial wealth, with each of these aggregate constructs having been researched in the literature (e.g., Meriküll et al., 2021; Nolan and Palomino, 2026). However, it is this latter category which is the focus of the following analysis, which comprises around 11% of total wealth (Advani et al., 2021), for a range of liquid and illiquid assets. In this paper, sub-categories of financial wealth are examined and decomposed across the sexes, as well as the value of net financial wealth (i.e., the total value of financial wealth minus non-mortgage debt) and the likelihood of being in financial difficulty. The data used in the empirical analysis is advantageous in that it has information regarding wealth at the individual level (where there is generally a lack of information, with many studies considering household level data), in addition it is accredited by the ONS for obtaining detailed national statistics on wealth. It is the most comprehensive wealth data available in the GB, both in terms of who it covers and additionally what financial assets are included in the survey. The gender financial wealth gap in GB should be of key policy concern given that females typically have lower average values of wealth than their male counterparts (Nolan and Palomino, 2026). Recent figures reveal the gap in overall financial wealth between men and women is 23% evaluated at the mean,<sup>2</sup> compared to a gender pay gap of 13%,<sup>3</sup> and hence should be of

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<sup>1</sup> <https://moneyandpensionsservice.org.uk/2022/11/07/one-in-six-uk-adults-have-no-savings/>.

<sup>2</sup> The statistics are obtained from the Women's Budget Group report '[The gender wealth gap in Great Britain](#)' which uses the Wealth and Assets Survey for the analysis.

<sup>3</sup> ONS (2024) '[Gender pay gap in the UK: 2024](#)' which uses the Annual Survey of Hours and Earnings (ASHE) for exploring the differences in earnings between men and women.

relevance to not only the Government but also practitioners, e.g., MaPS, who offer advice about money – such as regular saving – to improve the financial wellbeing of people.<sup>4</sup>

### *Contribution and research questions*

This paper contributes to the existing literature in several ways. Firstly, by providing detailed evidence for GB in recent years. Secondly, examining all sub-components of financial wealth, the first paper to do so both for GB and internationally, considering a range of both liquid and illiquid assets simultaneously within the same dataset. Whereas the majority of the focus in the literature has been on illiquid assets, such as stocks, which many people do not hold compared to liquid assets. To be specific, the different types of financial wealth explored are: savings accounts; national savings and investments; cash ISAs; stocks and shares ISAs; stocks and bonds; shares and options; unit trusts, and; all other types of financial wealth. In addition, the gender gap is also investigated for overall financial wealth net of liabilities, and the likelihood of facing financial distress. Thirdly, investigating the gender gap at both the extensive and intensive margins, using decomposition techniques typically adopted in labour economics. Specifically, the Fairlie-Blinder-Oaxaca approach to examine the difference in the probability of holding a given sub-category of financial wealth between males and females (extensive margin), and to explore the quantitative magnitude of the gender gap across the entire distribution adopting a re-centred influence function for quantile analysis (intensive margin). Fourthly, exploring heterogeneity across several domains for each component of overall financial wealth. Fifthly, employing an extensive set of covariates in comparison to much of the literature, in particular including controls for financial literacy as well as attitudinal and behavioural characteristics (e.g., saving for unexpected events, trust in banks and risk-taking),

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<sup>4</sup> For example, see the MaPS ‘[UK Strategy for Financial Wellbeing 2030 Goals](#)’ which seeks to raise the number of regular savers who are of working-age, particularly those who are currently struggling financially, by 2 million.

and lastly, exploring differences between males and females both at the mean and across the complete distribution for each element of financial wealth.

The specific research questions (RQs), culminating from the aforementioned contributions to the literature, which are addressed in this paper for sub-components of financial wealth varying in degrees of liquidity are: (1) Is there evidence of a gender gap between the sexes in terms of holding a given investment (extensive margin)? (2) What is the extent of the gender gap conditional upon ownership across the distribution (intensive margin)? (3) Is the existence of a gender gap consistently detrimental to females for different types of financial wealth, i.e., both liquid and illiquid assets? (4) What role do behavioural and attitudinal characteristics have, if any, in explaining the gender gap? (5) To what extent does heterogeneity occur between couple/married individuals compared to singletons, or alternatively is the gender gap stable over the life-cycle or does it vary by age? (6) Does a gender gap exist in the likelihood of an individual being in financial distress, and is there a differential across the sexes in terms of the level of net financial wealth? (7) How much of any observed gender gap is explained by covariates, or is the majority of the gap unexplained?

The results show that females hold a higher (lower) proportion of their financial wealth in liquid (illiquid) assets such as savings accounts (stocks and bonds). However, the gender gap is driven by the likelihood of holding a given sub-category of financial wealth (extensive margin), rather than the magnitude of the proportion of financial wealth held in a given asset relative to total financial wealth across the distribution (intensive margin). Moreover, despite including an extensive set of socio-demographic covariates there is evidence that behavioural and attitudinal traits influence the gender gap across a number of different types of financial wealth, both liquid and illiquid, where the findings are robust to a number of sensitivity checks. Saving for unexpected events only plays a role in explaining the observed gap for cash ISAs and savings accounts, i.e., the most liquid assets, whereas both time preference and financial

literacy influence the gender gap in terms of the likelihood of holding a given investment for all types of financial wealth regardless of the degree of liquidity. For example, financial literacy contributes approximately a third of the effect of having degree level education in explaining the gender gap in the probability of owning stocks and/or bonds.

The remainder of the paper is organised as follows. Section 2 provides a review of the literature which has considered the gender gap in wealth. Section 3 introduces the data and empirical methodology adopted. The results are shown in Section 4 along with sensitivity analysis and an exploration of heterogeneity. Section 5 concludes and discusses potential policy implications stemming from the analysis.

## 2. OVERVIEW OF THE EXISTING LITERATURE

Over the past two decades there has been increasing attention paid to gender differences in financial wealth, which represents a potential source of disadvantage to women distinct from what is evident in the literature for the labour market (e.g., Olivetti et al., 2024). Within married households this is possibly as a consequence of wealth (and financial portfolios) typically being managed by the husband (e.g., Fagereng et al., 2026). One of the original seminal papers in the literature by Barber and Odean (2001) used accounts data for just under 38,000 US households. With this data it was possible to identify the gender of the individual within the household who first opened a brokerage account to examine gender differences in stock market investment. They found that men trade more than women and their returns do better than their female counterparts consistent with theory, whereby men tend to exhibit more overconfidence than women.

Using individual level longitudinal data for Germany in 2002 Sierminska et al. (2010) investigate the gender gap in wealth, where the raw gap is around €50,000. Adopting decomposition analysis, they reveal that the majority of the gap is driven by differences in observed characteristics, in particular income and labour market experience. However, it is

notable that a considerable proportion of the gender gap culminates from differences in how individuals have accumulated their wealth, conditional on their observable characteristics (i.e., differences in their wealth function) which is ‘unexplained’ in the decomposition analysis. They also report differences in the gender wealth gap by couple status, which may reflect intra-partnership bargaining power.

Ruel and Hauser (2013) use the Wisconsin Longitudinal Study (WLS) for the US to examine the gender wealth gap accumulated by a single cohort, where the WLS collects data at five points over the period 1957 to 2003-04. In common with Sierminska et al. (2010) the authors find a large gender wealth gap which varies by marital status – being larger for currently married and never married individuals at \$245,000 and \$94,000 respectively, over their lifetime, where marital disruption penalises wealth accumulation. They also reveal that over the life-cycle, the gender wealth gap expands because men invest their family’s resources more aggressively due to gendered differences in risk aversion.

Anglade et al. (2017) investigate patterns of wealth inequality across the sexes for Ecuador using individual level data from a representative asset survey. In one of the first papers to study a developing country, employing decomposition analysis across the wealth distribution they show that among sole heads of household the gap favours men and is larger at the bottom tail of the distribution. In common with Ruel and Hauser (2013) the analysis reveals a contribution to the explained gap from labour market characteristics, where the authors report potential discrimination against self-employed women at the upper end of the wealth distribution. Their results also highlight substantial differences in the gender wealth gap across the distribution between developed and less developed countries.

Exploring the gender wealth gap for eight European countries, Schneebaum (2018) use the 2010 cross section of the Household Finance and Consumption dataset and reveal no differences in net wealth levels between the sexes at the mean, whilst there is some evidence



for a gender gap at the top end of the distribution. Labour market characteristics and participation in asset and debt largely explain any observable differences, and the overall net wealth gap is reduced in four economies by gender gaps in secured debt. However, the unexplained proportion of the wealth gap is relatively large, e.g., 33% in France, 45% in Germany and 48% in Greece.

Using individual level wealth data for Estonia Meriküll et al. (2021) study the gender gap in net wealth, where the unconditional mean reveals that males hold 45% more wealth than females and this is driven by the gap at the top end of the distribution, although at the 20<sup>th</sup> quantile females have approximately 180% more wealth than males. In a similar vein to Sierminska et al. (2010), the authors find that following decomposition analysis the unexplained gap dominates and follows the pattern of the raw decomposition, frequently offsetting the explanatory power from the observed covariates. They also reveal that women save more in deposits and men hold more money in riskier financial assets, e.g. stocks and bonds as well as voluntary pension schemes.

Merkoulova and Veld (2022) explore stock market ignorance in the context of the US economy using representative panel data, as well as return expectations and their distribution. They use decomposition techniques to study the effects of gender on stock market ignorance and participation in the stock market. Around 58% of males compared to 41% of females are engaged in the stock market. In the past this has been attributed to women having lower levels of financial literacy than males, e.g., Almenberg and Dreber (2015). Indeed, the gender gap in stock market participation attributable to financial literacy is around 8% compared to under 1% for life-cycle effects and 6% for household income. Differences in expected return ignorance, risk ignorance and over-optimism account for approximately: 1%; 2%, and; 0.4%, respectively.

Bacher (2025) considers the gender investment gap for the US where reduced form evidence shows that women are less likely to invest in the stock market and hold a lower

proportion of their wealth in risky assets compared to males. The author then develops a structural life-cycle modelling framework which reveals that gender differences can be explained without the introduction of heterogeneity in agent preferences. Lower income and larger household composition shifts women into poorer household which invest in less risky assets. In addition, both variables also make women more financially vulnerable than men in the advent of adverse economic shocks.

Bartels et al. (2025) explore the gender wealth gap in Germany using individual level survey data. They reveal evidence of life-cycle effects, where the gap between the sexes is small for those aged 40 and below, then expands, before reducing during retirement. The explanation and evidence put forward for this finding is the role that inheritance income plays. On average men receive larger amounts of such transfers during working age compared to women, whilst males have a lower life expectancy than females which means that they typically accumulate smaller inheritance bequests past retirement age.

Nolan and Palomino (2026) use individual level data from the Wealth and Assets Survey for GB to explore the overall gender wealth gap, with a particular focus on the role of private pension wealth. The gender wealth gap when pension income is included stood at 34% in 2018-20. As revealed in earlier studies the gap is found to be more pronounced between men and women living in couples in comparison to their single counterparts. Again, around 47% of the differential across the sexes is unexplained, in common with Sierminska et al. (2010) and Meriküll et al. (2021).

What is clear from the above review is that firstly, there is a dearth of evidence for whether a gender gap exists for different sub-categories of financial wealth both internationally and nationally.<sup>5</sup> Secondly, there is no analysis on what drives any observable differences across

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<sup>5</sup> A large literature exists which has explored the financial vulnerability of females and lower asset returns during old age in comparison to males (e.g., Neelakantan and Chang, 2010; Goldsmith-Pinkham and Shue, 2023), and the accumulation of pension wealth (e.g., Cordova et al., 2022; Cribb et al., 2023).

the sexes for each type of financial asset which constitutes overall financial wealth, incorporating both liquid (such as savings accounts and cash ISAs) and illiquid assets (e.g., stocks and bonds). Finally, there is no exploration of heterogeneity (e.g., by marital status or across the life-cycle) in the gender gap across financial assets of differing liquidity.<sup>6</sup> It is these gaps in the literature which this paper addresses.

### 3. DATA AND METHODOLOGY

This section introduces the data used in the analysis, along with summary statistics and a detailed overview of the different types of financial wealth and whether significant differences exist in the unconditional mean between males and females. The empirical methodology is then outlined based upon gender decompositions at the mean and the overall distribution.

#### *3.1 Data – sample description and summary statistics*

The data used in the empirical analysis is the Wealth and Assets Survey (WAS) which is a longitudinal biennial household survey for GB capturing information at the individual and household level on socio-economic characteristics, as well as assessing levels of assets, debt, savings and planning for retirement. The WAS is the primary data source of micro-level wealth data for GB and has been the accredited data used by the ONS for obtaining detailed national statistics on wealth. It is most comprehensive wealth data available in the GB, both in terms of who it covers and additionally what financial assets are covered. Currently eight waves/rounds of the WAS are available covering the period 2006 to 2022 (with wave 1 collected over the period 2006-08 and the latest wave 8 covers the period 2020-2022).<sup>7</sup>

The focus of the analysis is on waves 6 and 7, covering the periods 2016-18 and 2018-20 respectively, the latest most reliable WAS data available. This is for a number of reasons:

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<sup>6</sup> Whilst Ruel and Hauser (2013) explore the gender wealth gap in the US, they also consider the different types of assets that make up overall wealth: real estate; vehicles; business; deposits; private pension, and; stocks.

<sup>7</sup> It should be acknowledged that the WAS over-samples wealthier households compared with other postal addresses. The reason for this is that, in general, other household surveys do not adequately capture the top part of the wealth distribution, see Office for National Statistics (2012).

firstly, some important variables such as financial literacy are only available in waves 6 and 7; secondly, the methodology used for sampling changed from wave 6 onwards, where the survey period moved to a two-year, financial year-based periodicity (April to March) from a two-year period that started in July and ended in June two years later, resulting in concerns about the longitudinal comparability of the data and in particular for the key variables of interest in the analysis such as the value of assets, which may be affected by changing the sampling to a financial year basis, and; lastly, attrition in wave 8 is particularly problematic as a result of the pandemic to such an extent that the WAS had its accreditation from the ONS suspended.<sup>8</sup>

The unit of analysis is at the individual level for those aged 65 or below which yields a sample size ( $i$ ) of 37,862 of which 18,089 are males and 19,773 are females. Approximately 14%, 27%, 27%, 26% and 6% were interviewed in 2016, 2017, 2018, 2019 and 2020 respectively, with an even distribution of sampling across all the months of the year, apart from 2020 where the period of interviews only covered January to March. All monetary variables are deflated to 2016. Given only two waves are used in the analysis which follows the WAS as is treated as pooled cross sectional data. In sensitivity analysis (sub-section 4.3) the longitudinal nature of the data is investigated.

The dependent variables are each sub-component of financial assets as a proportion of total financial wealth, where there are  $k = 1, \dots, 8$  sub-categories of financial wealth,  $Y_t^k$ , defined as follows: savings accounts; national savings; cash ISAs; stocks and shares ISAs; stocks and bonds (UK and overseas); employee shares and options (UK and overseas); unit trusts; other types of assets (friendly society, insurance products, premium policies, endowment policies, and all other investments).<sup>9</sup> Total financial wealth is defined as the sum of the

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<sup>8</sup> <https://osr.statisticsauthority.gov.uk/news/osr-suspend-accreditation-of-wealth-and-assets-survey/>.

<sup>9</sup> The “all other investment category” also incorporates other types of ISAs, specifically: Lifetime ISAs (which are designed to help with the purchase of a first home or saving for later life); and Innovative Finance ISAs (which allow tax free investment via peer-to-peer lending platforms and crowdfunding). However, these are held by less than 1% of respondents and so are included in the catch-all category of all other investments.

aforementioned categories,  $\sum_{k=1}^8 Y_i^k$ , and the proportion of each asset held  $y_i^k$  is given as follows:

$$y_i^k = \left( \frac{Y_i^k}{\sum_{k=1}^8 Y_i^k} \right) \quad (1)$$

where the percentage of individuals holding each type is 54%, 17%, 30%, 10%, 10%, 6%, 4% and 5%. This shows the importance of considering categories of financial wealth other than just stocks which has been the predominant focus of the majority of the existing literature (see Section 2). Table 1 shows each sub-component as a proportion of overall financial wealth by gender and whether the difference is statistically significant. For example, females have around 35% of financial wealth held in savings compared to only 32% for males, and the difference is statistically significant. Indeed, it is noticeable that the only instances where the difference in means between the sexes is insignificant is for national savings and all other types of financial assets – as such these categories are excluded from the decomposition analysis which follows. Moreover, except for savings accounts and cash ISAs, for all other sub-components of financial wealth females have a lower proportion of their financial wealth invested in these assets compared to males. Table 1 also shows net financial wealth, that is overall gross financial wealth minus all liabilities (excluding mortgage debt),<sup>10</sup> where for males the average is over £29,878 and for females it is over £10,000 lower, with the gap being statistically significant.<sup>11</sup>

Figure 1 shows the distribution of each of the six components of financial wealth, where there is a statistically significant gap across the sexes (Table 1), as well as the monetary amount in the particular asset. For each sub-group there is considerable censoring, i.e., individuals not

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<sup>10</sup> The WAS has information on the value of liabilities (unsecured debt), i.e., the following debt categories: credit card; store card; hire purchase; mail order; formal loans; student loans; arrears in utilities, and; all other types of non-mortgage debt.

<sup>11</sup> Figure A1 in the appendix shows the percentage differential across the sexes in each ratio (calculated from equation 1 over time) for sub-categories of financial wealth from the WAS waves 1 to 7 (due to severe attrition wave 8 is excluded). Despite the break in how the data was collected from wave 6 onwards (see above discussion), in general the percentage gap between males and females for each type of financial asset is consistent with having persistent trends, the same sign pre- and post-wave 6, and being of similar magnitude over the period encapsulating the years 2006 through to 2020.

holding a particular asset. In terms of monetary value, the average amount held in savings accounts is the highest at £10,042 followed by unit trusts at £9,481. Figure 2 considers the distribution of each sub-component of financial wealth at the intensive margin, i.e., conditional on holding the asset, where it is evident that there is also censoring at the right-hand side of the distribution (i.e., 100% of financial wealth is invested in a given asset).<sup>12</sup>

In terms of the  $j$  covariates used in the empirical analysis,  $X_i \in (x_{1i}, x_{2i}, \dots, x_{ji})$ , these include the following binary controls: single; in very good or excellent health; hold or pay into a pension; trust banks for advice about saving for retirement; saves for a rainy day, i.e., unexpected expenditures; risk tolerance;<sup>13</sup> time preference;<sup>14</sup> financially optimistic (expect income to increase next year); answered all questions about financial literacy correctly;<sup>15</sup> labour market status, i.e., employed; unemployed (with all other states as the omitted category); highest educational qualification of a degree; owns home outright or via a mortgage; regional fixed effects, with London as the base category; year fixed effects (with 2016 as the reference), and; month of interview fixed effects (with December as the reference category). Other controls in  $X_i$  include: the natural logarithm of annual total individual income (labour and non-labour,

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<sup>12</sup> In the empirical analysis which follows, in robustness analysis the double censoring of the distribution of sub-components of financial wealth is explicitly modelled.

