#### CORRECTION



## Correction: Quantifying loss aversion: Evidence from a UK population survey

David Blake 10 · Edmund Cannon 20 · Douglas Wright 10

© The Author(s) 2025

Correction: Journal of Risk and Uncertainty (2021) 63:27–57 https://doi.org/10.1007/s11166-021-09356-7

We report and correct a coding error in the estimates of loss aversion in Blake et al. (2021, hereafter BCW) that were based on a representative sample of just over four thousand respondents to a survey in the United Kingdom. The original headline result was that the disutility of a loss of £500 was 2.41 times the utility of a gain of £500. The corrected result is a ratio of 1.80. In this correction, we explain briefly the error (full details of the model are in BCW).

The estimates of loss aversion were based upon the iso-elastic form of the value function, namely:

$$v(x) = \begin{cases} v^{+}(x) = x^{\alpha} & \text{if } x \ge 0 \\ v^{-}(x) = -\lambda (-x)^{\beta} & \text{if } x < 0, \end{cases}$$

where x is the gain if positive and loss if negative. The parameter  $\alpha$  measures risk attitude in the domain of gains; similarly, the parameter  $\beta$  measures risk attitude in

The original article can be found online at https://doi.org/10.1007/s11166-021-09356-7.

Edmund Cannon edmund.cannon@bristol.ac.uk

Published online: 27 October 2025

David Blake d.blake@city.ac.uk

Douglas Wright dwright@city.ac.uk

- Bayes Business School, City University of London, 106 Bunhill Row, London EC1Y 8TZ, UK
- School of Economics, University of Bristol, Priory Road Complex, Priory Road, Bristol BS8 1TU, UK



the domain of losses. Many papers estimating loss aversion restrict  $\alpha = \beta$ , including the original paper by Kahneman and Tversky (1979), but BCW did not do this.

Both  $\alpha$  and  $\beta$  were correctly estimated in first-stage regressions using data on respondents' choices to hypothetical gambles in the gain and loss domains, respectively. All of the results for  $\alpha$  and  $\beta$  in BCW Tables 3, 4 and 5 are correct. In second-stage regressions, the parameter  $\lambda$  was estimated, conditional on previous estimates  $\widehat{\alpha}$  and  $\widehat{\beta}$  using data on respondents' choices to gambles in the mixed domain. Alongside the parameter  $\lambda$ , BCW also reported a measure of "relative loss aver-

Alongside the parameter  $\lambda$ , BCW also reported a measure of "relative loss aversion" that depended upon the magnitude of x, i.e., the gain or loss, namely

$$\Lambda \, \left( x; \alpha \, , \beta \, , \lambda \, \right) \equiv \, \tfrac{-v^-(-x)}{v^+(x)} = \lambda \, x^{\beta \, -\alpha} \, . \label{eq:lambda}$$

The original paper contained the following coding error. For a gamble in the gain domain, denote G as the certainty equivalent for a gamble with equal chances of winning X or zero; conversely in the loss domain, M is the certainty equivalent for a gamble with equal chances of winning X or zero. The indifference condition in the mixed domain is  $M = G^{\alpha/\beta} \lambda^{-1/\beta}$ . This is also the correct regression equation if the random variation in respondents' reported values of G and M is homoskedastic. Having found strong evidence for heteroskedasticity, BCW scaled the formula by G to obtain  $M/G = G^{\alpha/\beta-1}\lambda^{-1/\beta}$ . However, when it came to the estimation code, BCW mistakenly scaled the formula by the size of the gamble, X, rather than the size of the gain, G, and estimated  $M/X = (G/X)^{\alpha/\beta} \lambda^{-1/\beta}$ . This resulted in X and X being incorrectly estimated. This only affects the final columns of BCW Tables 3 and 4.

The correct results for the whole sample, together with the corresponding incorrect results in BCW are reported in the correction to Table 3 below. The point estimate for  $\lambda$  should be 0.717, which is quite a bit lower than the original incorrect estimate of 0.956. The correction for  $\Lambda(500)$  is much larger, because this is a non-linear function of all three parameters. In BCW, Table 3 estimated loss aversion for sub-samples (e.g., splitting the sample into Male and Female). The qualitative conclusions are almost entirely unchanged, but the estimates of  $\Lambda$  are consistently lower. A fully-corrected version of Table 3 is available as electronic supplementary material below.

