How the UK Saves:
Effects of gender on retirement savings behaviour

Member experience from the
National Employment Savings Trust (NEST)

How the UK Saves research supplement

September 2019

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- Previous research observed that after controlling for earnings, women had higher median contributions and account balances than men in all but the highest earnings band, suggesting a positive skew toward female savings behaviour.
- After controlling for further variables alongside income, evidence of a 'positive' behavioural skew falls away, but arrives at a neutral position rather than negative. That is to say that men and women have no discernible differences in their savings behaviour.
- Females are typically over-represented in the opt in groups of employer populations, as a result of comprising a larger percentage of those falling below the earnings threshold for auto-enrolment eligibility.
- Structural factors such as wages, job selection and job turnover/tenure, rather than behavioural factors such as preference to save, lead to differences in savings and account balances.

As part of our research partnership, NEST Insight and Vanguard are delighted to present the second supplementary research publication to our How the UK Saves series. This paper focuses on understanding the impact of gender upon retirement savings behaviours.

In 2018 we published the inaugural edition of How the UK Saves: Member experience from the National Employment Savings Trust (NEST). In this report we observed that after controlling for earnings, women saving in NEST had higher median contributions and higher median account balances than men in all but the highest earnings band. This evidence of a positive behavioural skew towards female savings behaviour and accrual of higher balances suggested that we should take a closer look at this observed phenomena. Much has been written in the UK about the 'gender pension gap' without clear conclusions as to whether this gap is being created by behavioural or structural factors[1]. This research supplement seeks to address the topic, with the caveat that it is representative of the NEST membership and so may not capture factors affecting the highest earnings and wealth cohorts of the UK.

The dataset used in this research supplement covers the calendar year to 31st December 2018.

Similar to previous figures published in How the UK Saves 2018, **Figure 1** shows the summary statistics for the male and female populations within the entire NEST membership. While female and males have little material differences in either average age or tenure of participation within the scheme, in aggregate, average male earnings, contributions and account balances exceed those of females by a significant margin.

In order to explain the differences in earnings to a greater degree, **Figure 2** demonstrates the distribution of male and female members by earnings band. We see very notable differences at the extremes of the earnings distribution, with female members nearly three times more likely to be under the auto-enrolment eligibility threshold of £10,000 per annum, and males twice as likely as females to be in the highest income bracket.

Figure 1. Member demographics as of December 31, 2018

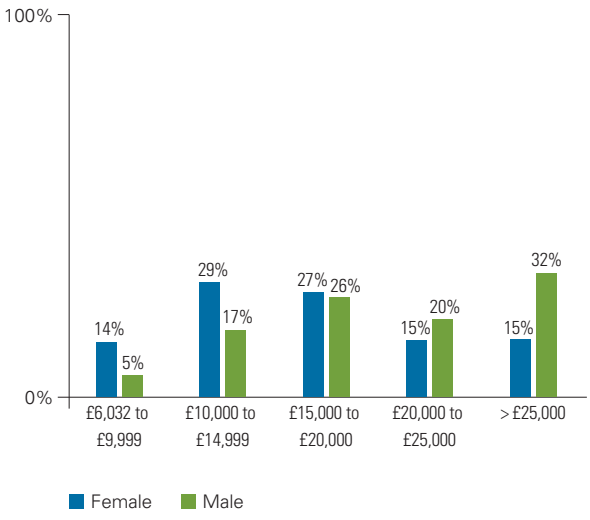
NEST members with positive pot balances and at least one contribution made in calendar year 2018

	Female	Male
	Average (Median)	
Percent of NEST membership	48%	52%
Age	39.5 (38.0)	39.6 (38.0)
Tenure	1.7 (1.3)	1.6 (1.4)
Annual earnings (where reported)	£17,545 (£16,031)	£22,085 (£20,400)
Total net contributions 2018	£352 (£278)	£474 (£406)
Pot balance	£641 (£419)	£845 (£597)
Percentage of continuous contributors	41%	40%

Source: NEST, Vanguard, 2019.

Figure 2. Distribution of member earnings

NEST members with positive pot balances and at least one contribution made in calendar year 2018



Source: NEST, Vanguard, 2019.

1 Understanding the Gender Pensions Gap, Pension Policy Institute, 2019

We also considered the differences in employment demographics between genders. We observe negligible differences in employer size data when considering male and female employment (**Figure 3**).

However, there is a significant concentration of female employees in the health and social care sector, with that sector alone representing a fifth of all female employment within the NEST membership.

Figure 3. Member demographics by gender

NEST members with positive pot balances and at least one contribution made in calendar year 2018

Employer size	Female	Male
1-4	10%	11%
5-49	36%	39%
50-249	16%	15%
250-499	5%	5%
500-999	5%	4%
1,000-4,999	10%	9%
5,000+	18%	16%

Top 5 industry categories	Female	Top 5 industry categories	Male
Health and social care	20%	Retail, hire and repair	10%
Retail, hire and repair	10%	Manufacturing	9%
Catering and accommodation	9%	Catering and accommodation	9%
Employment	7%	Employment	8%
Education	5%	Construction	7%

Source: NEST, Vanguard, 2019.