<sup>13</sup> This is a binary control based on a hypothetical gamble, where such constructs have been used in the literature for inferring risk tolerance e.g., Barsky et al. (1997) and Falk et al. (2018), and is defined from the following question: “If you had a choice between a guaranteed payment of one thousand pounds and a one in five chance of winning ten thousand pounds, which would you choose? 0 = Guaranteed payment of £1,000, 1 = One in five chance of £10,000.” If the respondent is willing to accept the gamble this is interpreted as the individual having high risk tolerance.

<sup>14</sup> Defined as a binary control constructed from the following question: “If you had a choice of receiving a thousand pounds today or one thousand one hundred pounds in 12 months, which would you choose? 0 = £1,000 today, 1 = £1,100 next year.” This is consistent with the literature which uses money earlier or later (MEL) payments to infer time preference from discrete choices, e.g. Falk et al. (2018), where delaying the receipt of income is indicative of the respondent exhibiting high time preference (for a review of time preference measures, see Frederick et al., 2002).

<sup>15</sup> Three questions regarding financial literacy are asked in waves 6 and 7 of the WAS regarding: (1) inflation “If the inflation rate is 5% and the interest rate you get on your savings is 3%, will your savings have more, less or the same amount of buying power in a year’s time?” where responses are “more, the same, less, or don’t know”; (2) interest rates “Suppose you put £100 into a savings account with a guaranteed interest rate of 2% per year. You don’t make any further payments into this account and you don’t withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made?”, and; (3) “Looking at this example of a bank statement, please can you tell me how much money was in the account at the end of February?” If the individual answers all three questions correctly then the binary financial literacy control is equal to unity and zero otherwise. This definition is similar to that used in the literature, e.g., Lusardi and Mitchell (2014).

i.e., benefit income); a quadratic in age to account for life-cycle effects; the number of children in household, and; the number of other adults in household. Summary statistics are provided in Table 2, where it can be seen that: 47% of males answered all three questions about financial literacy correctly compared to 44% of females, consistent with the existing literature which reports females generally have lower financial literacy, e.g., Lusardi and Mitchell (2014). Females (males) are aged 41 (39) on average, and total annual household income is 9.851 (9.473) for males (females) equating to £23,945 (£16,917). Apart from whether individuals are financially optimistic about future income, all other covariates are statistically different between males and females.

### 3.2 Empirical methodology

The gender decomposition analysis of each of the sub-components of financial wealth defined in sub-section 3.1 is based upon the Fairlie-Blinder-Oaxaca (FBO) decomposition approach, based upon the following:

$$y_i^M - y_i^F = (\bar{X}_i^M - \bar{X}_i^F)\hat{\beta}^M + \bar{X}_i^F(\hat{\beta}^M - \hat{\beta}^F) \quad (2)$$

Where  $X_i$  is a set of covariates (as defined in sub-section 3.1),  $\hat{\beta}$  is the estimate, a bar denotes the mean value,  $M$  and  $F$  denote male and female respectively. The first term on the right-hand side of the equation represents that part of the raw gap in the difference that is explained by female related differences in observable characteristics (referred to as the characteristics, explained, composition or endowment effect), whilst the second term captures female related differences in the return to those attributes (also known as the coefficients effect, structural or unexplained component). If the explained component has a negative sign this implies that observable characteristics actually widen the gender gap. The above approach is used to examine the extensive margin of each sub-component of financial wealth (RQ1), i.e., the probability of holding a particular type of asset, based upon a probit specification. In robustness analysis the FBO decomposition is also undertaken at the mean treating continuous outcomes

as censored, given the number of individuals reporting zeros, i.e., not holding a particular financial asset (left-hand censoring), and having 100% of financial wealth in a particular asset (right-hand censoring, see sub-section 4.3).

For net financial wealth as well as each type of sub-component of financial wealth the intensive margin, i.e., the proportion held in a particular asset conditional upon investing in the asset, is explored across the distribution (RQ2). This is based upon the approach of Firpo et al. (2009) and Fortin et al. (2011) employing a recentred influence function (RIF) for quantile  $q(\theta)$  as follows (omitting subscripts for brevity):

$$RIF(y; q(\theta); F_y) = q(\theta) + \frac{(\theta - \mathbf{1}\{y \leq q(\theta)\})}{f_y(q(\theta))} \quad (3)$$

Where  $\mathbf{1}\{\cdot\}$  is an indicator function for whether the dependent variable, the proportion of a sub-category of assets value to total financial wealth, or net financial wealth, is at or below quantile  $q(\theta)$ . The marginal unconditional distribution is denoted by  $F_y$  and the density at  $q(\theta)$  is given by  $f_y(q(\theta))$ . Similar to the FBO decomposition, the RIF analysis yields corresponding explained and unexplained components, but at each point of the distribution of the dependent variable, as follows (omitting  $i$  subscripts):

$$q_{\theta}^M - q_{\theta}^F = (\bar{X}^M - \bar{X}^F)\hat{\beta}_{\theta}^M + \bar{X}^F(\hat{\beta}_{\theta}^M - \hat{\beta}_{\theta}^F) \equiv \Delta^{\theta} = \Delta_X^{\theta} + \Delta_{\beta}^{\theta} \quad (4)$$

The difference in the  $\theta$ -quantile of each outcome for men and women, is decomposed into the explained or composition effect,  $\Delta_X^{\theta}$ , defined at the  $\theta$ -quantile, and the unexplained or structural effect at the  $\theta$ -quantile,  $\Delta_{\beta}^{\theta}$ .<sup>16</sup> WAS cross sectional sample weights are used throughout the decomposition analysis and robust standard errors are reported in all estimates.

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<sup>16</sup> Note that RIF regressions rely on the assumption of linearity, and bias can arise as this assumption only holds true locally. In the analysis which follows to correct for specification error the RIF regression is combined with a reweighting function (Dinardo et al., 1996). This enables a separation of the specification error and reweighting error, from the composition and structural effects. For further details see Fortin et al. (2011). In practice, RIF models are estimated for each outcome with and without reweighting, where differences are insignificant.



In either the FBO or RIF decompositions, if the unexplained component dominates the explained component for a particular sub-category of financial wealth this signals that the difference in the observed gender gap is due to either differential returns to the covariates, omitted variables, or structural elements, where the literature to date has found that this is typically the case for financial wealth and stocks.

#### 4. RESULTS

Initially gender differentials in the probability of holding each sub-component of financial wealth are explored, before considering the intensive margin for the entire distribution (based on being an investor in a given asset). Robustness analysis is then undertaken, followed by exploring heterogeneity across several domains, before examining the gender gap in likelihood of being in financial difficulty and overall net financial wealth across the distribution.

##### *4.1 The gender gap at the extensive margin for different types of financial wealth*

The analysis starts by considering the gender gap in the probability of holding each type of financial wealth, i.e., at the extensive margin (RQ1). Table 3 shows the results of estimating equation (2) based upon a probit specification (Fairlie, 2005), for: savings accounts; cash ISAs, and; stocks and shares ISAs. Whilst Table 4 shows the equivalent results for: stocks and bonds; shares and options, and; unit trusts. The top panel of Tables 3 and 4 reports the coefficients, standard errors (in parenthesis) and the percentage contributed towards the gap from each component (in square brackets) for the: overall difference, explained and unexplained elements. What is evident for each sub-category of financial wealth is that the unexplained component dominates throughout, implying that the gender gap is largely attributable to differences in coefficients (returns to characteristics), i.e., if males and female had the same average characteristics, how much of the gender gap would remain because the effect of a given covariate. The financial assets where the endowment component is the largest is for savings account, stocks and shares ISAs (Table 3), and unit trusts (Table 4). For example, based on the

regressors (endowments), one would expect that the likelihood savings are held by females would be  $\beta_{\text{EXP}} = -0.0068$ , which equates to 24% higher than males (given the difference across the sexes is positive at 6%),<sup>17</sup> however, it appears that this determined not by the covariates, but the unexplained component  $\beta_{\text{UNEXP}} = 0.0359$  (76%).<sup>18</sup> For the US Cota et al. (2025) found no gender gap in the ratio of safe assets to total financial wealth. The differential in the probability of holding a particular asset across the sexes ranges from 12% for cash ISAs, where females have a higher probability of holding their financial wealth in these assets than males, through to -45% for shares and options where the female gap is the largest. Indeed, apart from the most liquid assets, i.e., savings accounts and cash ISAs, for each other type of financial asset females have a lower likelihood of holding a given type of financial wealth than their male counterparts. The remainder of each table shows the estimates for each covariate, along with standard errors (in parenthesis), for both the explained and the unexplained components.

The analysis shows that although the unexplained component dominates overall for each component of financial wealth – consistent with Sierminska et al. (2010) who consider overall wealth for Germany, Meriküll et al. (2021) in the case of Estonia, and Nolan and Palomino (2026) who explore pension wealth in GB – for each outcome in Tables 3 and 4 it is evident that most of the covariates in the unexplained component are statistically insignificant. Considering the role of covariates for the explained component labour market status (i.e., being in paid employment) and having a degree are statistically significant and the dominant factors for liquid assets (savings accounts and cash ISAs, Table 3) and also for more illiquid assets (stocks and bonds, and shares and options, Table 4). For example, for stock and bonds having a degree as the highest qualification contributes 33% to the explained component and reduces

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<sup>17</sup> Interestingly, this finding is at odds with Sabbaghi (2026) who considers the gender savings gap in terms of the percentage of respondents who report personally saving (or setting aside any money for any reason and using any mode of saving) over the past year. However, the methodology, time-period and data (which is micro data pooled across low-, middle- and upper-income countries) differ substantially.

<sup>18</sup> The difference  $\beta_{\text{DIFF}} = \beta_{\text{UNEXP}} - \beta_{\text{EXP}}$ , hence for savings accounts:  $0.0359 - 0.0068 = 0.0291$ .

the overall gender gap.<sup>19</sup> Housing tenure and annual income are both statistically significant for each type of financial wealth contributing to the explained gap in the likelihood of holding a given asset between the sexes, where both narrow the gender differential. This is also evident across each financial wealth category for whether the individual has or is accumulating pension wealth, with the exception of the gender gap in shares and options.

In terms of behavioural and attitudinal controls (RQ4), all sub-components of financial wealth are influenced by time preference and having high financial literacy. For example, answering all of questions regarding financial literacy correctly contributes 13% to the explained gap in the differential between males and females in the probability of owning stocks and/or bonds, in line with the findings of Merkoulova and Veld (2022) for the US, which is not surprising given that females typically exhibit lower levels of financial literacy than males, e.g., Lusardi and Mitchell (2008) and Tinghog et al. (2021).<sup>20</sup> It is noticeable that from the set of attitudinal controls that only financial optimism about future income has no significant impact on the explained gap across all sub-components of financial wealth, although expectations are found to influence a number of financial outcomes in the literature, e.g. Brown et al., (2024) and Cocco et al., (2025). Precautionary saving, i.e., saving for unexpected events, contributes to the gender gap in the likelihood of holding both liquid and illiquid wealth, with the exception of stocks and shares ISAs and unit trusts. Interesting risk tolerance contributes around 7% to the endowment effects for stocks and bonds, which is not surprising given the finding that risk attitudes influence stock ownership, e.g. Alessie et al. (2004), and is also consistent with the existing literature which has typically found that risk attitudes as well as exposure to portfolio risk differ across the sexes, e.g. see Charness and Gneezy (2012) and Bucciol and Miniaci (2015) respectively. Interesting, risk tolerance has no influence on shares and options.

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<sup>19</sup> Calculated from Table 4 as follows:  $\left(\frac{\beta_{EXP_{degree}}}{\beta_{EXP}}\right) \times 100\% = \left(\frac{-0.0020}{-0.006}\right) \times 100\% = 33.33\%$ .

<sup>20</sup> Calculated from Table 4 as follows:  $\left(\frac{\beta_{EXP_{fin.lit.}}}{\beta_{EXP}}\right) \times 100\% = \left(\frac{-0.0008}{-0.006}\right) \times 100\% = 13.33\%$ .

#### *4.2 The gender gap at the intensive margin for different types of financial wealth*

Next the intensive margin across the full distribution is explored (RQ2), conditional on holding a given asset, for each sub-component of financial wealth. The results are shown in Figures 3 to 8 for savings accounts, cash ISAs, stocks and shares ISAs, stocks and bonds, shares and options, and unit trusts respectively. Each figure shows the point estimate in explaining the gap, where in terms of interpreting the parameter estimates from equation (4), a positive  $\hat{\beta}_j$  in the endowment component means that the covariate  $x_j$  has a positive contribution on the explained gap. Confidence intervals are also provided at the 95% level.<sup>21</sup>

Considering the intensive margin of the proportion of financial held in savings accounts across the distribution in Figure 3, time preference, risk tolerance, financial literacy and whether the individual has or pays into a pension each have an impact, where the latter has the largest positive effect on the explained gap rising throughout the distribution up to the 45<sup>th</sup> percentile, and each of the aforementioned covariates are statistically significant at all points. Interestingly, the effect of time preference and financial literacy differs in sign between the extensive and intensive margins regarding the contribution to the explained component – signifying the importance of considering these two parts of the distribution separately. The only other variables which are statistically significant and have a negative effect on the explained gap are saving for unexpected events and having degree level education. Noticeably, the only attitudinal variables which are statistically insignificant are whether the individual trusts banks and if the individual is financially optimistic.

Turning to the proportion of financial wealth held in other type of assets at the intensive margin, Figures 4 to 8 again reveal, that covariates have little explanatory power across the distribution in contributing towards the endowment effect – all the impact would appear to be

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<sup>21</sup> Each figure only reports the estimate associated with the explained (endowment) component, given that the covariate estimates for the unexplained part of the gap were largely statistically insignificant (as found at the extensive margin in Tables 3 and 4).

on the extensive margin (Tables 3 and 4). Considering cash ISAs, Figure 4 shows that financial optimism, time preference and whether the individual has pension wealth have a positive impact on the explained gap typically culminating in magnitude at the 60<sup>th</sup> percentile. Interesting, at all points of the distribution apart from the bottom tail, age decreases the endowment effect, this suggests that for this particular asset females become potentially less resilient to adverse unexpected shocks (e.g., ill health or job loss) across the life-cycle compared to males. The only covariate which explains the gap at the intensive margin for stocks and shares ISAs is risk tolerance from the 25<sup>th</sup> to 80<sup>th</sup> percentile as can be seen from Figure 5. For stocks and bonds it is labour market status, significant between the 40<sup>th</sup> and 60<sup>th</sup> percentile, and risk tolerance significant between the 50<sup>th</sup> and 55<sup>th</sup> percentile (Figure 6), where for the latter higher risk tolerance reduces the gender gap consistent with women being more risk-averse when investing which may be a result of lower financial confidence (Bucher-Koenen et al., 2025). No covariate contributes to the endowment effect for either shares and options, and unit trusts, as can be seen from Figures 7 and 8 respectively.

The analysis at both the extensive and intensive margins has revealed that covariates mostly influence the likelihood of owning particular sub-categories of financial wealth rather than the overall proportion of financial wealth held in a given asset (conditional upon ownership). There are some instances where the direction of impact of a covariate differs between in extensive and intensive margins. Interesting, in comparison to previous findings in the literature there is little evidence that the gap in different asset categories can be explained by either life-cycle effects or marital status. However, attitudinal and behavioural controls do play a role, e.g., financial literacy which reduces the gender gap for all assets apart from unit

trusts, where the effect of financial literacy is around a quarter of the income effect for investing in stocks and bonds (Table 4).<sup>22</sup>

### *4.3 Sensitivity analysis*

In this sub-section several sensitivity checks are undertaken in order to verify that the results reported thus far are robust. Firstly, allowing for the censored nature of the data, where it is possible that there is bunching at both tails of the distribution, and secondly, by adopting an alternative decomposition approach based on Gelbach (2016). Finally, the role of time invariant unobserved fixed effects is explored by utilising the longitudinal nature of the WAS, in order to see the extent to which the decompositions change when adopting a panel FBO estimator.

By construction each of the dependent variables examined are bounded between zero (not owning a particular financial asset) and 100% (all financial wealth is invested in a given asset). Indeed, Figures 1 and 2 revealed that such censoring at both the left-hand side and right-hand side of the distribution was prevalent for each sub-component of financial wealth (e.g., for savings accounts 54% hold all their financial wealth in this sub-category). For robustness analysis, instead of treating the data generating process as two separate constructs, i.e., split into analysis of the likelihood of holding a given type of financial wealth (the extensive margin, Tables 3 and 4) and the distribution conditional on a non-zero monetary value (the intensive margin, Figures 3 to 8), equation (2) is estimated treating each outcome as censored based upon a tobit specification.

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<sup>22</sup> Although Table 1 showed there was no significant difference in the mean of the proportion of financial wealth invested in national savings and other types of investments across the sexes, it may be the case that there are differences at the extensive margin. Table A1 panel A in the appendix explores this by estimating linear probability models for national savings and also for “all other types of asset” decomposing the category into its constituent elements, i.e., the probability of holding: other types of ISAs; friendly society assets; insurance products; premium policies; endowment policies, and; all other investments. Approximately 26% of respondents hold national savings and around 0.4% have friendly society assets. The results show that there are no significant differences at either the 1% or 5% level, except for the likelihood of holding other types of investments (held by around 0.7% of respondents) where females are 0.23% less likely than males to have such assets (unfortunately there is no information in the WAS on what constitutes this catch-all category). In panel B of Table A1 FBO decomposition analysis is undertaken at the extensive margin, where it can be seen that the only significant difference between males and females is for the other types of investments category (column 7), where the unexplained component dominates at 82% compared to 18% stemming from endowments.

The results are shown in Figure 9 where the contribution of covariates to the explained component is shown along with 95% confidence intervals. For illiquid assets (saving accounts and cash ISAs) the largest effects stem from whether the individual has pension wealth, time preference (for cash ISAs only) life-cycle effects, and home ownership. For stocks and shares ISAs and stocks and bonds having pension wealth decreases the explained component and is the dominant factor, i.e., reduces the observed gender gap. Interestingly, financial literacy is only significant for illiquid financial wealth with the largest effects for stocks and bonds – but was found to have an influence at the extensive margin for liquid and illiquid assets (Tables 3 and 4). Only time preference, employment and housing tenure reduce the observed gap for shares and options, whereas age has the opposite effect; whilst for unit trusts annual income and pension wealth are the largest components to endowments. Overall, the results from treating the outcomes as censored are broadly in line with those observed at the extensive margin.