BCW also reported results for a sub-sample corresponding approximately to graduate students and the results were compared in Table 4 to some other studies using students. Again there is a substantial reduction in the estimate of  $\lambda$ . Note that relative loss aversion  $\Lambda$  for students differs from the population as a whole, partly because of a different value of  $\beta$  (which was estimated correctly in the original paper).

#### Correction to Table 3 – whole sample

	α	β	λ	Λ(500)
BCW original estimate	0.685	0.833	0.956	2.41 {2.13, 2.70}
Corrected estimate	0.685	0.883	0.717	1.80 {1.64, 1.96}



Note: Parameter estimates for the whole sample, pooling all 4016 observations.  $\alpha$  and  $\beta$  are estimated from separate first-step regressions (and were correctly estimated in BCW);  $\lambda$  is estimated from a second-step regression.  $\Lambda(500)$  is the relative loss aversion for a gain or loss of £500 and is reported alongside its asymmetric 90% confidence interval, which is estimated by bootstrapping. For further details, see BCW.

#### Correction to Table 4 – graduate students only

	α	β	λ	Λ(500)
BCW original estimate	0.703	0.924	1.256	5.24 {2.20, 9.77}
Corrected estimate	0.703	0.924	0.750	3.08 {1.71, 5.58}

Note: Parameter estimates for 71 students age 21–23 (corresponding approximately to graduate students). See also the notes to the Correction to Table 3 above.

**Supplementary Information** The online version contains supplementary material available at https://doi.org/10.1007/s11166-025-09472-8.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <a href="http://creativecommons.org/licenses/by/4.0/">http://creativecommons.org/licenses/by/4.0/</a>.

#### References

Blake, D., Cannon, E., & Wright, D. (2021). Quantifying loss aversion: Evidence from a UK population survey. *Journal of Risk and Uncertainty*, 63, 27–57.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263–92.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



# Correction: Quantifying loss aversion: evidence from a UK population survey Fully corrected version of Table 3

Available at: https://doi.org/10.1007/s11166-025-09472-8

The following pages contain a fully corrected version of Table 3. Note that the estimates of  $\alpha$  and  $\beta$  were correct in the original paper, but they are repeated again here for convenience. The estimates of  $\lambda$  and  $\Lambda(x)$  have been corrected. The model is

$$v(x) = \begin{cases} v^+(x) = x^{\alpha} & \text{if } x \ge 0 \\ v^-(x) = -\lambda (-x)^{\beta} & \text{if } x < 0. \end{cases}$$

and the measure of relative loss aversion is

$$\Lambda(x;\alpha,\beta,\lambda) \equiv \frac{-v^{-}(-x)}{v^{+}(x)} = \lambda x^{\beta-\alpha}.$$

### **Corrected Table 3**

Characteristic	N	α	β	λ	$\Lambda(5)$	$\Lambda(50)$	$\Lambda(500)$
All	4016	0.685 (0.005)	0.833 (0.008)	0.717 (0.008)	0.911 {0.893, 0.927}	1.281 {1.214, 1.345}	1.803 {1.640, 1.955}
Gender							
Male	1815	0.700 (0.008)	0.828 (0.011)	0.751 (0.014)	0.925 {0.903, 0.954}	1.245 {1.159, 1.349}	1.677 {1.481, 1.918}
Female	2201	0.673 (0.007)	0.837 (0.010)	0.693 (0.011)	0.905 {0.877, 0.937}	1.328 {1.238, 1.427}	1.950 {1.736, 2.197}
Equality test		p = 0.013	p = 0.556				
Age							
18-24	350	0.736 (0.018)	0.904 (0.023)	0.781 (0.037)	1.027 {0.972, 1.083}	1.514 {1.335, 1.736}	2.243 {1.761, 2.829}
25-34	438	0.719 (0.016)	0.866 (0.023)	0.740 (0.035)	0.941 {0.899, 0.985}	1.325 {1.172, 1.527}	1.877 {1.473, 2.404}
35-44	630	0.746 (0.015)	0.798 (0.018)	0.837 (0.055)	0.914 {0.879, 0.958}	1.033 {0.969, 1.113}	1.173 {0.995, 1.388}
45-54	837	0.699 (0.012)	0.815 (0.016)	0.713 (0.022)	0.862 {0.841, 0.894}	1.130 {1.028, 1.261}	1.486 {1.243, 1.824}
55-64	939	0.646 (0.011)	0.834 (0.017)	0.724 (0.017)	0.987 {0.918, 1.087}	1.532 {1.308, 1.841}	2.383 {1.866, 3.148}
65 & over	822	0.635 (0.011)	0.831 (0.018)	0.709 (0.022)	0.977 {0.902, 1.075}	1.539 {1.314, 1.816}	2.429 {1.885, 3.063}
Equality test		p = 0.000	p = 0.006				
Age and gender							
M 18-24	151	0.742 (0.028)	0.880 (0.034)	0.844 (0.066)	1.066 {0.990, 1.155}	1.476 {1.223, 1.865}	2.068 {1.455, 2.984}
M 25-34	143	0.751 (0.029)	0.888 (0.041)	0.740 (0.059)	0.945 {0.878, 1.036}	1.315 {1.049, 1.704}	1.856 {1.171, 2.810}