Given the material differences in the distribution of member earnings by gender observed in **Figure 2**, **Figure 4** re-examines the aggregated contribution and account balance statistics by controlling for earnings. Having done so, females appear to have both superior contributions and account balances in all earnings bands except for the very highest, with material differences in the two lowest income brackets. This observation, made originally in How the UK Saves 2018, initially suggests a positive skew toward female savings behaviour, and warranted further study.

Figure 4. Contributions and pot balances by gender and earnings

NEST members with positive pot balances and at least one contribution made in calendar year 2018

Median account balances	Female	Male	Female/ male (%)
< £10,000	£111	£99	12%
£10,000 - £14,999	£273	£236	16%
£15,000 - £20,000	£498	£468	6%
£20,000 - £25,000	£756	£746	1%
> £25,000	£1,168	£1,234	-5%

Median total contributions	Female	Male	Female/ male (%)
< £10,000	£59	£46	28%
£10,000 - £14,999	£198	£174	13%
£15,000 - £20,000	£382	£365	5%
£20,000 - £25,000	£575	£568	1%
> £25,000	£829	£863	-4%

Source: NEST, Vanguard, 2019.

In order to further understand this skew in savings behaviour, we also viewed the contribution and pot balances after controlling for continuous contributions. Approximately 4 in 10 males and females within the NEST membership are "continuous contributors", meaning that they remain actively contributing on a regular basis to the scheme for a full 12 months. For example, for members on a monthly payroll arrangement, we observe approximately 12 contributions into their account throughout the calendar year to be considered a continuous contributor. By contrast, partial contributors may have either only one contribution within the calendar year, or multiple contributions but interspersed with gaps that do not reflect the corresponding payroll arrangement for their employer.

Figure 5. Contributions and pot balances by gender and earnings

Continuously contributing members with a positive pot balance as of December 31, 2018 NEST tenure more than one year

Median account balances	Female	Male	Female/ male (%)
< £10,000	£198	£193	2%
£10,000 - £14,999	£412	£394	5%
£15,000 - £20,000	£702	£718	-2%
£20,000 - £25,000	£1,012	£1,018	-1%
> £25,000	£1,564	£1,610	-3%

Median total contributions	Female	Male	Female/ male (%)
< £10,000	£121	£123	-1%
£10,000 - £14,999	£269	£271	-1%
£15,000 - £20,000	£455	£469	-3%
£20,000 - £25,000	£647	£659	-2%
> £25,000	£963	£1,014	-5%

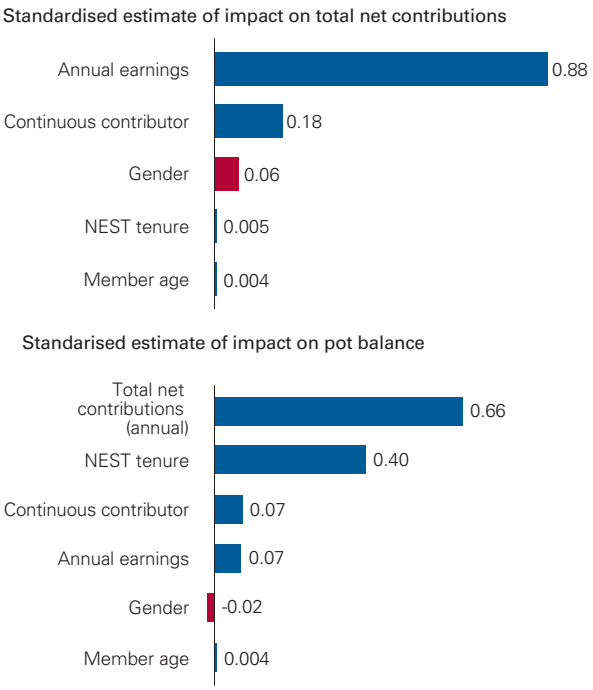
Source: NEST, Vanguard, 2019.

Figure 5 shows that when controlling for both contribution pattern and earnings, the material differences in contributions and account balances for males and females observed in **Figure 4**, especially in the lowest income brackets, fall away. This is largely driven by the observation that male 'partial contributors' in the lowest earnings brackets have lower contributions and account balances than their female counterparts. When considering the patterns of contributions, data shows that male partial contributors make on average, fewer contiguous contributions than females, suggesting more transient employment patterns and higher job turnover for males in those lower earning groups. However it does not necessarily mean that such males will have worse retirement savings outcomes in the long term. Logic would dictate that those members who are partial contributors in a 12-month period, and therefore have not opted out of retirement saving within the NEST scheme, would equally not opt out of retirement saving when either moving to a new employer, or participating in multiple employments, during those 12 months.

Linear regression techniques were used to identify the factors that influence total contributions and account balances. As would be expected, earnings and continuous contributions have by far the largest impact upon total net contributions (**Figure 6**). Account balances are most affected by total net contributions, scheme tenure, earnings and continuous contributions. In both analyses, the impact of gender is largely de minimus.