The following analysis considers an alternative approach to the FBO decomposition based upon Gelbach (2016). This method allows an identification of which covariates are responsible for changes in the key parameter of interest, the effect of gender upon each component of financial wealth, and also the contribution made by each variable to the gap. The approach is robust to the sequence in which covariates are added to the model, whereas other techniques such as the FBO approach may be influenced by sequence sensitivity and an arbitrary ordering of controls. It differs to the FBO decomposition by focusing solely on the explained component and enables a quantification of how much groups of covariates contribute to the overall explained gender gap in financial wealth sub-components. Given that the majority of the impact of covariates occurred at the extensive margin (Tables 3 and 4), this is the focus of the analysis, i.e., the likelihood of owning a particular financial asset ( $y$ ). Based upon a linear probability model the following is estimated for each outcome:

$$y_i = \alpha + \beta F_i + \sum_j \gamma_j x_{ij} + \epsilon_i \quad (5)$$

Defining  $F_i$  as a binary indicator equal to unity if the individual is female, if  $\gamma_j = 0$  then the estimate of  $\beta$  provides the raw gender gap without the inclusion of covariates, and if  $\gamma_j \neq 0$  this gives the unconditional gender gap in the probability of holding a given sub-component of financial wealth. Denoting  $\beta^r$  and  $\beta^c$  as the raw and conditional difference in the likelihood of holding a given financial asset,  $\Delta = \beta^r - \beta^c$  represents the proportion of the financial asset gap between the sexes explained by covariates. The Gelbach decomposition can be written as follows:

$$\Delta = \beta^r - \beta^c = \sum_j \gamma_j (\bar{x}_j^F - \bar{x}_j^M) = \sum_j \gamma_j \pi_j \quad (6)$$

The mean difference in the covariate  $x_{ij}$  between females and males is given by  $\pi_j = (\bar{x}_j^F - \bar{x}_j^M)$ ,  $\gamma_j$  is the partial effect of covariate  $x_j$  in the full model, and  $\gamma_j \pi_j$  is the contribution of the covariate  $x_j$  to the total explained difference  $\Delta$ . The percentage contributed to the gap from a given covariate is by:  $(\hat{\gamma}_j / \hat{\Delta}) \times 100\%$ .<sup>23</sup>

The results are shown in Table 5 by aggregated groups,<sup>24</sup> and the full estimates for each covariate in Table A2 in the appendix. The approach is implemented in order to assess the relative role of each group of covariates in explaining the gap in sub-components of financial wealth attributable to the introduction of control variables. In panel A of Table 5 the estimate of  $\beta$  is provided without the inclusion of covariates, where the probability of a female holding a savings account (stocks and bonds) is 3.6% (3.4%) higher (lower) than a male. Panel B shows the decomposition and the conditional estimate of  $\beta$ , standard error, and percentage contributed

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<sup>23</sup> The decomposition is based upon auxiliary regressions and the omitted variable bias formula, for further details see Gelbach (2016).

<sup>24</sup> Covariate groups are defined as follows: (i) human capital – quadratic in age, degree; (ii) labour market status – employee, unemployed; (iii) household composition – single, number of adults, number of children; (iv) resources – annual income, whether pension, housing tenure; (v) whether in very good or good health; (vi) attitudinal and/or behavioural – trust banks, save for a rainy day, time preference, risk tolerance, financially optimistic, and financial literacy.



to the explained gap, where the sign and statistical significance remain. The total gap to be explained,  $\Delta$ , is given at the bottom of the table, where for savings it is 1%, i.e.,  $\Delta = (0.0360 - 0.0459)$ , whilst for stocks and bonds it is 0.6%, i.e.,  $\Delta = (-0.0338 + 0.0282)$ . The covariates are grouped for brevity and show how they contribute to the explained gap along with the percentage contribution. The resources that the individual has (income, pension and housing tenure) have a large and significant effect on the explained gap for each outcome, for example contributing 71% and 111% to the gap in the likelihood of holding savings and cash ISAs respectively, and each covariate within the group is statistically significant for all outcomes (Table A1). Similarly, human capital is important in explaining the gap for each outcome, but has the opposite effect to resources in reducing the explained gap. Unlike the previous FBO analysis there is some evidence of life-cycle effects especially for more illiquid assets (Table A1). Household composition and health are largely insignificant throughout and where significance is achieved typically have small effects on the explained gap. The effects of labour market status are most evident for liquid assets as well as shares and options. As found in the FBO analysis attitudinal and behavioural controls play a role in explaining the gap for illiquid financial assets, where the largest effects in terms of magnitude are for stocks and bonds (49%), shares and options (160%), and unit trusts (75%). Consistent with the previous analysis based upon the FBO decompositions at the extensive margin (Tables 3 and 4) no role is found for financial optimism in explaining the gender gap, Table A1, yet in the literature this has been found to have a significant effect on financial behaviour, e.g., Puri and Robinson (2007). Overall, the results are broadly in line with those found from the FBO analysis of different types of financial wealth at the extensive margin, where the signs of the estimates correspond between Tables 3, 4 and A3. In addition, consistent with the earlier FBO analysis a role is revealed for attitudinal controls which is not trivial in magnitude in explaining the gender gap.

The final part of the sensitivity analysis considers a panel FBO decomposition equivalent fixed effects model for each sub-component of financial wealth at the extensive margin (see Kim, 2010; Kröger and Hartmann, 2021). The longitudinal decomposition attributes the difference between the sexes in the likelihood of owning a given type of asset into the following elements: the explained effect (endowments); the unexplained effect (coefficients), and; unobserved factors (individual level fixed effects for each group) that do not change within the period of observation. The longitudinal estimation sample is based on 28,407 observations with 71% of individuals observed twice. The results are shown in Table 6, where each column is a sub-category of financial wealth. The analysis is based on the change in the gender gap between waves 6 and 7 of the WAS (with the former as the base) for each outcome. Hence, the sample composition differs and as such the results are not directly comparable to the previous findings based on decomposition of the levels.

Panel A reports a summary of the decomposition showing the percentage contribution of each component to the total gender gap for each type of financial asset. It is noticeable that the unexplained component dominates the explained element of the gender gap, as found in the results of Tables 3 and 4 which is consistent with the existing literature, but there is also a role for fixed effects. These magnitudes are not trivial and typically outweigh the explained component as well as the unexplained component in some instances (e.g., stocks and bonds). In Panel B the contribution of blocks of covariates (as defined in Table 5) are shown for the explained component. The  $\beta$  estimates are provided with standard errors bootstrapped with 100 replications shown in parenthesis along with the percentage contribution to the explained component. Not surprisingly, given there are only two waves of data and the analysis employs fixed effects most groups of controls are statistically insignificant. The dominate set of controls in absolute magnitude which retain significance typically stem from household composition, e.g., explaining 88% of the endowment effect for the change in the likelihood of holding stocks

and shares ISAs between waves. This is potentially due to changes in marital status over time which would be consistent with the literature, e.g., Ruel and Hauser (2013). Interestingly, despite the inclusion of fixed effects attitudinal controls are also of relevance for the change in the probability of having cash ISAs, explaining 14% of the gap. Labour market status is only of statistical significance for the most liquid type of financial wealth, i.e., the change in the likelihood of having a savings account contributing 63% to the explained component. None of the covariate groupings are statistically significant in the endowment component for either the change in the extensive margin of stocks and options or unit trusts.<sup>25</sup>

Due to the fact there are only two waves of data, this means: (1) that many of the covariates are only likely to have a small (if any) change over time – especially binary indicators – and may be partially subsumed into the fixed effect; (2) given the small proportion of individuals holding financial wealth (particularly illiquid assets, Figure 1) it is highly probable that there will be negligible changes at the extensive margin for financial outcomes across waves, and; (3) the longitudinal sample size is significantly reduced by approximately 25% compared to non-panel estimates. Consequently, given the aforementioned reasons the preferred specifications are based on the earlier pooled cross-sectional results and subsequently in the remainder of the empirical analysis the data is treated as non-panel.

#### *4.4 The gender gap for different types of financial wealth – heterogeneity analysis*

Given that the existing literature has reported differences in the gender gap by couple status and at different points of the life-cycle (Section 2), although the evidence reported thus far has been mixed, the next part of the analysis considers such heterogeneity in any financial wealth gaps that exist between males and females (RQ5). The analysis is shown for savings accounts, cash ISAs and stocks and shares ISAs in Table 7; whilst Table 8 shows the results for stocks

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<sup>25</sup> Note that where the summation of the percentages in Table 6 Panel B across covariate groups doesn't equate to the explained percentage reported in Panel A this is due to the remainder of the endowment component being determined by year, month and/or regional fixed effects.

and bonds, shares and options and unit trusts, based upon the FBO decomposition. In both tables Panel A splits the analysis by marital status, whilst Panel B shows the gender decomposition by different age-bands. Both tables are structured in the same way, where the gender gap for each group is shown with the explained and unexplained components from the decomposition, along with the parameter estimates, the percentage contribution and standard errors.<sup>26</sup>

The gender gap is in favour of females and is statistically significant for liquid assets (savings accounts and cash ISAs) and is similar across marital status, however, compared to other types of financial wealth the unexplained component is noticeably much larger over 100%. The difference in the probability of wealth held in stocks and bonds, or unit trusts, is much higher for couples where females are disadvantaged, e.g., the gender gap for stocks and bonds is 36% for couples compared to just 29% for singletons (Table 8), with the explained component explaining only 24% and 21% respectively. These findings are consistent with Sierminska et al. (2010) for Germany and Ruel and Hauser (2013) for the US. This may reflect the financial decision-making power of males within couples (e.g., Fagereng et al., 2026), which can potentially leave women less able to build their own financial skills and knowledge (e.g., Cota et al., 2025).

Turning to heterogeneity over the life-cycle, the analysis of Table 7 shows females have a higher likelihood of holding savings accounts than males, particularly below the age of 25 and aged between 45-54. The gender gap in the probability of holding cash ISAs only stems for those aged 35 and over, peaking at 55-65 where the gap is 19%. Consistent with the earlier results the unexplained component dominates. Turning to more illiquid assets, the gender gap peaks for those aged 25-34 in terms of the likelihood of investing in stocks and shares ISAs,

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<sup>26</sup> Given the finding that most of the impact of the gender gap for each type of financial wealth occurred predominantly at the extensive margin, i.e. the probability of holding a given asset, the heterogeneity analysis is restricted to the extensive margin.

Table 7. Females are less likely to hold stocks and bonds, as well as shares and options, than males from the age of 25 to 65, where for the former the gap is largest for individuals aged 25-44, Table 8. Regarding shares and options the gender gap culminates at the age of 45-54, where females are 53% less likely to hold this particular type of asset. This is consistent with slower wealth accumulation as an individual ages, e.g., Neelakantan and Chang (2010); Goldsmith-Pinkham and Shue (2023). Interestingly, for stocks and bonds the explained component is largest at the age of 55-65 at 42%, whereas for shares and options the explained gap peaks for those aged 25-34. Clearly, there is evidence of heterogeneity over the life-cycle, consistent with Bartels et al. (2025) for Germany, but also across different components of financial wealth and degrees of liquidity. However, there is no evidence of monotonicity in the gender gap over the life-cycle.

#### *4.5 The probability of financial difficulty and net wealth over the distribution*

The likelihood of being in financial distress is also modelled (RQ6), defined as equal to unity if the individual has negative net wealth below the bottom quartile (e.g., Giarda, 2013; Brown and Taylor, 2008). This is estimated via equation (2) with a probit specification. The distribution of financial wealth net of liabilities (unsecured debts only),  $y_i$ , is also examined (RQ6), by estimating equation (4). Net financial wealth is negative for part of the sample and hence an inverse hyperbolic sine (IHS) transformation is adopted.<sup>27</sup>

Figure 10 shows a histogram of IHS net financial wealth for males (shown in red) and females (shown in blue). It is noticeable that females are observed to have moderately less extreme values of negative financial wealth and larger amounts of low levels of positive financial wealth than males. Whilst approximately, 17% of males and 15% of females have zero net financial wealth, i.e., where the amount of assets is equal to liabilities (including holding zero amounts in both assets and debt). Figure 11 shows that below the top quartile

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<sup>27</sup> The IHS transformation of  $y_i$  is given as follows:  $\sinh^{-1}(y_i) = \ln(y_i) + \sqrt{(y_i^2 + 1)}$ .

differences across the sexes in net financial wealth are either statistically insignificant or at the bottom tail of the distribution females have higher levels of net financial wealth compared to males. Conversely, at the top end of the distribution females hold lower amounts of net financial wealth than males which is consistent with evidence for other European countries, e.g., Schneebaum et al. (2018).

The probability of holding net financial wealth below the bottom quartile is shown in Table 9 column 1, the remainder of the table considers the gender gap in net financial wealth at or above the 75<sup>th</sup> percentile where women fare worse than men (i.e., having lower monetary amounts of net financial wealth). The table is constructed in the same way as Tables 3 and 4. The analysis shows that females have a 4% lower probability compared to males of having financial difficulty (based upon the above definition), and 2% lower level of net financial wealth at each point of the distribution (at or above the top quartile) compared to males. It is also evident that the majority of the gender gap for each outcome stems from the unexplained component, and that this increases across the distribution.

Financial literacy and saving for a rainy day contribute negatively to the explained component, i.e., reduce the likelihood of having net wealth below the bottom quartile, whilst conversely, the gap is increasing in annual income, education and having paid employment. Across the distribution of net financial wealth annual income contributes to both the endowment and unexplained components. Annual income, saving for a rainy day, time preference, and having a degree all have a negative effect on the explained part of the net wealth gap between the sexes at each point of the distribution, i.e., narrowing the gender gap in net financial wealth. Interestingly, there is no role for financial literacy on the level of net financial wealth in contrast to its importance in explaining the likelihood of holding particular sub-categories of financial wealth (Tables 3 and 4).

## 5. CONCLUSION

This paper has provided unique evidence for what drives the gender gap for different types of financial wealth in the contemporary GB economy, namely: savings accounts; cash ISAs; stocks and shares ISAs; stocks and bonds; shares and options, and; unit trusts, as well as overall financial wealth net of liabilities, and the likelihood of facing financial distress. Whilst females are found to hold a higher proportion of their wealth compared to males in liquid assets, e.g., savings accounts, conversely, they hold lower levels of their wealth in illiquid assets such as stocks and bonds (RQ1&3). Females have a lower probability than males of being in financial difficulty, however, they have lower levels of net financial wealth compared to males at the top end of the distribution, at or above the top quartile where the gender differential is significant (RQ6). Hence, the evidence suggests that the gender gap for liquid categories of financial wealth and financial distress are not detrimental to females (RQ3), e.g., females have a higher probability of holding a savings account compared to males. The majority of the gender gap for each sub-component of financial wealth stems from the likelihood of holding a given asset, rather than the proportion of financial wealth held in a particular type of asset across the distribution (RQ1&2). This is particularly evident for stocks and options, and unit trusts, where no covariate is associated with the explained gap at the intensive margin. In common with the existing literature some evidence is found in terms of heterogeneity by couple status and over the life-cycle (RQ5). For the former, this is consistent with bargaining power within couples in terms of who is responsible for managing finances where females are less likely to make financial decisions compared to males when in a couple household, which may culminate in a differential gender gap when comparing couples to singletons consistent with the evidence reported herein especially for illiquid assets.

Behavioural and attitudinal characteristics are associated with the gender gap related to the likelihood of holding certain types of financial wealth (RQ4). For instance time preference

and financial literacy, regardless of the degree of asset liquidity, i.e., for each asset type, whereas saving for unexpected events plays a role in explaining the observed gap for cash ISAs and savings accounts. These effects are over and above controlling for a rich set of socio-economic characteristics and robust to a number of sensitivity checks. For example, high financial literacy contributes approximately a third (fifth) of the effect of education (annual income) in explaining the gender gap in stocks and bonds. Moreover, endowment effects are largely non-existent for explaining the proportion of financial wealth held in each asset, condition upon ownership, with the exception of liquid assets. In common with findings in the existing literature a large element of the gender gap stems from the unexplained component of the decomposition (RQ7). This potentially reflects the role of structural factors in driving the observable wealth gap, with a nuanced role for individual differences in covariates. This is also apparent in sensitivity analysis which exploits the longitudinal nature of the WAS.

In terms of policy, given the role found for behavioural covariates in partially explaining the gender gap in the ownership of certain types of financial wealth, empowering individuals to shape their future could culminate in a stronger orientation regarding planning for expenses, thereby insulating households against shocks, especially given the role found for saving for unexpected events in explaining the gender gap for more liquid assets, as well as position individuals better for retirement. Financial literacy was found to play a role in influencing the observed gender gap in the probability of holding certain sub-categories of financial assets, both liquid (e.g., saving accounts) and illiquid (e.g., stock and bonds), as well as the gender difference in the likelihood of facing financial difficulty.<sup>28</sup> Hence, improving individuals' financial knowledge but also instilling confidence in their knowledge, which

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<sup>28</sup> The economic crisis of 2007-8 which caused a shock to private wealth arguably adversely affected the less financially literate to a greater extent as they were more likely to sell risky assets when stock values depreciated and then chose not to reinvest once the market improved, e.g. Bucher-Koenen and Ziegelmeyer (2014). Such crises could influence investment behaviour long-term where the financially illiterate miss out on the higher long-term returns of the stock market. Hence, improving financial literacy may make the less financially literate, e.g. females, more likely to remain in the stock market following negative shocks and reap longer term returns.



females typically lack relative to males (Bucher-Koenen et al., 2025), should be of importance in not only lowering gender inequality in financial literacy, but may also ultimately influence the accumulation of overall financial wealth and its sub-components.<sup>29</sup> This could potentially shift investors, especially females, away from highly liquid safe assets (the current predominant state in the UK), e.g. savings accounts and cash ISAs, towards having a higher proportion of people holding mainstream investments which is aligned with strategy for 2025-2030 proposed by the UK Financial Conduct Authority.<sup>30</sup>

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<sup>29</sup> This is also relevant for the stock market participation puzzle where despite potential high returns few individuals actually hold stocks, going against predictions from portfolio theory where a proportion of wealth would be expected to be held in risky assets. Potential reasons and barriers to holding stocks are a lack of financial awareness and the information costs associated with market entry, e.g., Guiso and Jappelli (2005).

<sup>30</sup> See FCA ‘[Strategy 2025 2030 Deepening Trust Rebalancing Risk Supporting Growth Improving Lives](#)’.