Characteristic	N	α	β	λ	$\Lambda(5)$	$\Lambda(50)$	Λ(500)
M 35-44	275	0.765 (0.023)	0.827 (0.028)	0.833 (0.097)	0.934 {0.873, 1.035}	1.076 {0.982, 1.205}	1.249 {0.950, 1.592}
M 45-54	401	0.730 (0.018)	0.821 (0.023)	0.769 (0.048)	0.900 {0.865, 0.941}	1.116 {1.001, 1.258}	1.392 {1.101, 1.740}
M 55-64	405	0.644 (0.017)	0.808 (0.023)	0.767 (0.029)	1.008 {0.925, 1.134}	1.472 {1.208, 1.837}	2.161 {1.581, 3.035}
M 65 & over	440	0.660 (0.016)	0.817 (0.023)	0.725 (0.023)	0.937 {0.873, 1.030}	1.339 {1.109, 1.632}	1.923 {1.408, 2.544}
F 18-24	199	0.732 (0.023)	0.923 (0.032)	0.737 (0.055)	1.006 {0.933, 1.102}	1.555 {1.289, 1.860}	2.425 {1.695, 3.213}
F 25-34	295	0.704 (0.019)	0.856 (0.028)	0.740 (0.043)	0.958 {0.908, 1.023}	1.358 {1.156, 1.687}	1.944 {1.393, 2.819}
F 35-44	355	0.732 (0.019)	0.777 (0.022)	0.840 (0.079)	0.913 {0.861, 0.985}	1.006 {0.936, 1.090}	1.115 {0.913, 1.331}
F 45-54	436	0.672 (0.016)	0.809 (0.023)	0.673 (0.029)	0.847 {0.810, 0.899}	1.172 {1.026, 1.387}	1.630 {1.246, 2.156}
F 55-64	534	0.648 (0.014)	0.853 (0.023)	0.694 (0.024)	0.977 {0.888, 1.119}	1.578 {1.272, 2.060}	2.565 {1.829, 3.787}
F 65 & over	382	0.607 (0.015)	0.848 (0.027)	0.706 (0.048)	1.051 {0.902, 1.239}	1.846 {1.402, 2.420}	3.260 {2.188, 4.756}
Marital status							
Married or living with partner	2544	0.681 (0.007)	0.829 (0.010)	0.709 (0.010)	0.903 {0.881, 0.929}	1.272 {1.194, 1.371}	1.793 {1.606, 2.024}
Single	1004	0.721 (0.011)	0.846 (0.015)	0.759 (0.024)	0.931 {0.904, 0.960}	1.247 {1.148, 1.372}	1.675 {1.443, 1.984}
Widowed, separated or divorced	468	0.636 (0.016)	0.822 (0.023)	0.712 (0.023)	0.965 {0.893, 1.064}	1.482 {1.242, 1.761}	2.284 {1.709, 2.975}
Equality test		p = 0.000	p = 0.553				