Figure 6. Factors influencing member contributions

Continuously contributing members with a positive pot balance as of December 31, 2018 NEST tenure more than one year



Plotted values represent standardised coefficient estimates from standard linear regression model.

Source: NEST, Vanguard, 2019.

Figure 7. Methods of enrolment

NEST members with positive pot balances and at least one contribution made in calendar year 2018

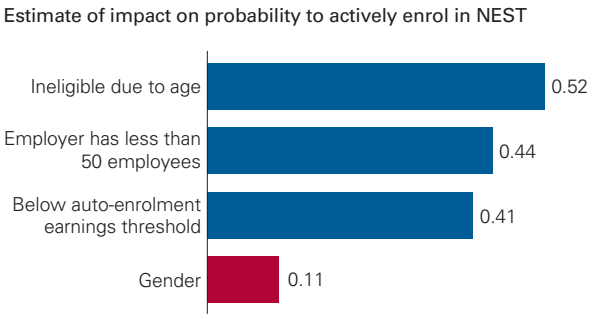
Enrolment	Auto enrolment	Active choice
% of active members enroled	93%	7%
Female	48%	52%
Male	54%	46%

Source: NEST, Vanguard, 2019.

The eligibility threshold for auto enrolment is to be between the ages of 22 and State Pension Age (SPA) and have earnings at least equivalent to £10,000 per annum. As a result, members of NEST earning less than £10,000 per annum have in general[1] actively chosen to opt in to retirement saving through their employer. **Figure 7** shows that females represent a greater proportion than males of those in this group, which correlates to the phenomenon observed in **Figure 2**; that females are three times more likely to be in the lowest earnings bracket – below the auto-enrolment threshold – than males.

Figure 8. Factors influencing the choice to actively enrol in NEST

NEST members with positive pot balances and at least one contribution made in calendar year 2018



Plotted values represent coefficient estimates from binary logistic regression model.

Source: NEST, Vanguard, 2019.

To examine the factors influencing the choice to actively opt in to NEST through their employer, we first ran a regression to determine if women are more likely to make voluntary savings choices than men. The logistic regression showed that ineligibility for auto enrolment (due to either age or earnings) was the most significant factor whereas gender was insignificant (**Figure 8**). Interestingly, working for a smaller employer is also a significant factor. It is possible that this might reflect a large proportion of smaller employers who are automatically enrolling their non-qualifying workers as described in the previous footnote, but further investigation will be needed to establish whether this is the case.

To further confirm this finding, we ran a series of discontinuity regression analyses around various points in the income distribution, such as the £10,000 threshold for auto enrolment. After controlling for various factors including age and employer size, we found that women were no different from men in their willingness to make

1 We identify 'active choice' enrolments as those members who do not meet the qualifying criteria (i.e. between the ages of 22 and State Pension Age and earning at least equivalent to £10,000 per annum) for auto enrolment under the applicable legislation. Some employers may choose to automatically enrol all of their staff regardless of age or earnings qualification, and thus some of the members identified as 'active choice' may in fact have been automatically enrolled. Hence this is a proxy rather than direct measure of members who have actively chosen to opt in.

voluntary contributions, either above or below the threshold. It is true that, in aggregate terms, there are more women making voluntary contributions at lower wages because more women hold such jobs. Yet after controlling for this effect, there is no greater tendency for women to be interested in voluntary savings than men. With the data that we have available on contributions and estimated incomes, we can find no statistically significant evidence to suggest a difference in savings behaviour between genders.

Finally, we looked at whether gender drove any difference in the additional contributions being made into the scheme by members. **Figure 9** shows that equal numbers of males and females choose to make such additional contributions, while contributions from males tend to be higher, likely as a result of higher earnings and higher account balances accrued in other savings arrangements.

Figure 9. Additional contributions by gender

Yearly gross contributions January 1, 2018 through December 31, 2018

	Females	Males
Percentage of members	50%	50%
Average (median) annual contributions	£845 (£300)	£1,109 (£385)
Average (median) one-time contributions	£1,389 (£63)	£1,636 (£63)

Source: NEST, Vanguard, 2019.

In conclusion, we began this supplementary research study on the basis of our original observation from How the UK Saves 2018 – a hypothesis that females are more proactive savers than males, driven by the observation that we have outlined in **Figure 4**. As a result of our subsequent analysis, it is clear that gender is a minimal factor when describing differences in retirement savings behaviours. Retirement saving differences between males and females – in terms of contributions, accrued account balances and propensity to opt in are driven by structural factors within our economy. Based on this new evidence, the often referred to "gender pensions gap" is not driven, under the current policy of auto enrolment, by gender differences in retirement saving and investment behavior. Instead it arises from gender differences in work or employment, such as differences in wages, including career (economic sector) choices, and labour market participation.

The implications of our analysis is that to address the shortfall of female retirement wealth relative to male, we should refocus our attention on the differences in average earnings and working patterns between males and females. Auto-enrolment policy or indeed employers' own retirement benefit plan terms could be amended to help address the issue. Lowering the earnings threshold for auto-enrolment eligibility, or making employer and employee contributions on the first pound of earnings (rather than adhering to the lower earnings limit) would both help to narrow the disparity between male and female retirement wealth.

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