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**TABLE 1:** Tests of differences in means for sub-components of financial wealth and net financial wealth by gender

|                                                                    | MALE ( $\bar{y}^M$ ) | FEMALE ( $\bar{y}^F$ ) | Test of equality in means<br>$H_0: \bar{y}^M - \bar{y}^F = 0$<br>F-test; $p$ -value |
|--------------------------------------------------------------------|----------------------|------------------------|-------------------------------------------------------------------------------------|
| Savings accounts as a % of financial wealth                        | 31.92                | 35.12                  | 51.91; $p=0.000$                                                                    |
| National savings as a % of financial wealth                        | 4.24                 | 4.23                   | 0.01; $p=0.969$                                                                     |
| Cash ISAs as a % of financial wealth                               | 14.93                | 12.84                  | 44.78; $p=0.000$                                                                    |
| Stocks & shares ISAs as a % of financial wealth                    | 3.65                 | 2.85                   | 27.60; $p=0.000$                                                                    |
| Stocks & bonds as a % of financial wealth                          | 2.65                 | 1.55                   | 83.56; $p=0.000$                                                                    |
| Shares & options as a % of financial wealth                        | 3.53                 | 1.81                   | 137.41; $p=0.000$                                                                   |
| Unit trusts as a % of financial wealth                             | 0.93                 | 0.84                   | 6.28; $p=0.012$                                                                     |
| All other types of assets as a % of financial wealth               | 3.33                 | 3.13                   | 1.40; $p=0.237$                                                                     |
| Net financial wealth (financial wealth minus total unsecured debt) | £29,878              | £17,466                | 13.04; $p=0.000$                                                                    |
| OBSERVATIONS                                                       | 18,089               | 19,773                 |                                                                                     |

**TABLE 2:** Tests of differences in means for covariates by gender

|                                 | MALE ( $\bar{x}_j^M$ ) | FEMALE ( $\bar{x}_j^F$ ) | Test of equality in means<br>$H_0: \bar{x}_j^M - \bar{x}_j^F = 0$<br>F-test; $p$ -value |
|---------------------------------|------------------------|--------------------------|-----------------------------------------------------------------------------------------|
| Marital status single (=1)      | 0.460                  | 0.434                    | 26.09; $p=0.000$                                                                        |
| Very good health (=1)           | 0.238                  | 0.270                    | 53.90; $p=0.000$                                                                        |
| Log total income                | 9.851                  | 9.473                    | 111.22; $p=0.000$                                                                       |
| Pension (=1)                    | 0.088                  | 0.053                    | 170.21; $p=0.000$                                                                       |
| Trust banks (=1)                | 0.054                  | 0.066                    | 23.60; $p=0.000$                                                                        |
| Save for rainy day (=1)         | 0.258                  | 0.274                    | 12.57; $p=0.000$                                                                        |
| Time preference (=1)            | 0.228                  | 0.208                    | 20.57; $p=0.000$                                                                        |
| Risk tolerance (=1)             | 0.083                  | 0.074                    | 8.97; $p=0.003$                                                                         |
| Financially optimistic (=1)     | 0.297                  | 0.297                    | 0.00; $p=0.961$                                                                         |
| Financial literacy (=1)         | 0.470                  | 0.443                    | 26.83; $p=0.000$                                                                        |
| Employee (=1)                   | 0.817                  | 0.733                    | 384.18; $p=0.000$                                                                       |
| Unemployed (=1)                 | 0.036                  | 0.023                    | 53.95; $p=0.000$                                                                        |
| Number of children (0-5)        | 0.627                  | 0.716                    | 75.72; $p=0.000$                                                                        |
| Number of adults (0-4)          | 1.427                  | 1.339                    | 79.89; $p=0.000$                                                                        |
| Age                             | 39                     | 41                       | 5.42; $p=0.019$                                                                         |
| Degree (=1)                     | 0.325                  | 0.364                    | 66.14; $p=0.000$                                                                        |
| Owned outright or mortgage (=1) | 0.670                  | 0.651                    | 16.24; $p=0.000$                                                                        |
| OBSERVATIONS                    | 18,089                 | 19,773                   |                                                                                         |

**TABLE 3:** Decomposition of financial wealth sub-components by gender – extensive margin

|                             | SAVINGS<br>ACCOUNTS |           | CASH<br>ISAs |           | STOCKS &<br>SHARES ISAs |            |
|-----------------------------|---------------------|-----------|--------------|-----------|-------------------------|------------|
|                             | DIFF                |           | DIFF         |           | DIFF                    |            |
|                             | 0.0291***           |           | 0.0288***    |           | -0.0172***              |            |
|                             | (0.006)             |           | (0.005)      |           | (0.003)                 |            |
|                             | [6%]                |           | [12%]        |           | [-22%]                  |            |
|                             | EXP                 | UNEXP     | EXP          | UNEXP     | EXP                     | UNEXP      |
|                             | -0.0068**           | 0.0359*** | -0.0041**    | 0.0330*** | -0.0042***              | -0.0130*** |
|                             | (0.003)             | (0.006)   | (0.002)      | (0.005)   | (0.001)                 | (0.003)    |
|                             | [-24%]              | [123%]    | [-14%]       | [114%]    | [24%]                   | [76%]      |
| Marital status single (=1)  | -0.0001             | 0.0028    | -0.0002      | 0.0011    | -0.0002                 | 0.0004     |
|                             | (0.000)             | (0.005)   | (0.000)      | (0.006)   | (0.000)                 | (0.002)    |
| Very good health (=1)       | -0.0000             | 0.0040    | 0.0002       | 0.0028    | -0.0001                 | 0.0027*    |
|                             | (0.000)             | (0.004)   | (0.000)      | (0.004)   | (0.000)                 | (0.001)    |
| Log total income            | -0.0004             | -0.0149   | -0.0005*     | 0.0000    | -0.0014**               | -0.0103*   |
|                             | (0.000)             | (0.013)   | (0.000)      | (0.013)   | (0.000)                 | (0.005)    |
| Pension (=1)                | -0.0021***          | -0.0001   | -0.0011***   | 0.0008    | -0.0029***              | 0.0006     |
|                             | (0.000)             | (0.002)   | (0.000)      | (0.002)   | (0.001)                 | (0.000)    |
| Trust banks (=1)            | -0.0003             | 0.0001    | 0.0000       | 0.0007    | -0.0009**               | 0.0001     |
|                             | (0.000)             | (0.001)   | (0.000)      | (0.002)   | (0.000)                 | (0.001)    |
| Save for rainy day (=1)     | -0.0022**           | 0.0118**  | -0.0015***   | 0.0071    | 0.0014                  | -0.0026    |
|                             | (0.001)             | (0.004)   | (0.000)      | (0.004)   | (0.001)                 | (0.001)    |
| Time preference (=1)        | -0.0008**           | 0.0001    | -0.0008**    | -0.0038   | -0.0008**               | 0.0007     |
|                             | (0.000)             | (0.003)   | (0.000)      | (0.003)   | (0.000)                 | (0.001)    |
| Risk tolerance (=1)         | 0.0003*             | -0.0005   | 0.0003*      | 0.0023    | -0.0007*                | -0.0021**  |
|                             | (0.000)             | (0.002)   | (0.000)      | (0.002)   | (0.000)                 | (0.001)    |
| Financially optimistic (=1) | -0.0000             | -0.0055   | 0.0000       | -0.0040   | 0.0000                  | -0.0003    |
|                             | (0.000)             | (0.004)   | (0.000)      | (0.004)   | (0.000)                 | (0.001)    |
| Financial literacy (=1)     | -0.0010***          | 0.0040    | -0.0005**    | 0.0002    | -0.0004**               | -0.0011    |
|                             | (0.000)             | (0.006)   | (0.000)      | (0.006)   | (0.000)                 | (0.002)    |
| Age                         | 0.0013              | 0.0706    | -0.0006      | 0.0448    | 0.0007                  | -0.0023    |
|                             | (0.001)             | (0.182)   | (0.001)      | (0.202)   | (0.001)                 | (0.081)    |
| Age squared                 | -0.0006             | -0.0358   | 0.0009       | 0.0253    | 0.0006                  | 0.0180     |
|                             | (0.001)             | (0.097)   | (0.001)      | (0.106)   | (0.001)                 | (0.042)    |
| Employee (=1)               | -0.0076***          | -0.0185   | -0.0043***   | -0.0021   | -0.0010                 | 0.0046     |
|                             | (0.001)             | (0.013)   | (0.001)      | (0.014)   | (0.001)                 | (0.005)    |
| Unemployed (=1)             | 0.0010***           | -0.0002   | 0.0002       | 0.0006    | 0.0003                  | 0.0003     |
|                             | (0.000)             | (0.001)   | (0.000)      | (0.001)   | (0.000)                 | (0.001)    |
| Degree (=1)                 | -0.0039***          | 0.0126**  | -0.0025***   | 0.0007    | -0.0037**               | 0.0045*    |
|                             | (0.001)             | (0.005)   | (0.000)      | (0.005)   | (0.001)                 | (0.002)    |
| Number of children          | -0.0002             | -0.0030   | -0.0015***   | 0.0010    | -0.0012**               | 0.0013     |
|                             | (0.000)             | (0.005)   | (0.000)      | (0.005)   | (0.000)                 | (0.002)    |
| Number of adults            | 0.0005              | -0.0021   | 0.0019***    | 0.0014    | 0.0005                  | 0.0000     |
|                             | (0.000)             | (0.009)   | (0.000)      | (0.010)   | (0.000)                 | (0.003)    |
| Own outright/mortgage (=1)  | -0.0031**           | 0.0101    | -0.0020*     | 0.0240*   | -0.0021**               | 0.0070     |
|                             | (0.001)             | (0.009)   | (0.001)      | (0.012)   | (0.001)                 | (0.004)    |
| OBSERVATIONS                | 37,862              |           |              |           |                         |            |

\*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% respectively. Figures in parenthesis are robust standard errors.

**TABLE 4:** Decomposition of financial wealth sub-components by gender – extensive margin

|                               | STOCKS &<br>BONDS |              | SHARES &<br>OPTIONS |              | UNIT<br>TRUSTS |              |
|-------------------------------|-------------------|--------------|---------------------|--------------|----------------|--------------|
|                               | <u>DIFF</u>       |              | <u>DIFF</u>         |              | <u>DIFF</u>    |              |
|                               | -0.0260***        |              | -0.0279***          |              | -0.0041**      |              |
|                               | (0.003)           |              | (0.003)             |              | (0.002)        |              |
|                               | [-33%]            |              | [-45%]              |              | [-17%]         |              |
|                               | <u>EXP</u>        | <u>UNEXP</u> | <u>EXP</u>          | <u>UNEXP</u> | <u>EXP</u>     | <u>UNEXP</u> |
|                               | -0.0060***        | -0.0200***   | -0.0036***          | -0.0243***   | -0.0011*       | -0.0029*     |
|                               | (0.001)           | (0.003)      | (0.001)             | (0.002)      | (0.000)        | (0.001)      |
|                               | [23%]             | [77%]        | [13%]               | [87%]        | [28%]          | [72%]        |
| Marital status single (=1)    | -0.0002           | 0.0026       | -0.0003*            | -0.0007      | -0.0002        | -0.0665      |
|                               | (0.000)           | (0.002)      | (0.000)             | (0.002)      | (0.000)        | (4.360)      |
| Very good health (=1)         | -0.0003           | -0.0012      | 0.0002              | 0.0001       | -0.0002*       | -0.0975      |
|                               | (0.000)           | (0.001)      | (0.000)             | (0.001)      | (0.000)        | (6.388)      |
| Log total income              | -0.0010***        | 0.0031       | 0.0016**            | -0.0030      | -0.0008**      | -0.1195      |
|                               | (0.000)           | (0.005)      | (0.000)             | (0.006)      | (0.000)        | (7.813)      |
| Pension (=1)                  | -0.0018***        | 0.0012**     | -0.0001             | -0.0000      | -0.0005*       | -0.0071      |
|                               | (0.000)           | (0.000)      | (0.000)             | (0.001)      | (0.000)        | (0.463)      |
| Trust banks (=1)              | -0.0007**         | 0.0008       | -0.0002             | -0.0011      | -0.0002        | -0.0316      |
|                               | (0.000)           | (0.001)      | (0.000)             | (0.001)      | (0.000)        | (2.061)      |
| Save for rainy day (=1)       | -0.0009*          | -0.0015      | -0.0003*            | 0.0007       | 0.0004         | 0.0817       |
|                               | (0.000)           | (0.001)      | (0.000)             | (0.001)      | (0.000)        | (5.340)      |
| Time preference (=1)          | -0.0008***        | -0.0009      | -0.0004**           | -0.0002      | -0.0002*       | -0.0701      |
|                               | (0.000)           | (0.001)      | (0.000)             | (0.001)      | (0.000)        | (4.593)      |
| Risk tolerance (=1)           | -0.0004*          | -0.0007      | -0.0001             | 0.0004       | -0.0001        | 0.0366       |
|                               | (0.000)           | (0.001)      | (0.000)             | (0.001)      | (0.000)        | (2.397)      |
| Financially optimistic (=1)   | -0.0000           | -0.0014      | -0.0000             | -0.0017      | 0.0000         | 0.0875       |
|                               | (0.000)           | (0.001)      | (0.000)             | (0.001)      | (0.000)        | (5.729)      |
| Financial literacy (=1)       | -0.0008***        | 0.0005       | -0.0004**           | 0.0044       | -0.0001        | 0.2546       |
|                               | (0.000)           | (0.002)      | (0.000)             | (0.002)      | (0.000)        | (16.678)     |
| Age                           | 0.0012            | 0.1315       | 0.0025              | 0.0361       | 0.0000         | 11.8785      |
|                               | (0.001)           | (0.079)      | (0.001)             | (0.080)      | (0.000)        | (776.792)    |
| Age squared                   | -0.0002           | -0.0575      | -0.0021             | -0.0342      | 0.0004         | -6.1758      |
|                               | (0.000)           | (0.040)      | (0.001)             | (0.041)      | (0.000)        | (403.999)    |
| Employee (=1)                 | -0.0025***        | -0.0105*     | -0.0040***          | 0.0022       | 0.0002         | -0.4872      |
|                               | (0.000)           | (0.005)      | (0.000)             | (0.007)      | (0.000)        | (31.900)     |
| Unemployed (=1)               | -0.0000           | -0.0004      | -0.0001             | -0.0012      | 0.0000         | 0.0241       |
|                               | (0.000)           | (0.001)      | (0.000)             | (0.001)      | (0.000)        | (1.577)      |
| Degree (=1)                   | -0.0020***        | -0.0020      | 0.0001              | -0.0077***   | -0.0010*       | 0.0803       |
|                               | (0.000)           | (0.002)      | (0.000)             | (0.002)      | (0.000)        | (5.236)      |
| Number of children            | -0.0006**         | -0.0035      | -0.0002             | -0.0051**    | -0.0005**      | -0.0558      |
|                               | (0.000)           | (0.002)      | (0.000)             | (0.002)      | (0.000)        | (3.630)      |
| Number of adults              | 0.0002            | 0.0088*      | 0.0004*             | 0.0009       | 0.0002         | -0.3834      |
|                               | (0.000)           | (0.004)      | (0.000)             | (0.004)      | (0.000)        | (25.109)     |
| Own outright or mortgage (=1) | -0.0014**         | 0.0073       | -0.0010**           | 0.0052       | -0.0006**      | -0.2437      |
|                               | (0.000)           | (0.005)      | (0.000)             | (0.005)      | (0.000)        | (16.059)     |
| OBSERVATIONS                  | 37,862            |              |                     |              |                |              |

\*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% respectively. Figures in parenthesis are robust standard errors.



**TABLE 5:** Gelbach decomposition of financial wealth sub-components by gender – extensive margin

|                            | SAVINGS ACC                    | CASH ISAs                       | STOCKS & SHARES ISAs            | STOCKS & BONDS                 | SHARES & OPTIONS                | UNIT TRUSTS                     |
|----------------------------|--------------------------------|---------------------------------|---------------------------------|--------------------------------|---------------------------------|---------------------------------|
| <u>A) RAW GAP</u>          |                                |                                 |                                 |                                |                                 |                                 |
| Female ( $\hat{\beta}^r$ ) | 0.0360***<br>(0.006)           | 0.0378***<br>(0.005)            | -0.0193***<br>(0.003)           | -0.338***<br>(0.003)           | -0.0320***<br>(0.003)           | -0.0076***<br>(0.002)           |
| <u>B) CONDITIONAL GAP</u>  |                                |                                 |                                 |                                |                                 |                                 |
| Female ( $\hat{\beta}^c$ ) | 0.0459***<br>(0.006)           | 0.0424***<br>(0.005)            | -0.0156***<br>(0.003)           | -0.0282***<br>(0.003)          | -0.0315***<br>(0.002)           | -0.0068***<br>(0.002)           |
| <i>Covariates</i>          |                                |                                 |                                 |                                |                                 |                                 |
| Human capital              | 0.0044***<br>(0.001)<br>[-44%] | 0.0029***<br>(0.001)<br>[-63%]  | 0.0028***<br>(0.001)<br>[-76%]  | 0.0021***<br>(0.000)<br>[-38%] | 0.0007***<br>(0.000)<br>[-140%] | 0.0010***<br>(0.000)<br>[-125%] |
| Labour market status       | -0.0072***<br>(0.001)<br>[73%] | -0.0035***<br>(0.001)<br>[76%]  | 0.0016***<br>(0.000)<br>[-43%]  | 0.0001<br>(0.000)<br>[-2%]     | -0.0015***<br>(0.000)<br>[300%] | 0.0012***<br>(0.000)<br>[-150%] |
| Household composition      | -0.0003<br>(0.000)<br>[3%]     | 0.0008**<br>(0.000)<br>[-17%]   | -0.0000<br>(0.000)<br>[0%]      | -0.0003*<br>(0.000)<br>[5%]    | 0.0001<br>(0.000)<br>[-20%]     | -0.0000<br>(0.000)<br>[0%]      |
| Resources                  | -0.0070***<br>(0.001)<br>[71%] | -0.0051***<br>(0.001)<br>[111%] | -0.0063***<br>(0.000)<br>[170%] | -0.0050***<br>(0.000)<br>[89%] | 0.0007***<br>(0.000)<br>[-140%] | -0.0022***<br>(0.000)<br>[275%] |
| Health                     | 0.0000<br>(0.000)<br>[0%]      | 0.0001<br>(0.000)<br>[-2%]      | 0.000<br>(0.000)<br>[0%]        | -0.0003**<br>(0.000)<br>[5%]   | 0.0002***<br>(0.000)<br>[-40%]  | -0.0001*<br>(0.000)<br>[13%]    |
| Attitudinal                | -0.0001<br>(0.001)<br>[4%]     | 0.0007<br>(0.001)<br>[-15%]     | -0.0018***<br>(0.001)<br>[38%]  | -0.0021***<br>(0.001)<br>[49%] | -0.0008***<br>(0.000)<br>[160%] | -0.0006**<br>(0.000)<br>[75%]   |
| GAP ( $\hat{\Delta}$ )     | -0.0099***<br>(0.002)          | -0.0046***<br>(0.002)           | -0.0037***<br>(0.001)           | -0.0056***<br>(0.001)          | -0.0005<br>(0.001)              | -0.0008<br>(0.001)              |
| OBSERVATIONS               |                                |                                 |                                 | 37,862                         |                                 |                                 |

\*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% respectively. Figures in parenthesis are robust standard errors. Covariate groups: (i) human capital – quadratic in age, degree; (ii) labour market status – employee, unemployed; (iii) household composition – single, number of adults, number of children; (iv) resources – annual income, whether pension, housing tenure; (v) whether in very good or good health; (vi) Attitudinal – trust banks, save for a rainy day, time preference, risk tolerance, financially optimistic, and financial literacy. The remaining contribution to the gap stems from year, month and regional fixed effects.