Characteristic	N	α	β	λ	$\Lambda(5)$	$\Lambda(50)$	$\Lambda(500)$
Number of children							
No children	2778	0.668 (0.006)	0.845 (0.009)	0.709 (0.008)	0.945 {0.915, 0.982}	1.422 {1.321, 1.562}	2.142 {1.900, 2.473}
One or more children	925	0.730 (0.012)	0.808 (0.015)	0.775 (0.035)	0.883 {0.862, 0.905}	1.054 {0.987, 1.129}	1.262 {1.093, 1.456}
No answer	313	0.713 (0.021)	0.796 (0.026)	0.807 (0.056)	0.934 {0.890, 0.987}	1.135 {1.007, 1.324}	1.390 {1.069, 1.849}
Equality test (excl NA)		p = 0.000	p = 0.000				
Health Status							
Better than average	1072	0.684 (0.011)	0.853 (0.015)	0.706 (0.013)	0.935 {0.895, 0.991}	1.390 {1.234, 1.562}	2.071 {1.685, 2.511}
Average	2065	0.687 (0.007)	0.825 (0.010)	0.728 (0.013)	0.908 {0.890, 0.927}	1.245 {1.173, 1.330}	1.709 {1.540, 1.909}
Worse than average	879	0.682 (0.012)	0.826 (0.017)	0.714 (0.019)	0.905 {0.876, 0.944}	1.264 {1.128, 1.416}	1.770 {1.449, 2.137}
Equality test		p = 0.930	p = 0.279				
Personality 1							
Type A (competitive)	1202	0.732 (0.011)	0.828 (0.013)	0.759 (0.027)	0.887 {0.867, 0.905}	1.112 {1.046, 1.196}	1.396 {1.219, 1.623}
Type B (laid back)	2814	0.666 (0.006)	0.835 (0.009)	0.714 (0.009)	0.938 {0.913, 0.975}	1.389 {1.289, 1.509}	2.059 {1.821, 2.343}
Equality test		p = 0.000	p = 0.691				
Personality 2							
Optimist	2652	0.688 (0.007)	0.824 (0.009)	0.716 (0.011)	0.893 {0.875, 0.912}	1.222 {1.153, 1.308}	1.675 {1.517, 1.882}
Pessimist	1364	0.679 (0.009)	0.850 (0.013)	0.725 (0.013)	0.958 {0.920, 1.006}	1.420 {1.282, 1.587}	2.108 {1.791, 2.512}
Equality test		p = 0.425	p = 0.111				

Characteristic	N	α	β	λ	$\Lambda(5)$	$\Lambda(50)$	$\Lambda(500)$
Emotional state							
Tense	343	0.667 (0.019)	0.830 (0.026)	0.743 (0.028)	0.980 {0.900, 1.089}	1.439 {1.214, 1.761}	2.126 {1.610, 2.863}
Neutral	1772	0.673 (0.008)	0.850 (0.012)	0.712 (0.012)	0.949 {0.914, 0.992}	1.430 {1.309, 1.585}	2.159 {1.849, 2.559}
Relaxed	1815	0.700 (0.008)	0.821 (0.011)	0.722 (0.016)	0.880 {0.862, 0.898}	1.166 {1.087, 1.249}	1.546 {1.355, 1.746}
Not sure	86	0.691 (0.044)	0.743 (0.045)	0.844 (0.143)	0.953 {0.872, 1.073}	1.078 {0.909, 1.347}	1.245 {0.817, 1.954}
Equality test (excl NS)		p = 0.040	p = 0.204				
Final educational attainmen	nt						
16 & under	1104	0.656 (0.010)	0.803 (0.015)	0.684 (0.013)	0.869 {0.836, 0.914}	1.224 {1.104, 1.376}	1.727 {1.443, 2.062}
17-19	893	0.663 (0.012)	0.824 (0.017)	0.716 (0.014)	0.930 {0.882, 0.984}	1.347 {1.178, 1.533}	1.956 {1.569, 2.396}
20 & over	1298	0.716 (0.010)	0.854 (0.012)	0.756 (0.021)	0.947 {0.920, 0.974}	1.303 {1.213, 1.407}	1.794 {1.564, 2.031}
Other	721	0.703 (0.013)	0.852 (0.018)	0.733 (0.021)	0.933 {0.898, 0.983}	1.309 {1.161, 1.466}	1.841 {1.477, 2.219}
Equality test (excl Other)		p = 0.000	p = 0.030				
Financial understanding							
Low	967	0.665 (0.011)	0.851 (0.016)	0.714 (0.017)	0.966 {0.906, 1.030}	1.485 {1.300, 1.691}	2.288 {1.852, 2.786}
Medium	2640	0.684 (0.007)	0.820 (0.009)	0.722 (0.012)	0.900 {0.883, 0.925}	1.234 {1.159, 1.327}	1.693 {1.501, 1.921}
High	409	0.743 (0.020)	0.876 (0.023)	0.749 (0.040)	0.938 {0.896, 0.994}	1.289 {1.115, 1.526}	1.781 {1.361, 2.349}
Equality test		p = 0.002	p = 0.035				