**TABLE 6:** Longitudinal decomposition of the change in financial wealth sub-components between waves by gender – extensive margin

|                         | SAVINGS ACC       | CASH ISAs       | STOCKS & SHARES ISAs | STOCKS & BONDS   | SHARES & OPTIONS | UNIT TRUSTS    |
|-------------------------|-------------------|-----------------|----------------------|------------------|------------------|----------------|
| <u>A) DECOMPOSITION</u> |                   |                 |                      |                  |                  |                |
| Explained               | -39%              | -32%            | -45%                 | 61%              | -22%             | 14%            |
| Unexplained             | -57%              | 254%            | 175%                 | -173%            | 118%             | 151%           |
| Fixed Effect            | 196%              | -122%           | -30%                 | 212%             | 4%               | -65%           |
| <u>B) EXPLAINED</u>     |                   |                 |                      |                  |                  |                |
|                         | $\beta$ (SE)      | $\beta$ (SE)    | $\beta$ (SE)         | $\beta$ (SE)     | $\beta$ (SE)     | $\beta$ (SE)   |
| Human capital           | 0.001 (0.001)     | -0.000 (0.000)  | 0.001 (0.002)        | 0.001 (0.001)    | 0.001 (0.000)    | 0.000 (0.000)  |
|                         | [28%]             | [1%]            | [-41%]               | [15%]            | [-10%]           | [38%]          |
| Labour market status    | 0.002** (0.001)   | 0.001 (0.001)   | -0.000 (0.000)       | 0.000 (0.000)    | 0.001 (0.000)    | -0.000 (0.000) |
|                         | [63%]             | [-6%]           | [17%]                | [10%]            | [-11%]           | [-21%]         |
| Household composition   | -0.007*** (0.002) | 0.001 (0.002)   | -0.002*** (0.000)    | 0.002*** (0.000) | -0.000 (0.001)   | -0.000 (0.001) |
|                         | [-218%]           | [-8%]           | [88%]                | [23%]            | [3%]             | [-1%]          |
| Resources               | 0.001 (0.002)     | 0.001 (0.002)   | -0.001 (0.001)       | 0.000 (0.001)    | 0.000 (0.001)    | -0.000 (0.001) |
|                         | [24%]             | [-4%]           | [-31%]               | [9%]             | [-5%]            | [-1%]          |
| Health                  | 0.000 (0.000)     | 0.000 (0.000)   | 0.000 (0.000)        | -0.000 (0.000)   | -0.000 (0.000)   | -0.000 (0.000) |
|                         | [7%]              | [0%]            | [-3%]                | [-2%]            | [-1%]            | [-1%]          |
| Attitudinal             | 0.002 (0.002)     | 0.002** (0.000) | -0.000 (0.002)       | -0.000 (0.002)   | -0.000 (0.000)   | 0.000 (0.001)  |
|                         | [58%]             | [-14%]          | [21%]                | [0%]             | [3%]             | [10%]          |
| OBSERVATIONS            |                   |                 | 28,407               |                  |                  |                |

\*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% respectively. Figures in parenthesis are bootstrapped standard errors with 100 replications. Results based on decomposing the change in gender gap between waves adopting a panel FBO estimator incorporating fixed effects. Covariate groups: (i) human capital – quadratic in age, degree; (ii) labour market status – employee, unemployed; (iii) household composition – single, number of adults, number of children; (iv) resources – annual income, whether pension, housing tenure; (v) whether in very good or good health; (vi) Attitudinal – trust banks, save for a rainy day, time preference, risk tolerance, financially optimistic, and financial literacy. Year, month and regional fixed effects are also incorporated.

**TABLE 7:** Decomposition of financial wealth sub-components by gender heterogeneity analysis – extensive margin

|                          |       |  | SAVINGS ACCOUNTS |            |         | CASH ISAs |            |         | STOCKS & SHARES ISAs |            |         |
|--------------------------|-------|--|------------------|------------|---------|-----------|------------|---------|----------------------|------------|---------|
| <u>A) MARITAL STATUS</u> |       |  | %                | $\beta$    | (SE)    | %         | $\beta$    | (SE)    | %                    | $\beta$    | (SE)    |
| SINGLE                   | GAP   |  | 7                | 0.0340***  | (0.010) | 13        | 0.0311***  | (0.008) | -23                  | -0.0169*** | (0.004) |
|                          | EXP   |  | -5               | -0.0016    | (0.004) | -5        | -0.0016*** | (0.003) | 28                   | -0.0048*** | (0.002) |
|                          | UNEXP |  | 105              | 0.0356***  | (0.009) | 105       | 0.0327***  | (0.008) | 72                   | -0.0121*** | (0.004) |
| COUPLE                   | GAP   |  | 5                | 0.0249***  | (0.008) | 12        | 0.0274***  | (0.007) | -22                  | -0.0176*** | (0.004) |
|                          | EXP   |  | -30              | -0.0075**  | (0.003) | -20       | -0.0055**  | (0.003) | 22                   | -0.0039*** | (0.001) |
|                          | UNEXP |  | 130              | 0.0324***  | (0.008) | 120       | 0.0329***  | 0.006)  | 78                   | -0.0137*** | (0.004) |
| <u>B) LIFE-CYCLE</u>     |       |  | %                | $\beta$    | (SE)    | %         | $\beta$    | (SE)    | %                    | $\beta$    | (SE)    |
| AGED <25                 | GAP   |  | 16               | 0.0496***  | (0.020) | -1        | -0.0020    | (0.015) | -17                  | -0.0039    | (0.005) |
|                          | EXP   |  | -14              | -0.0069    | (0.008) | 24        | -0.0005    | (0.006) | 2                    | -0.0001    | (0.002) |
|                          | UNEXP |  | 114              | 0.0565***  | (0.018) | 76        | -0.0015    | (0.014) | 98                   | -0.0038    | (0.005) |
| AGED 25-34               | GAP   |  | 7                | 0.0304*    | (0.015) | 3         | 0.0056     | (0.012) | -54                  | -0.0187*** | (0.005) |
|                          | EXP   |  | 34               | 0.0102     | (0.007) | -120      | -0.0067    | (0.005) | 18                   | -0.0034*   | (0.002) |
|                          | UNEXP |  | 66               | 0.0202     | (0.013) | 220       | 0.0122     | (0.011) | 82                   | -0.0153*** | (0.004) |
| AGED 35-44               | GAP   |  | -2               | -0.0092    | (0.013) | 7         | 0.0184     | (0.012) | -33                  | -0.0230*** | (0.006) |
|                          | EXP   |  | 156              | -0.0143**  | (0.006) | -44       | -0.0081*   | (0.005) | 23                   | -0.0052*** | (0.002) |
|                          | UNEXP |  | -56              | 0.0051     | (0.012) | 144       | 0.0264***  | (0.011) | 77                   | -0.0178*** | (0.005) |
| AGED 45-54               | GAP   |  | 11               | 0.0572***  | (0.012) | 17        | 0.0415***  | (0.010) | -18                  | -0.0163*** | (0.006) |
|                          | EXP   |  | -6               | -0.0032    | (0.005) | -4        | -0.0017    | (0.004) | 33                   | -0.0054**  | (0.002) |
|                          | UNEXP |  | 106              | 0.0604***  | (0.011) | 104       | 0.0431***  | (0.009) | 67                   | -0.0109*   | (0.006) |
| AGED 55-65               | GAP   |  | 3                | 0.0190*    | (0.011) | 19        | 0.0601***  | (0.011) | -14                  | -0.0201*** | (0.007) |
|                          | EXP   |  | -124             | -0.0235*** | (0.005) | -14       | -0.0083*   | (0.004) | 66                   | -0.0133*** | (0.003) |
|                          | UNEXP |  | 224              | 0.0425***  | (0.010) | 114       | 0.0684***  | (0.010) | 34                   | -0.0068*** | (0.007) |

\*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% respectively. Figures in parenthesis are robust standard errors.

**TABLE 8:** Decomposition of financial wealth sub-components by gender heterogeneity analysis – extensive margin

|                          |       |     | STOCKS & BONDS |         |     | SHARES & OPTIONS |         |     | UNIT TRUSTS |         |
|--------------------------|-------|-----|----------------|---------|-----|------------------|---------|-----|-------------|---------|
| <u>A) MARITAL STATUS</u> |       | %   | $\beta$        | (SE)    | %   | $\beta$          | (SE)    | %   | $\beta$     | (SE)    |
| SINGLE                   | GAP   | -29 | -0.0227***     | (0.004) | -44 | -0.0285***       | (0.004) | -11 | -0.0028     | (0.002) |
|                          | EXP   | 21  | -0.0048***     | (0.002) | 9   | -0.0026**        | (0.001) | 45  | -0.0013*    | (0.001) |
|                          | UNEXP | 79  | -0.0179***     | (0.004) | 91  | -0.0259***       | (0.004) | 55  | -0.0015     | (0.002) |
| COUPLE                   | GAP   | -36 | -0.0286***     | (0.004) | -45 | -0.0265***       | (0.003) | -21 | -0.0050**   | (0.002) |
|                          | EXP   | 24  | -0.0069***     | (0.001) | 13  | -0.0034***       | (0.001) | 23  | -0.0012**   | (0.001) |
|                          | UNEXP | 76  | -0.0216***     | (0.003) | 87  | -0.0231***       | (0.003) | 77  | -0.0039**   | (0.002) |
| <u>B) LIFE-CYCLE</u>     |       | %   | $\beta$        | (SE)    | %   | $\beta$          | (SE)    | %   | $\beta$     | (SE)    |
| AGED <25                 | GAP   | 37  | 0.0060         | (0.010) | 45  | 0.0077           | (0.012) | 22  | 0.0062      | (0.010) |
|                          | EXP   | 146 | 0.0087         | (0.006) | 4   | 0.0003           | (0.005) | -17 | -0.0011     | (0.014) |
|                          | UNEXP | -46 | -0.0028        | (0.008) | 96  | 0.0074           | (0.010) | 117 | 0.0073      | (0.013) |
| AGED 25-34               | GAP   | -47 | -0.0176***     | (0.005) | -35 | -0.0159***       | (0.006) | -8  | -0.0011     | (0.006) |
|                          | EXP   | 17  | -0.0029*       | (0.002) | 21  | -0.0043**        | (0.002) | 185 | -0.0020     | (0.004) |
|                          | UNEXP | 83  | -0.0147***     | (0.005) | 79  | -0.0126***       | (0.006) | -85 | 0.0009      | (0.004) |
| AGED 35-44               | GAP   | -45 | -0.0321***     | (0.006) | -43 | -0.0319***       | (0.006) | -43 | -0.0079***  | (0.003) |
|                          | EXP   | 24  | -0.0076***     | (0.002) | 19  | -0.0061***       | (0.002) | 4   | -0.0003     | (0.001) |
|                          | UNEXP | 76  | -0.0244***     | (0.006) | 81  | -0.0258***       | (0.006) | 96  | -0.0076***  | (0.003) |
| AGED 45-54               | GAP   | -24 | -0.0235***     | (0.006) | -53 | -0.0477***       | (0.006) | -13 | -0.0035     | (0.003) |
|                          | EXP   | 21  | -0.0049**      | (0.002) | 11  | -0.0051***       | (0.002) | 3   | -0.0001     | (0.001) |
|                          | UNEXP | 79  | -0.0187***     | (0.006) | 89  | -0.0426***       | (0.005) | 97  | -0.0034     | (0.003) |
| AGED 55-65               | GAP   | -29 | -0.0425***     | (0.007) | -43 | -0.0274***       | (0.005) | -15 | -0.0088*    | (0.005) |
|                          | EXP   | 42  | -0.0179***     | (0.003) | 19  | -0.0051***       | (0.001) | 66  | -0.0058***  | (0.002) |
|                          | UNEXP | 58  | -0.0246***     | (0.006) | 81  | -0.0223***       | (0.005) | 34  | -0.0030     | (0.004) |

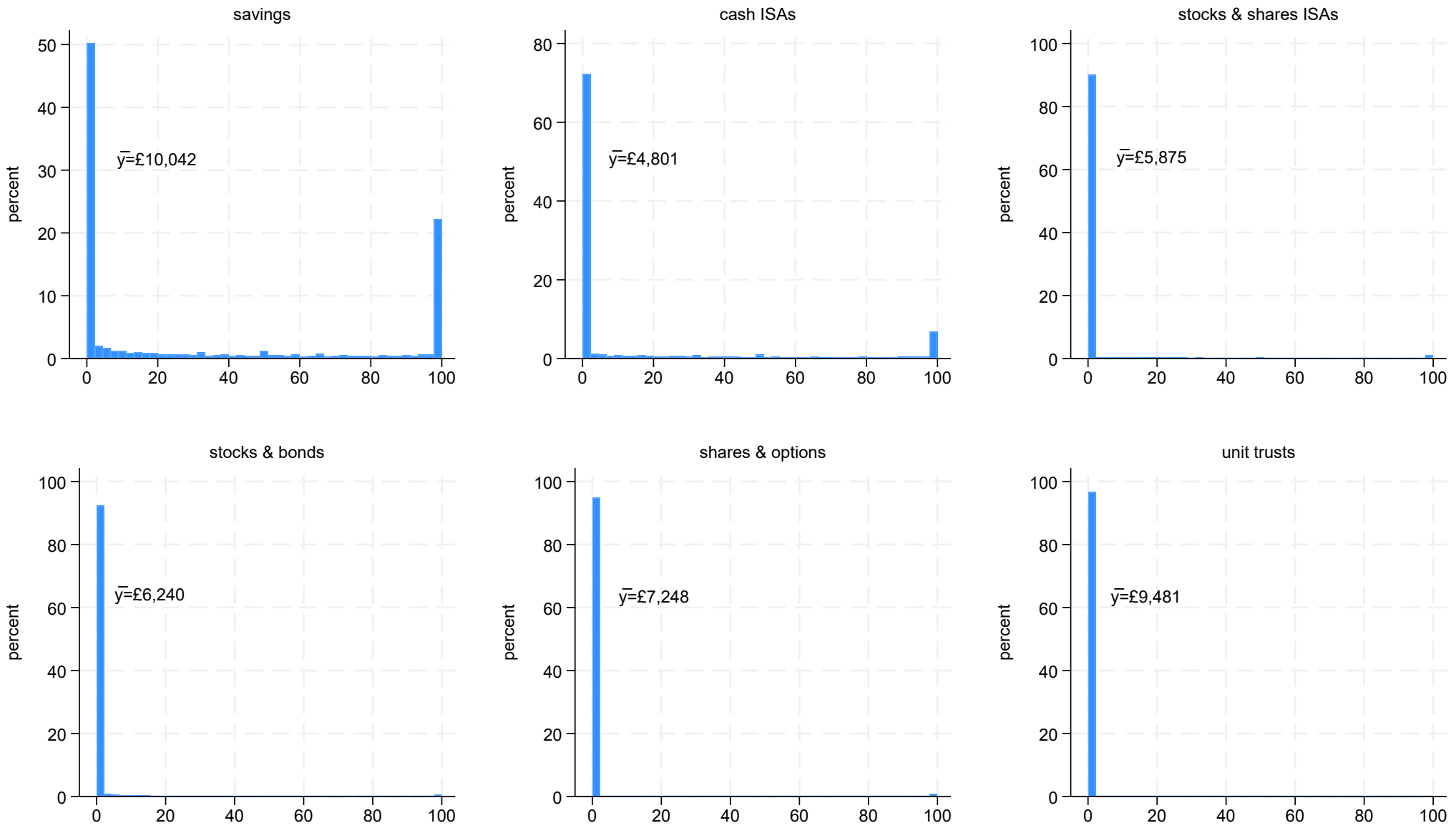
\*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% respectively. Figures in parenthesis are robust standard errors.

**TABLE 9: Decomposition of financial distress and net financial wealth by gender**

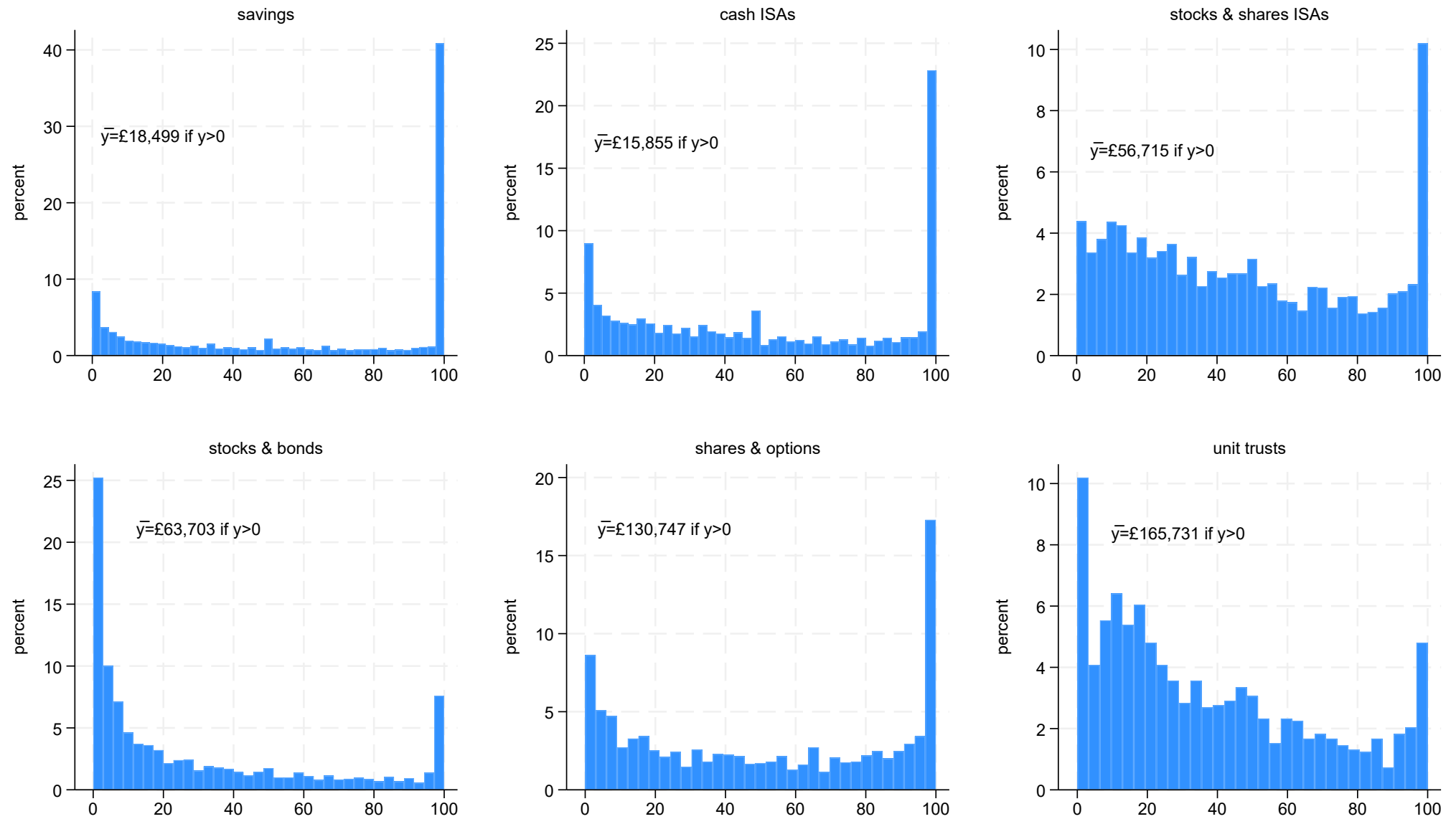
|                               | FINANCIAL DISTRESS                                |            | INTENSIVE MARGIN                             |            |                                              |            |                                              |            |
|-------------------------------|---------------------------------------------------|------------|----------------------------------------------|------------|----------------------------------------------|------------|----------------------------------------------|------------|
|                               | PROB. NET WEALTH<br>< 25 <sup>TH</sup> PERCENTILE |            | NET WEALTH AT<br>75 <sup>TH</sup> PERCENTILE |            | NET WEALTH AT<br>85 <sup>TH</sup> PERCENTILE |            | NET WEALTH AT<br>95 <sup>TH</sup> PERCENTILE |            |
|                               | DIFF                                              |            | DIFF                                         |            | DIFF                                         |            | DIFF                                         |            |
|                               | 0.0101                                            |            | -0.1550***                                   |            | -0.2248***                                   |            | -0.2605***                                   |            |
|                               | (0.004)***                                        |            | (0.070)                                      |            | (0.061)                                      |            | (0.052)                                      |            |
|                               | [-4%]                                             |            | [-2%]                                        |            | [-2%]                                        |            | [-2%]                                        |            |
|                               | EXP                                               | UNEXP      | EXP                                          | UNEXP      | EXP                                          | UNEXP      | EXP                                          | UNEXP      |
|                               | -0.0064***                                        | 0.0165**   | -0.0233**                                    | 0.1316*    | 0.0190***                                    | -0.2438*** | 0.0234**                                     | -0.2540*** |
|                               | (0.002)                                           | (0.005)    | (0.001)                                      | (0.070)    | (0.003)                                      | (0.057)    | (0.001)                                      | (0.052)    |
|                               | [-59%]                                            | [159%]     | [15%]                                        | [85%]      | [-8%]                                        | [108%]     | [-9%]                                        | [109%]     |
| Marital status single (=1)    | 0.0005**                                          | -0.0151*   | -0.0050*                                     | -0.0320    | -0.0012                                      | 0.0577     | 0.0031                                       | 0.0543     |
|                               | (0.000)                                           | (0.008)    | (0.003)                                      | (0.059)    | (0.002)                                      | (0.047)    | (0.002)                                      | (0.042)    |
| Very good health (=1)         | 0.0003                                            | -0.0032    | -0.0114**                                    | 0.1183**   | -0.0046                                      | 0.0859**   | -0.0017                                      | 0.0604*    |
|                               | (0.000)                                           | (0.005)    | (0.004)                                      | (0.047)    | (0.004)                                      | (0.039)    | (0.003)                                      | (0.037)    |
| Log total income              | 0.0018***                                         | 0.0393*    | -0.0323***                                   | -0.4902*** | -0.0268***                                   | -0.4307*** | -0.0158***                                   | -0.3028*** |
|                               | (0.000)                                           | (0.019)    | (0.007)                                      | (0.153)    | (0.005)                                      | (0.126)    | (0.004)                                      | (0.115)    |
| Pension (=1)                  | 0.0008**                                          | -0.0018    | -0.045***                                    | 0.0183     | -0.0480***                                   | 0.0128     | -0.0398***                                   | -0.0047    |
|                               | (0.000)                                           | (0.002)    | (0.008)                                      | (0.017)    | (0.008)                                      | (0.016)    | (0.008)                                      | (0.015)    |
| Trust banks (=1)              | 0.0004**                                          | -0.0016    | -0.009***                                    | 0.0091     | -0.0085***                                   | 0.0131     | -0.0051**                                    | 0.0093     |
|                               | (0.000)                                           | (0.002)    | (0.003)                                      | (0.017)    | (0.003)                                      | (0.013)    | (0.002)                                      | (0.012)    |
| Save for rainy day (=1)       | -0.0019**                                         | 0.0059     | -0.0531***                                   | 0.0993*    | -0.0381***                                   | 0.1091**   | -0.0181***                                   | 0.0721*    |
|                               | (0.001)                                           | (0.005)    | (0.018)                                      | (0.053)    | (0.013)                                      | (0.044)    | (0.006)                                      | (0.039)    |
| Time preference (=1)          | 0.0008***                                         | 0.0017     | -0.0220***                                   | -0.0175    | -0.0207***                                   | -0.0474    | -0.0145***                                   | -0.0640**  |
|                               | (0.000)                                           | (0.004)    | (0.007)                                      | (0.041)    | (0.006)                                      | (0.034)    | (0.004)                                      | (0.032)    |
| Risk tolerance (=1)           | -0.0003*                                          | 0.0033     | -0.0023                                      | -0.0427**  | -0.0058**                                    | -0.0490*** | -0.0076**                                    | -0.0638*** |
|                               | (0.000)                                           | (0.002)    | (0.002)                                      | (0.019)    | (0.003)                                      | (0.016)    | (0.003)                                      | (0.017)    |
| Financially optimistic (=1)   | -0.0000                                           | -0.0194**  | 0.0001                                       | 0.0377     | 0.0000                                       | 0.0374     | 0.0000                                       | -0.0038    |
|                               | (0.000)                                           | (0.006)    | (0.002)                                      | (0.049)    | (0.001)                                      | (0.041)    | (0.000)                                      | (0.038)    |
| Financial literacy (=1)       | -0.0013***                                        | -0.0098    | -0.0020                                      | 0.0154     | -0.0016                                      | 0.0204     | 0.0008                                       | 0.0484     |
|                               | (0.000)                                           | (0.008)    | (0.003)                                      | (0.069)    | (0.003)                                      | (0.055)    | (0.002)                                      | (0.048)    |
| Age                           | 0.0020                                            | 0.1443     | -0.0252                                      | 1.2346     | -0.0277*                                     | -0.8282    | -0.0190                                      | -0.9473    |
|                               | (0.001)                                           | (0.243)    | (0.051)                                      | (2.001)    | (0.017)                                      | (1.608)    | (0.012)                                      | (1.430)    |
| Age squared                   | -0.0028                                           | -0.1510    | 0.0510*                                      | -0.2325    | 0.0483*                                      | 0.8108     | 0.0280*                                      | 0.8346     |
|                               | (0.002)                                           | (0.134)    | (0.029)                                      | 1.099      | 0.028                                        | 0.901      | 0.017                                        | (0.808)    |
| Employee (=1)                 | -0.0079***                                        | 0.0001     | -0.0296***                                   | 0.0540     | 0.0087                                       | 0.1081     | 0.0187**                                     | -0.0025    |
|                               | (0.001)                                           | (0.019)    | (0.011)                                      | (0.127)    | (0.009)                                      | (0.103)    | (0.008)                                      | (0.094)    |
| Unemployed (=1)               | -0.0001                                           | 0.0005     | 0.0078***                                    | 0.0117     | 0.0042                                       | -0.0037    | 0.0034                                       | -0.0065    |
|                               | (0.000)                                           | (0.002)    | (0.003)                                      | (0.008)    | (0.003)                                      | (0.006)    | (0.002)                                      | (0.006)    |
| Degree (=1)                   | 0.0013***                                         | 0.0104     | -0.0742***                                   | -0.2137*** | -0.0593***                                   | -0.1567*** | -0.0378***                                   | -0.0460    |
|                               | (0.000)                                           | (0.006)    | (0.012)                                      | 0.060      | (0.010)                                      | (0.050)    | (0.007)                                      | (0.045)    |
| Number of children            | 0.0004                                            | -0.0171**  | -0.0118**                                    | 0.1134**   | 0.0001                                       | 0.1056***  | 0.0169***                                    | -0.0171    |
|                               | (0.000)                                           | (0.006)    | (0.005)                                      | (0.054)    | (0.004)                                      | (0.043)    | (0.004)                                      | (0.039)    |
| Number of adults              | -0.0001                                           | -0.0174    | 0.0105**                                     | -0.0931    | 0.0037                                       | -0.0166    | -0.0001                                      | 0.0087     |
|                               | (0.000)                                           | (0.012)    | (0.050)                                      | (0.096)    | (0.004)                                      | (0.076)    | (0.003)                                      | (0.070)    |
| Own outright or mortgage (=1) | 0.0006**                                          | -0.0513*** | -0.0386***                                   | 0.1862*    | -0.0220***                                   | 0.0898     | -0.0110***                                   | 0.0426     |
|                               | (0.000)                                           | (0.015)    | (0.013)                                      | (0.100)    | (0.007)                                      | (0.076)    | (0.004)                                      | ((0.065))  |
| OBSERVATIONS                  | 37,862                                            |            |                                              |            |                                              |            |                                              |            |

\*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% respectively. Figures in parenthesis are robust standard errors.

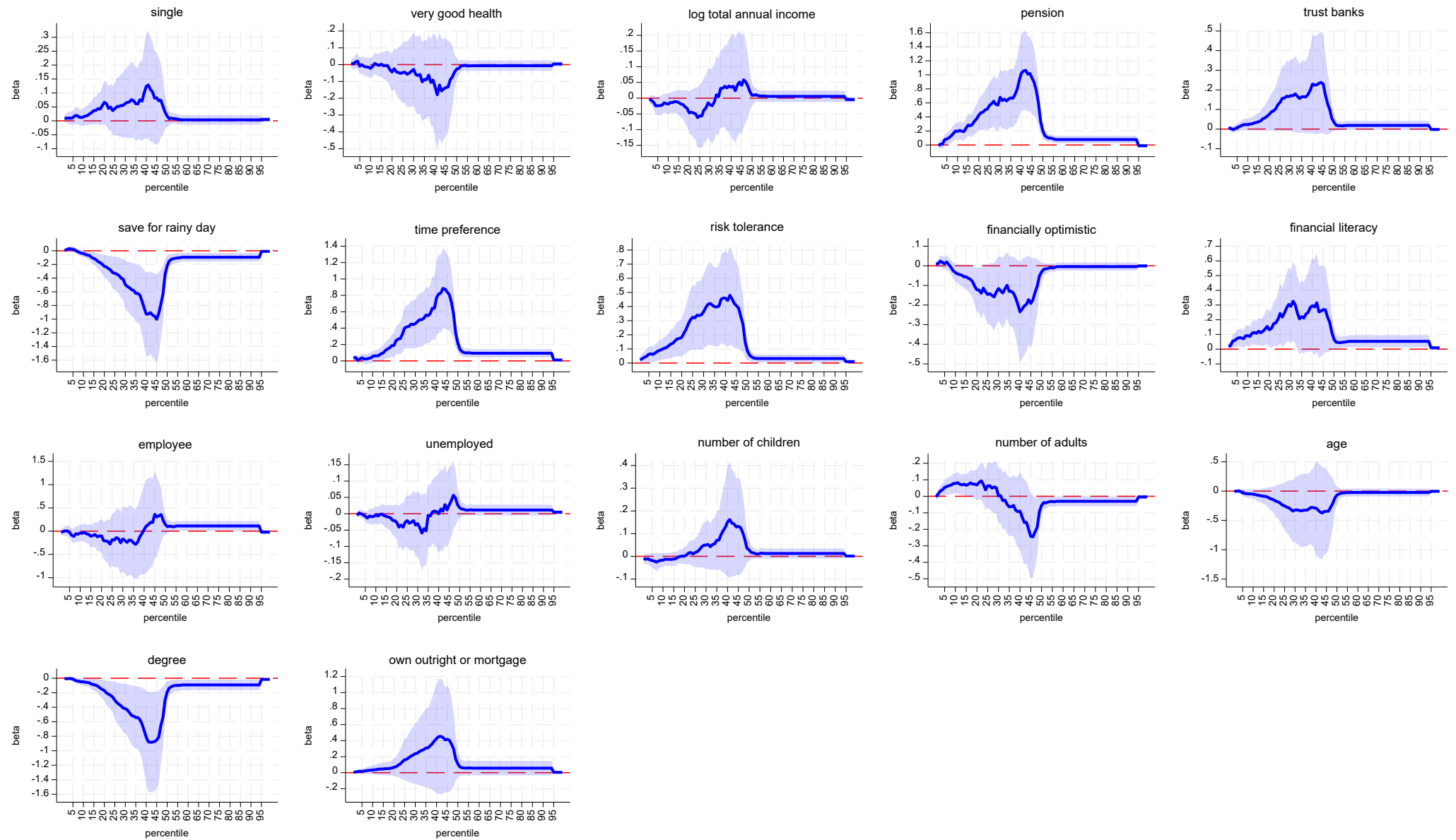
**FIGURE 1:** Overall distribution of financial wealth sub-components