Characteristic	N	α	β	λ	Λ(5)	$\Lambda(50)$	$\Lambda(500)$
Social class							
A	646	0.711 (0.014)	0.792 (0.017)	0.799 (0.039)	0.914 {0.887, 0.941}	1.109 {1.018, 1.237}	1.350 {1.116, 1.639}
В	869	0.686 (0.011)	0.857 (0.016)	0.711 (0.017)	0.941 {0.901, 1.000}	1.405 {1.251, 1.601}	2.103 {1.718, 2.579}
C1	1053	0.710 (0.010)	0.845 (0.014)	0.731 (0.022)	0.910 {0.888, 0.937}	1.244 {1.149, 1.366}	1.702 {1.464, 2.005}
C2	581	0.684 (0.015)	0.827 (0.020)	0.704 (0.022)	0.891 {0.848, 0.949}	1.242 {1.088, 1.453}	1.738 {1.402, 2.268}
D	347	0.655 (0.017)	0.813 (0.027)	0.700 (0.026)	0.911 {0.847, 1.003}	1.316 {1.109, 1.580}	1.913 {1.437, 2.558}
Е	390	0.607 (0.017)	0.844 (0.028)	0.772 (0.063)	1.132 {0.931, 1.429}	1.962 {1.398, 2.774}	3.426 {2.101, 5.407}
Not available	130	0.693 (0.033)	0.836 (0.045)	0.742 (0.068)	0.972 {0.883, 1.140}	1.385 {1.021, 2.005}	2.012 {1.143, 3.461}
Equality test (excl NA)		p = 0.000	p = 0.093				
Employment type							
Full-time	1644	0.733 (0.009)	0.835 (0.011)	0.767 (0.024)	0.907 {0.891, 0.922}	1.148 {1.085, 1.222}	1.455 {1.291, 1.647}
Part-time	612	0.685 (0.014)	0.810 (0.018)	0.722 (0.026)	0.886 {0.856, 0.920}	1.178 {1.070, 1.309}	1.572 {1.300, 1.889}
Student	184	0.726 (0.025)	0.933 (0.034)	0.747 (0.049)	1.057 {0.960, 1.223}	1.702 {1.355, 2.209}	2.770 {1.822, 4.140}
Retired	1155	0.635 (0.010)	0.819 (0.015)	0.724 (0.017)	0.974 {0.911, 1.053}	1.481 {1.295, 1.731}	2.256 {1.842, 2.855}
Not working	324	0.629 (0.016)	0.860 (0.028)	0.695 (0.047)	1.037 {0.888, 1.249}	1.787 {1.356, 2.337}	3.100 {2.052, 4.532}
No answer	97	0.634 (0.032)	0.832 (0.054)	0.716 (0.073)	1.024 {0.851, 1.327}	1.663 {1.095, 2.580}	2.760 {1.347, 4.942}