**FIGURE 2:** Distribution of financial wealth sub-components at the intensive margin

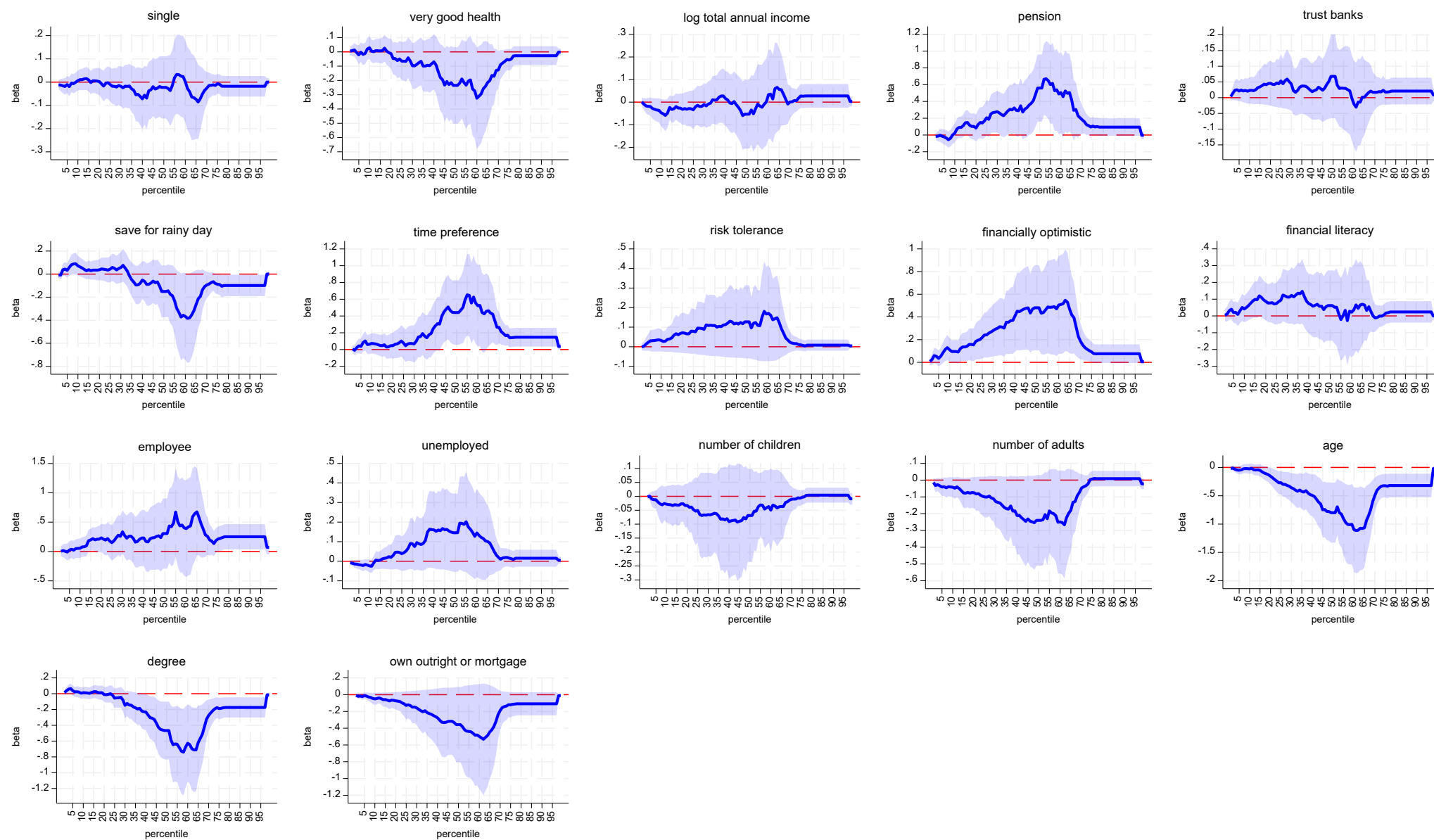


**FIGURE 3: Savings across distribution at the intensive margin – gender gap explained by each covariate**

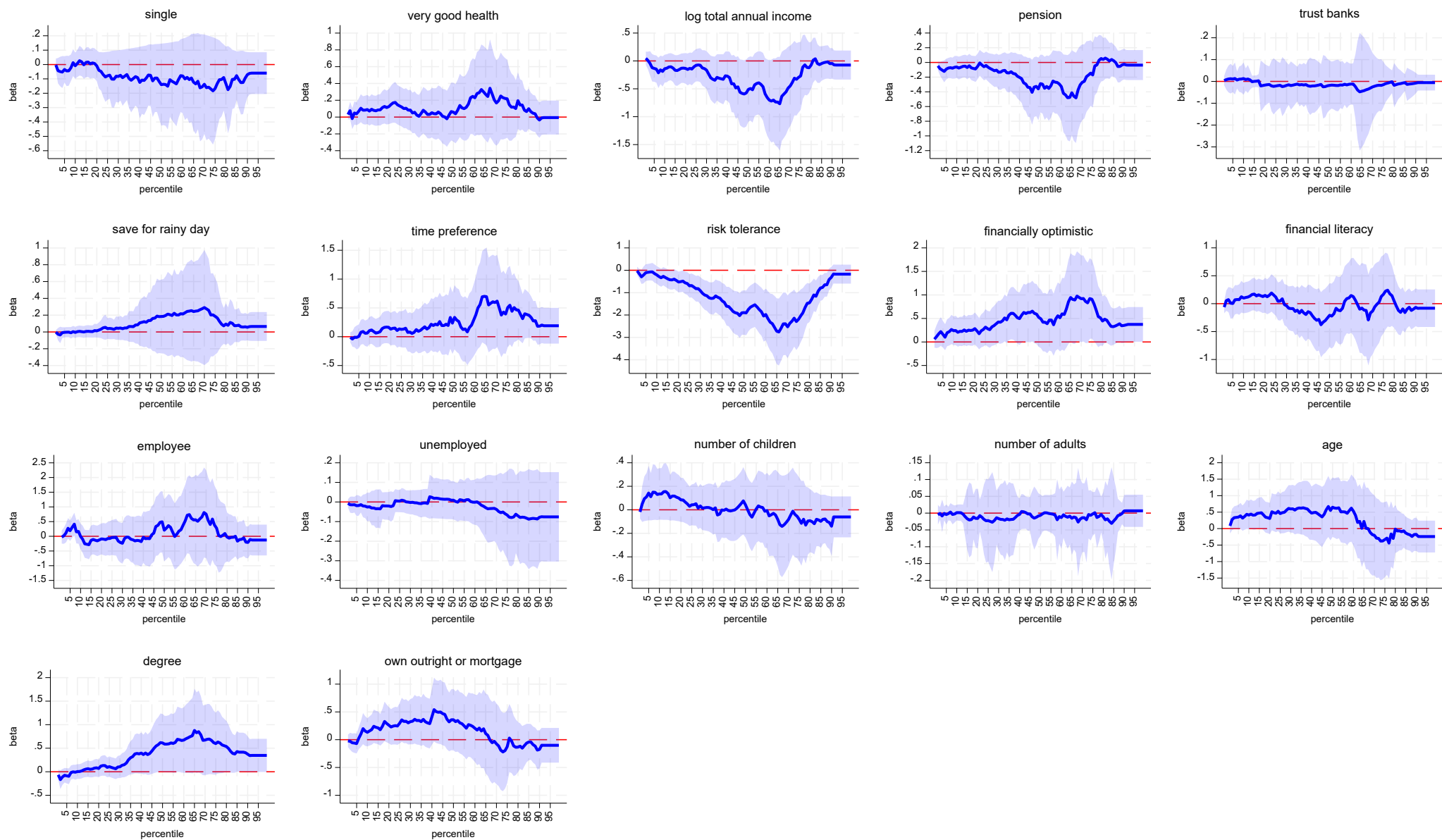




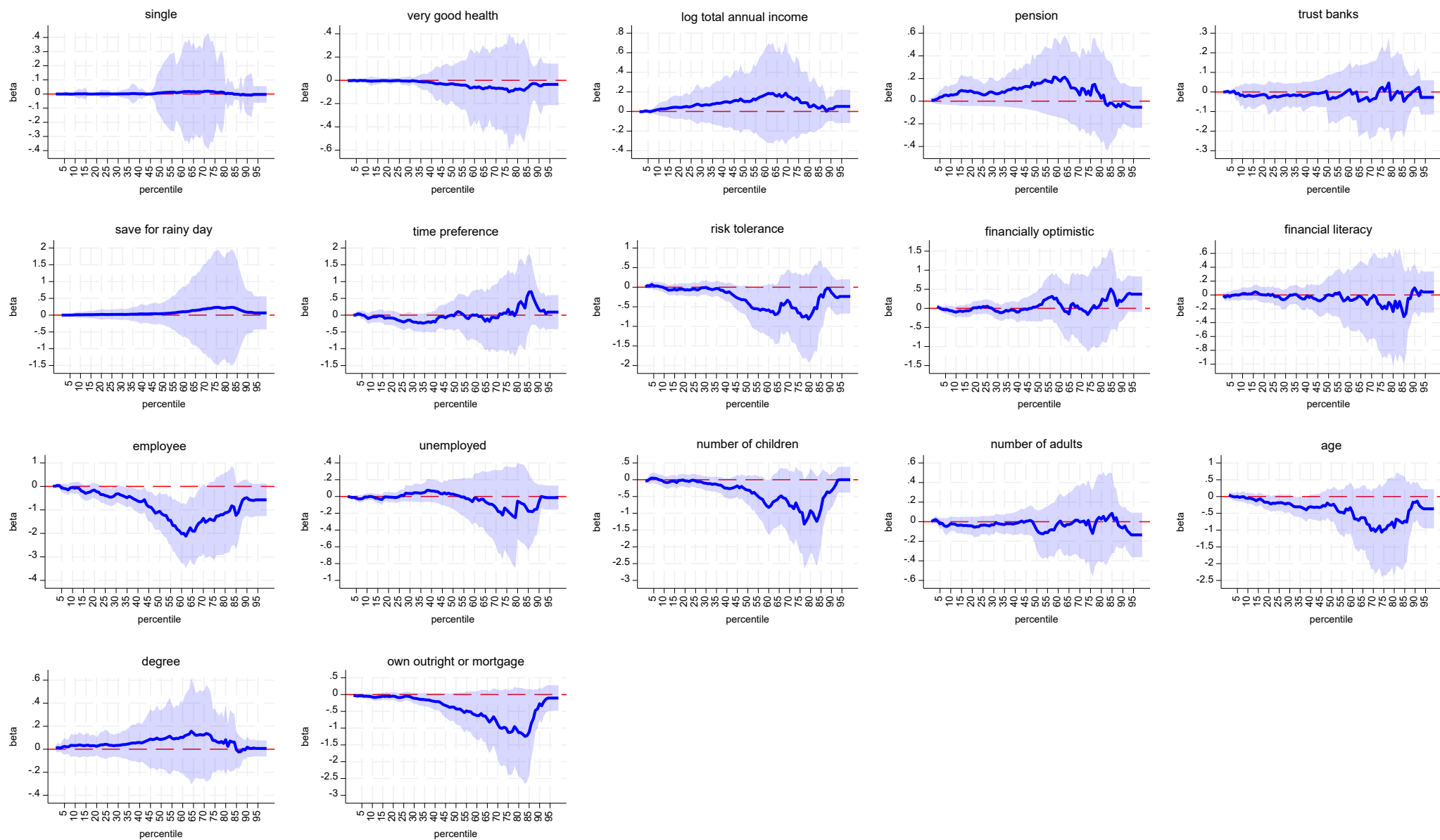
**FIGURE 4:** Cash ISAs across distribution at the intensive margin – gender gap explained by each covariate



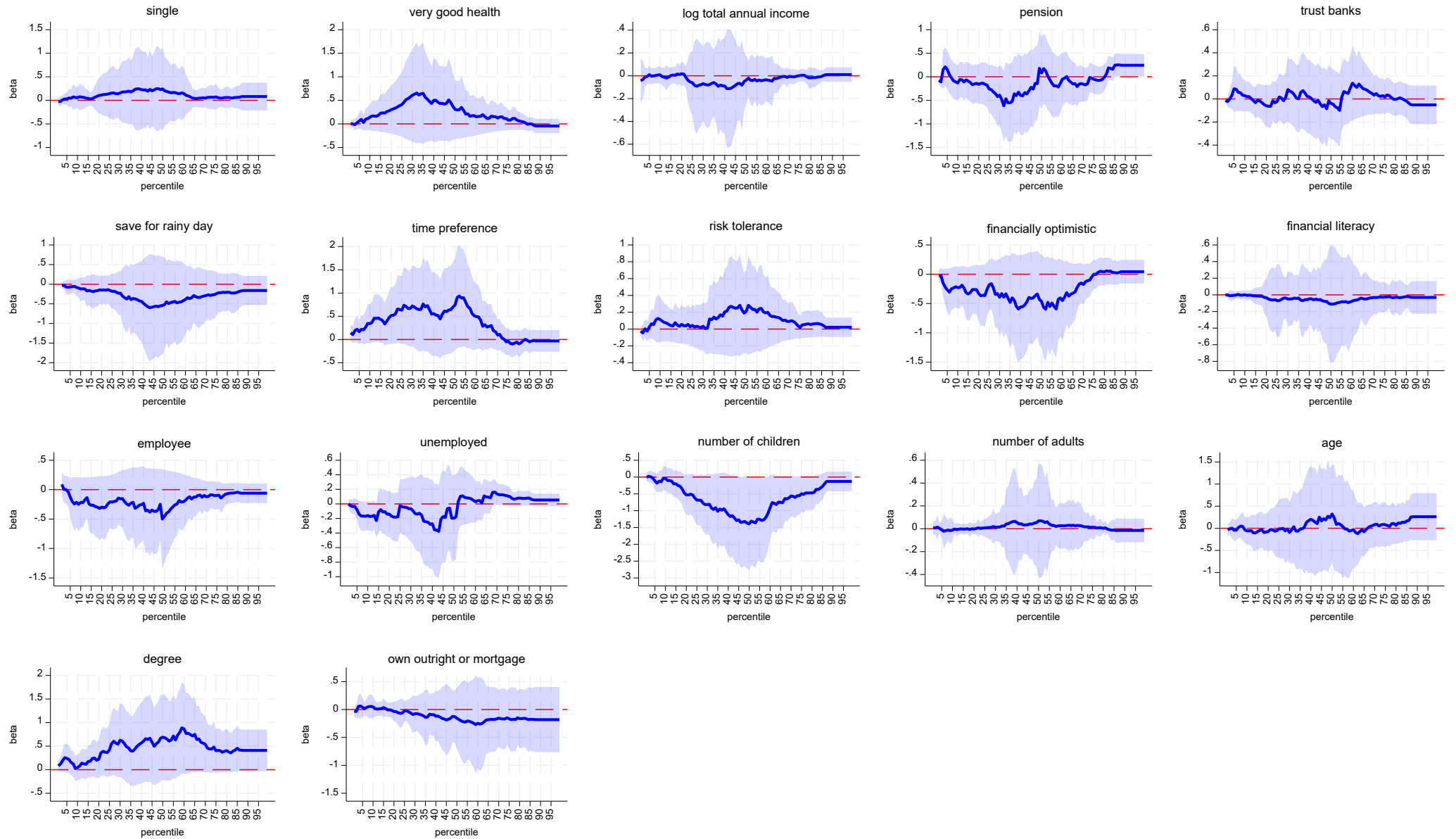
**FIGURE 5:** Stocks and shares ISAs across distribution at the intensive margin – gender gap explained by each covariate



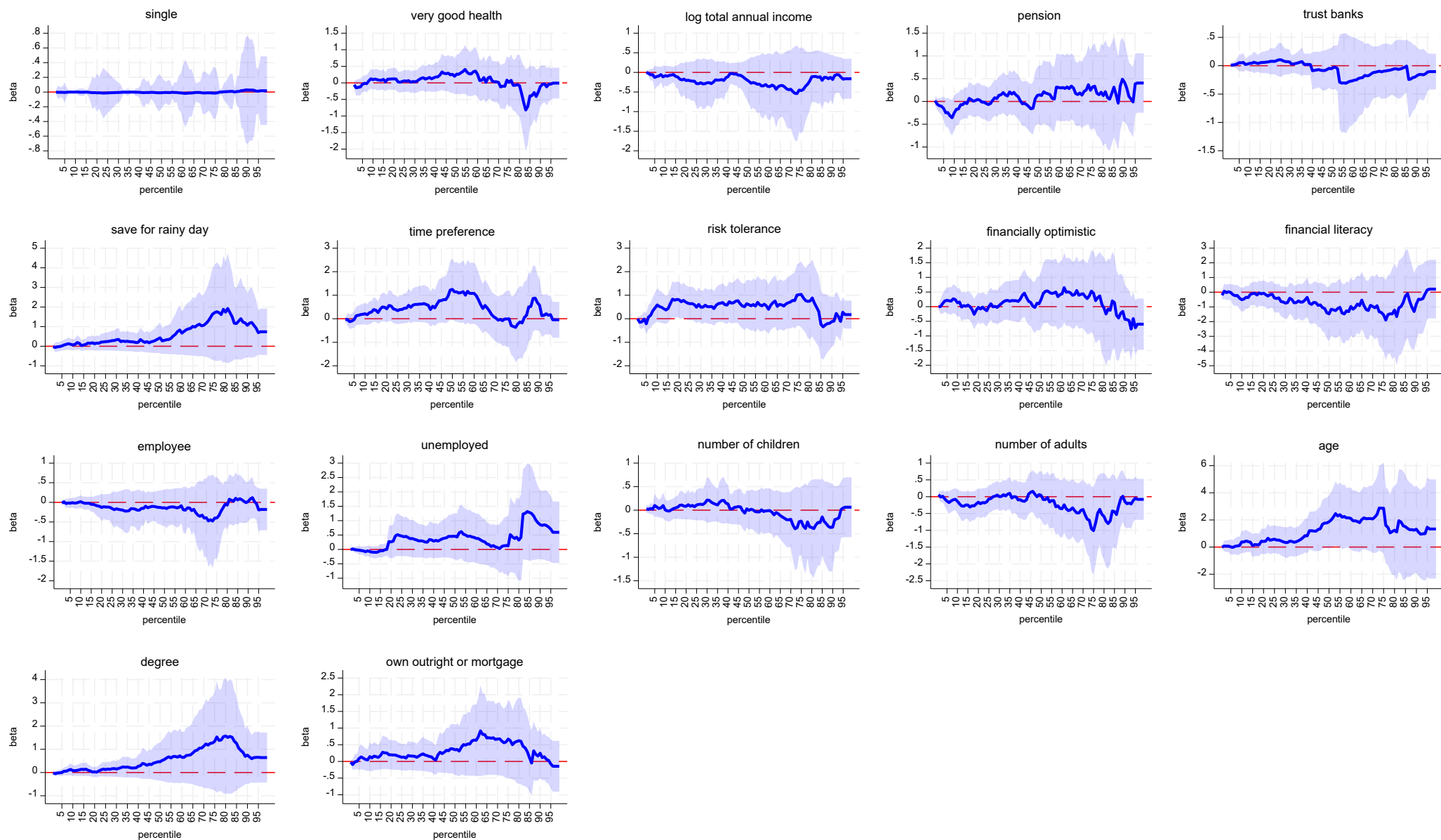
**FIGURE 6:** Stocks and bonds across distribution at the intensive margin – gender gap explained by each covariate



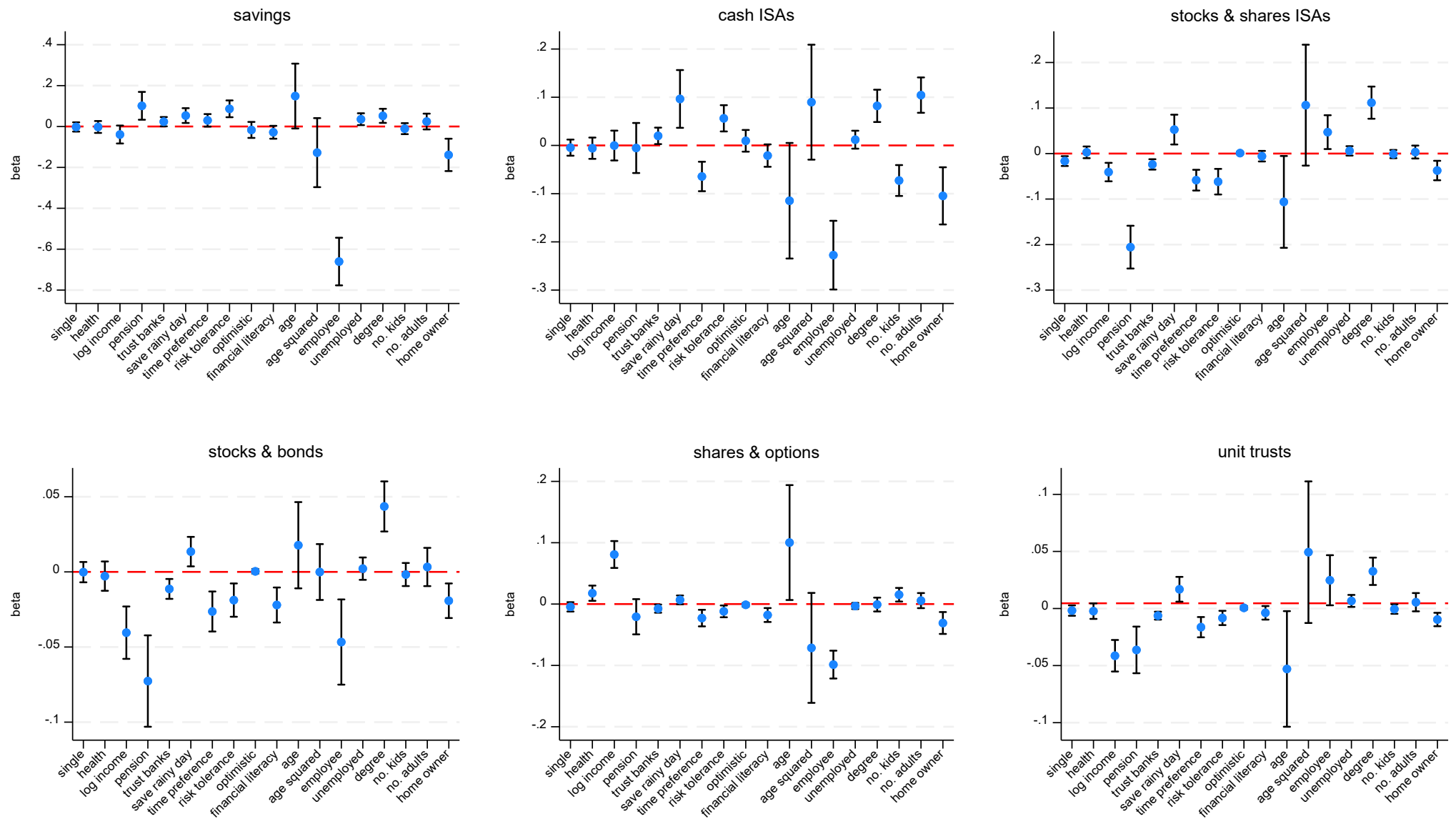
**FIGURE 7: Shares and options across distribution at the intensive margin – gender gap explained by each covariate**