Characteristic	N	α	β	λ	$\Lambda(5)$	$\Lambda(50)$	$\Lambda(500)$
Management responsibility							
Owner, etc	300	0.699 (0.021)	0.808 (0.027)	0.790 (0.050)	0.952 {0.907, 1.009}	1.206 {1.047, 1.435}	1.538 {1.145, 2.075}
Senior manager	145	0.745 (0.034)	0.809 (0.033)	0.854 (0.115)	0.969 {0.892, 1.088}	1.131 {0.965, 1.384}	1.341 {0.926, 1.954}
Middle manager	302	0.759 (0.020)	0.762 (0.023)	0.944 (0.095)	0.964 {0.898, 1.057}	0.960 {0.915, 1.018}	0.960 {0.836, 1.119}
Junior manager	443	0.718 (0.017)	0.869 (0.022)	0.677 (0.035)	0.871 {0.836, 0.907}	1.236 {1.083, 1.453}	1.763 {1.371, 2.338}
No management responsibility	1073	0.701 (0.010)	0.846 (0.015)	0.722 (0.021)	0.914 {0.884, 0.944}	1.279 {1.160, 1.424}	1.795 {1.479, 2.165}
Other / NA	1753	0.649 (0.008)	0.835 (0.012)	0.715 (0.012)	0.969 {0.921, 1.030}	1.490 {1.333, 1.674}	2.293 {1.934, 2.724}
Equality test (excl Oth/NA)		p = 0.078	p = 0.008				
Employment sector							
Self-employed	375	0.673 (0.018)	0.815 (0.024)	0.752 (0.027)	0.957 {0.896, 1.056}	1.337 {1.133, 1.658}	1.879 {1.396, 2.572}
Private sector	1231	0.710 (0.010)	0.814 (0.013)	0.757 (0.025)	0.898 {0.878, 0.923}	1.148 {1.069, 1.255}	1.471 {1.276, 1.719}
Public corporation	533	0.698 (0.015)	0.844 (0.020)	0.708 (0.028)	0.901 {0.862, 0.939}	1.270 {1.111, 1.483}	1.796 {1.414, 2.323}
Public sector	465	0.667 (0.015)	0.867 (0.023)	0.679 (0.026)	0.944 {0.866, 1.034}	1.502 {1.228, 1.832}	2.402 {1.719, 3.250}
Charity sector	211	0.672 (0.023)	0.870 (0.034)	0.693 (0.037)	0.975 {0.868, 1.157}	1.567 {1.209, 2.111}	2.543 {1.634, 3.799}
Other / NA	1201	0.668 (0.010)	0.834 (0.014)	0.712 (0.013)	0.931 {0.895, 0.979}	1.363 {1.242, 1.508}	1.997 {1.707, 2.339}
Equality test (excl Oth/NA)		p = 0.094	p = 0.181				

Characteristic	N	α	β	λ	$\Lambda(5)$	$\Lambda(50)$	$\Lambda(500)$
Job security							
Secure	1781	0.723 (0.008)	0.836 (0.011)	0.747 (0.019)	0.897 {0.883, 0.913}	1.162 {1.105, 1.239}	1.506 {1.361, 1.689}
Insecure	475	0.707 (0.017)	0.801 (0.021)	0.776 (0.049)	0.909 {0.869, 0.951}	1.130 {1.029, 1.291}	1.414 {1.161, 1.809}
No answer	1760	0.643 (0.008)	0.839 (0.012)	0.717 (0.013)	0.980 {0.926, 1.039}	1.535 {1.362, 1.715}	2.407 {1.999, 2.828}
Equality test (excl NA)		p = 0.000	p = 0.000				
Personal gross income							
Below £15,000	1057	0.649 (0.010)	0.845 (0.015)	0.694 (0.015)	0.956 {0.904, 1.023}	1.514 {1.338, 1.741}	2.402 {1.965, 2.959}
£15,000-£29,999	1056	0.678 (0.010)	0.832 (0.015)	0.715 (0.016)	0.920 {0.885, 0.959}	1.313 {1.187, 1.463}	1.877 {1.576, 2.253}
£30,000-£49,999	567	0.746 (0.015)	0.827 (0.019)	0.794 (0.045)	0.909 {0.876, 0.945}	1.098 {1.017, 1.186}	1.330 {1.139, 1.550}
£50,000 & above	208	0.790 (0.027)	0.790 (0.028)	0.983 (0.140)	0.990 {0.891, 1.126}	0.995 {0.933, 1.076}	1.009 {0.834, 1.239}
No answer	1128	0.679 (0.010)	0.833 (0.015)	0.726 (0.014)	0.935 {0.897, 0.982}	1.335 {1.197, 1.485}	1.910 {1.579, 2.249}
Equality test (excl NA)		p = 0.000	p = 0.387				
Home ownership							
Own outright	713	0.654 (0.013)	0.850 (0.020)	0.727 (0.021)	1.003 {0.924, 1.112}	1.583 {1.303, 1.925}	2.507 {1.840, 3.362}
Mortgage	610	0.694 (0.014)	0.816 (0.018)	0.739 (0.030)	0.903 {0.873, 0.938}	1.196 {1.070, 1.349}	1.591 {1.279, 1.984}
Rent	420	0.669 (0.018)	0.798 (0.024)	0.732 (0.028)	0.909 {0.861, 0.981}	1.230 {1.035, 1.456}	1.675 {1.235, 2.189}
No answer / don't know	2273	0.696 (0.007)	0.839 (0.010)	0.714 (0.012)	0.902 {0.885, 0.922}	1.258 {1.173, 1.335}	1.757 {1.543, 1.950}
Equality test (excl NA/DK)		p = 0.104	p = 0.213				

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Characteristic	N	α	β	λ	Λ(5)	$\Lambda(50)$	Λ(500)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Total savings							
(0.012) (0.016) (0.029) {0.074, 0.926} {1.111, 1.340} {1.389, 1.988} £10,000 - £49,999	Below £1,000	938						1.605 {1.374, 1.866}
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	£1,000 - £9,999	816						1.657 {1.389, 1.988}
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	£10,000 - £49,999	690						1.921 {1.573, 2.344}
	£50,000 and above	596						1.667 {1.344, 2.095}
Ease of short-term saving           Easy         2488 $0.686$ $0.834$ $0.714$ $0.908$ $1.284$ $1.816$ $(0.007)$ $(0.007)$ $(0.010)$ $(0.011)$ $\{0.889, 0.932\}$ $\{1.209, 1.381\}$ $\{1.635, 2.046\}$ Not easy $1528$ $0.684$ $0.831$ $0.723$ $0.917$ $1.287$ $1.808$ $(0.009)$ $(0.009)$ $(0.012)$ $(0.013)$ $\{0.890, 0.946\}$ $\{1.185, 1.395\}$ $\{1.568, 2.069\}$ Equality test $\mathbf{p} = 0.861$ $\mathbf{p} = 0.832$ Rainy day fund           Yes         2719 $0.677$ $0.842$ $0.709$ $0.925$ $1.354$ $1.984$ $1.984$ $0.006)$ $0.006)$ $0.009)$ $0.009)$ $0.009$	No answer	976						2.280 {1.807, 2.899}
Easy 2488 0.686 0.834 0.714 0.908 1.284 1.816 (0.007) (0.010) (0.011) $\{0.889, 0.932\}$ $\{1.209, 1.381\}$ $\{1.635, 2.046\}$ Not easy 1528 0.684 0.831 0.723 0.917 1.287 1.808 (0.009) (0.012) (0.013) $\{0.890, 0.946\}$ $\{1.185, 1.395\}$ $\{1.568, 2.069\}$ Equality test $p = 0.861$ $p = 0.832$ $p = 0.861$ $p = 0.832$ $p = 0.87$ $p = 0.87$ $p = 0.882$ $p = 0.883$ $p = 0.677$ 0.842 0.709 0.925 1.354 1.984 (0.006) (0.009) (0.009) $\{0.009\}$ $\{0.900, 0.955\}$ $\{1.274, 1.448\}$ $\{1.791, 2.196\}$ No 1297 0.702 0.814 0.741 0.890 1.149 1.487 (0.010) (0.013) (0.013) (0.016) $\{0.871, 0.911\}$ $\{1.075, 1.242\}$ $\{1.317, 1.700\}$ $\{0.911\}$ $\{1.075, 1.242\}$ $\{1.317, 1.700\}$ $\{0.911\}$ $\{1.075, 1.242\}$ $\{1.317, 1.700\}$ $\{0.024\}$ $\{0.033\}$ $\{0.054\}$ $\{0.054\}$ $\{0.054\}$ $\{0.056\}$ $\{0.099\}$ $\{0.090\}$	Equality test (excl NA)		p = 0.098	p = 0.620				