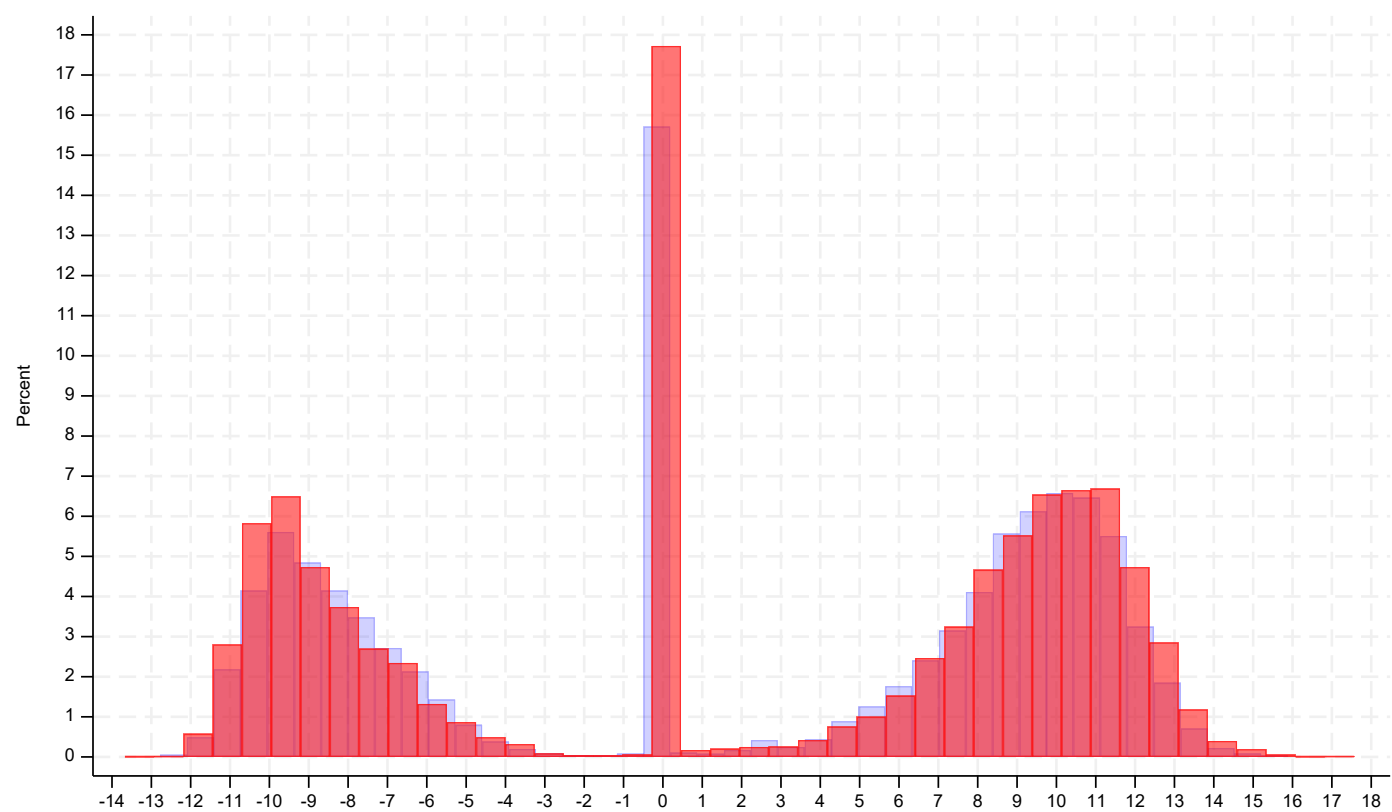
**FIGURE 8:** Unit trusts across distribution at the intensive margin – gender gap explained by each covariate



**FIGURE 9:** Decomposition of financial wealth sub-components by gender: the role of covariates in explaining the gap – censored analysis

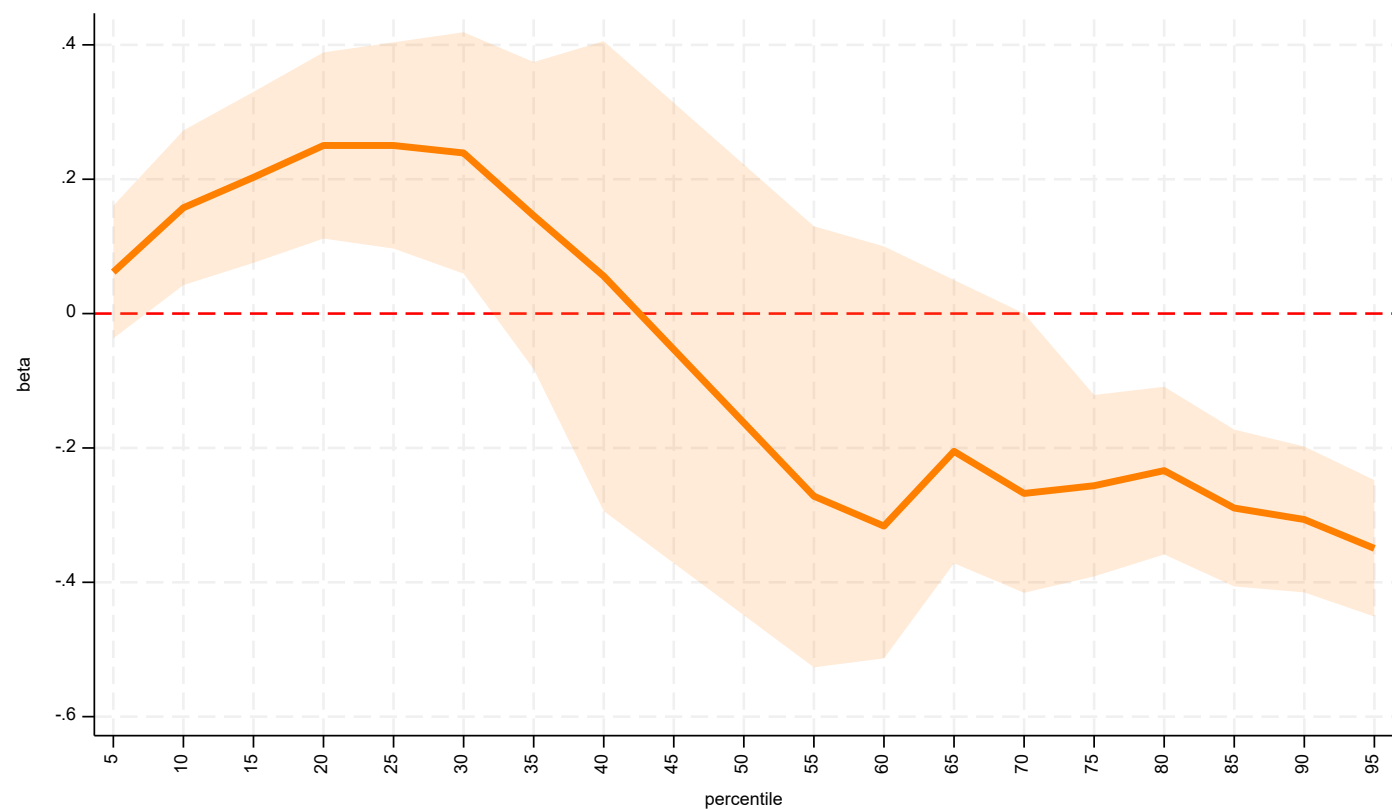


**FIGURE 10:** Histogram of net financial wealth contrasted by gender



Notes: The distribution of net financial wealth is shown for females in blue and for males in red.

**FIGURE 11:** Difference in total IHS net financial wealth by gender across the distribution



**TABLE A1:** An examination of national savings and all other types of assets – extensive margin

|                         | (1)                              | (2)                          | (3)                           | (4)                            | (5)                         | (6)                            | (7)                           |
|-------------------------|----------------------------------|------------------------------|-------------------------------|--------------------------------|-----------------------------|--------------------------------|-------------------------------|
|                         | NATIONAL SAVINGS                 | OTHER TYPES OF ISAs          | FRIENDLY SOCIETY ASSETS       | INSURANCE PRODUCTS             | PREMIUM POLICIES            | ENDOWMENT POLICIES             | OTHER TYPES OF INVESTMENTS    |
| A) <u>PROBABILITY</u>   |                                  |                              |                               |                                |                             |                                |                               |
| Female                  | 0.0095*<br>(0.005)               | 0.0017<br>(0.001)            | -0.0001<br>(0.000)            | -0.0030<br>(0.002)             | -0.0007<br>(0.001)          | -0.0001<br>(0.001)             | -0.0023***<br>(0.001)         |
| R-squared               | 0.0965                           | 0.0038                       | 0.0044                        | 0.0224                         | 0.0061                      | 0.0132                         | 0.0101                        |
| $\bar{y}$               | 0.2608                           | 0.0902                       | 0.0039                        | 0.0395                         | 0.0055                      | 0.0177                         | 0.0071                        |
| OBSERVATIONS            | 37,862                           |                              |                               |                                |                             |                                |                               |
| B) <u>DECOMPOSITION</u> |                                  |                              |                               |                                |                             |                                |                               |
| Difference              | -0.0013<br>(0.005)               | 0.0009<br>(0.000)            | -0.0005<br>(0.000)            | -0.0040*<br>(0.002)            | -0.0007<br>(0.000)          | -0.0008<br>(0.001)             | -0.0024***<br>(0.001)         |
| Explained               | -0.0092***<br>(0.002)<br>[-679%] | -0.0003<br>(0.000)<br>[-33%] | -0.0003**<br>(0.000)<br>[60%] | -0.0017***<br>(0.000)<br>[43%] | -0.0001<br>(0.000)<br>[14%] | -0.0008**<br>(0.004)<br>[107%] | -0.0004**<br>(0.000)<br>[18%] |
| Unexplained             | 0.0078*<br>(0.004)<br>[579%]     | 0.0012<br>(0.000)<br>[133%]  | -0.0002<br>(0.000)<br>[40%]   | -0.0023<br>(0.002)<br>[57%]    | -0.0006<br>(0.000)<br>[86%] | 0.0001<br>(0.001)<br>[-7%]     | -0.0019**<br>(0.000)<br>[82%] |
| OBSERVATIONS            | 37,862                           |                              |                               |                                |                             |                                |                               |

\*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% respectively. Figures in parenthesis are robust standard errors. Columns (2) to (7) comprise the all other types of assets category. Controls in panels A and B include: quadratic in age; degree; employee; unemployed; single; number of adults; number of children; annual income, whether pension, housing tenure; very good or good health; trust banks, save for a rainy day, time preference, risk tolerance, financially optimistic, and financial literacy. Fixed effects are also included for year, month and region of residence.

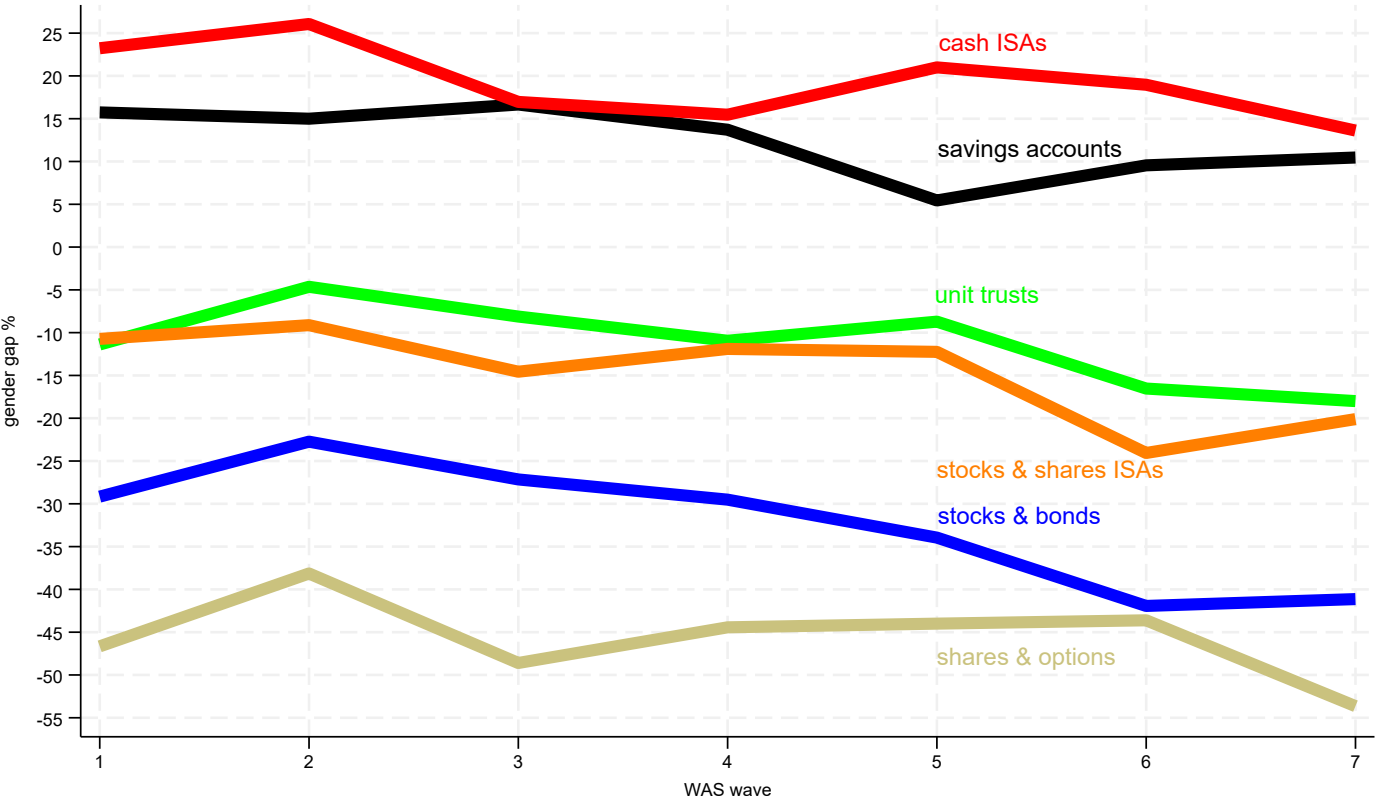


**TABLE A2:** Gelbach decomposition of financial wealth sub-components by gender (full results) – extensive margin

|                               | SAVINGS<br>ACCOUNTS | CASH<br>ISAs  | STOCKS &<br>SHARES ISAs | STOCKS &<br>BONDS | SHARES &<br>OPTIONS | UNIT<br>TRUSTS |
|-------------------------------|---------------------|---------------|-------------------------|-------------------|---------------------|----------------|
| Female ( $\hat{\beta}^c$ )    | 0.0459***           | 0.0424***     | -0.0156***              | -0.0282***        | -0.0315***          | -0.0068***     |
| <i>Covariates</i>             |                     |               |                         |                   |                     |                |
| Age                           | 0.0013*             | -0.0014*      | -0.0020**               | -0.0009*          | 0.0016**            | -0.0014**      |
| Age squared                   | -0.0004             | 0.0015        | 0.0021                  | 0.0013            | -0.0011             | 0.0013         |
| Degree (=1)                   | -0.0035***          | -0.0028***    | -0.0027***              | -0.0018***        | -0.0002**           | -0.0011***     |
| <i>HUMAN CAPITAL</i>          | <i>[-44%]</i>       | <i>[-63%]</i> | <i>[-76%]</i>           | <i>[-38%]</i>     | <i>[-140%]</i>      | <i>[-125%]</i> |
| Employee (=1)                 | -0.0079***          | -0.0038***    | 0.0014***               | -0.0001           | -0.0015***          | 0.0010***      |
| Unemployed (=1)               | 0.0007***           | 0.0002        | 0.0002**                | 0.0001            | -0.0001             | 0.0002***      |
| <i>LABOUR MARKET STATUS</i>   | <i>[73%]</i>        | <i>[76%]</i>  | <i>[-43%]</i>           | <i>[-2%]</i>      | <i>[300%]</i>       | <i>[-150%]</i> |
| Marital status single (=1)    | -0.0003**           | -0.0002       | -0.0003***              | -0.0002**         | -0.0001*            | -0.0001**      |
| Number of children            | -0.0002             | -0.0010***    | 0.0000                  | -0.0001           | 0.0001              | -0.0001        |
| Number of adults              | 0.0002              | 0.0020***     | 0.0002*                 | -0.0000           | 0.0001              | 0.0002**       |
| <i>HOUSEHOLD COMPOSITION</i>  | <i>[3%]</i>         | <i>[-17%]</i> | <i>[0%]</i>             | <i>[5%]</i>       | <i>[-20%]</i>       | <i>[0%]</i>    |
| Log total income              | -0.0007***          | -0.0004*      | -0.0012***              | -0.0010***        | 0.0014***           | -0.0009***     |
| Pension (=1)                  | -0.0032***          | -0.0023***    | -0.0044***              | -0.0033***        | -0.0001             | -0.0010***     |
| Own outright or mortgage (=1) | -0.0031***          | -0.0023***    | -0.0007***              | -0.0007***        | -0.0006***          | -0.0002***     |
| <i>RESOURCES</i>              | <i>[71%]</i>        | <i>[111%]</i> | <i>[170%]</i>           | <i>[89%]</i>      | <i>[-140%]</i>      | <i>[275%]</i>  |
| Very good health (=1)         | 0.0002              | 0.0001        | 0.0000                  | -0.0003**         | 0.0002***           | -0.0001*       |
| <i>HEALTH</i>                 | <i>[0%]</i>         | <i>[-2%]</i>  | <i>[2%]</i>             | <i>[5%]</i>       | <i>[-40%]</i>       | <i>[13%]</i>   |
| Trust banks (=1)              | -0.0002             | 0.0001        | -0.0004***              | -0.0004***        | -0.0001**           | -0.0001**      |
| Save for rainy day (=1)       | -0.0022***          | -0.0023***    | -0.0013***              | -0.0011***        | -0.0004***          | -0.0005***     |
| Time preference (=1)          | -0.0013***          | -0.0019***    | -0.0015***              | -0.0015***        | -0.0006***          | -0.0006***     |
| Risk tolerance (=1)           | 0.0005***           | 0.0007***     | -0.0010***              | -0.0006***        | -0.0002***          | -0.0003***     |
| Financially optimistic (=1)   | -0.0001             | 0.0001        | 0.0000                  | 0.0000            | -0.0000             | 0.0000         |
| Financial literacy (=1)       | -0.0012***          | -0.0006***    | -0.0002*                | -0.0007***        | -0.0003***          | -0.0001        |
| <i>ATTITUDINAL</i>            | <i>[4%]</i>         | <i>[-15%]</i> | <i>[38%]</i>            | <i>[49%]</i>      | <i>[160%]</i>       | <i>[75%]</i>   |
| GAP ( $\hat{\Delta}$ )        | -0.0099***          | -0.0046**     | -0.0037***              | -0.0056***        | -0.0005             | -0.0008        |
| OBSERVATIONS                  | 37,862              |               |                         |                   |                     |                |

\*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% respectively. Figures in parenthesis are robust standard errors. The remaining contribution to the gap stems from year, month and regional fixed effects.

**FIGURE A1:** The gender gap over time for each sub-component of financial wealth



Notes: The figure shows the difference between the sexes in the proportion of financial wealth held in each type of asset over waves 1-7 of the WAS, defined from equation (1) as the ratio of the amount invested in a given sub-category of financial wealth relative to the total value of financial wealth.