Not easy $1528$ $0.684$ $0.831$ $0.723$ $0.917$ $1.287$ $1.808$ $(0.009)$ $(0.009)$ $(0.012)$ $(0.013)$ $\{0.890, 0.946\}$ $\{1.185, 1.395\}$ $\{1.568, 2.069\}$ Equality test $p = 0.861$ $p = 0.832$ Rainy day fund  Yes $2719$ $0.677$ $0.842$ $0.709$ $0.925$ $1.354$ $1.984$ $1.791, 2.196\}$ No $1297$ $0.702$ $0.814$ $0.741$ $0.890$ $0.900, 0.955\}$ $\{1.274, 1.448\}$ $\{1.791, 2.196\}$ $1.487$ $(0.010)$ $(0.010)$ $(0.013)$ $(0.016)$ $\{0.871, 0.911\}$ $\{1.075, 1.242\}$ $\{1.317, 1.700\}$ Equality test $p = 0.039$ $p = 0.081$ Region  North East $174$ $0.678$ $0.809$ $0.720$ $0.907$ $1.249$ $1.737$ $1.737$ $(0.024)$ $0.024)$ $0.033)$ $0.054$ $0.829$ $0.729$ $0.932$ $1.307$ $1.842$	Ease of short-term saving							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Easy	2488						1.816 {1.635, 2.046}
Rainy day fund           Yes         2719 $0.677$ $0.842$ $0.709$ $0.925$ $1.354$ $1.984$ No         1297 $0.702$ $0.814$ $0.741$ $0.890$ $0.149$ $0.487$ Equality test $p = 0.039$ $p = 0.081$ Region           North East         174 $0.678$ $0.809$ $0.720$ $0.907$ $0.249$ $0.720$ $0.836$ $0.993$ $0.899$ $0.720$ $0.836$ $0.899$ $0.720$ $0.907$ $0.849$ <td< td=""><td>Not easy</td><td>1528</td><td></td><td></td><td></td><td></td><td></td><td>1.808 {1.568, 2.069}</td></td<>	Not easy	1528						1.808 {1.568, 2.069}
Yes 2719 0.677 0.842 0.709 0.925 1.354 1.984 (0.006) (0.006) (0.009) (0.009) $\{0.900, 0.955\}$ $\{1.274, 1.448\}$ $\{1.791, 2.196\}$ No 1297 0.702 0.814 0.741 0.890 1.149 1.487 (0.010) (0.013) (0.013) (0.016) $\{0.871, 0.911\}$ $\{1.075, 1.242\}$ $\{1.317, 1.700\}$ Equality test $\mathbf{p} = 0.039$ $\mathbf{p} = 0.081$ Region North East 174 0.678 0.809 0.720 0.907 1.249 1.737 (0.024) (0.033) (0.054) $\{0.836, 0.993\}$ $\{1.039, 1.585\}$ $\{1.210, 2.564\}$ North West 490 0.670 0.816 0.729 0.932 1.307 1.842	Equality test		p = 0.861	p = 0.832				
No 1297 0.702 0.814 0.741 0.890 1.149 1.487 (0.010) $p = 0.039$ $p = 0.081$ Region  North East 174 0.678 0.809 0.720 0.907 1.249 1.737 (0.024) (0.024) (0.033) (0.054) {0.866, 0.993} {1.039, 1.585} {1.274, 1.448} {1.791, 2.196} {1.487} {1.448} {1.487} {1.448} {1.487} {1.448} {1.487} {1.448} {1.487} {1.448} {1.487} {1.448} {1.487} {1.448} {1.487} {1.448} {1.487} {1.448} {1.487} {1.448} {1.487} {1.448} {1.487} {	Rainy day fund							
	Yes	2719						1.984 {1.791, 2.196}
Region       North East     174     0.678 (0.024)     0.809 (0.033)     0.720 (0.054)     0.907 (0.836, 0.993)     1.249 (1.039, 1.585)     1.737 (1.240, 2.564)       North West     490     0.670     0.816     0.729 (0.729)     0.932 (0.932)     1.307 (0.942)	No	1297						1.487 {1.317, 1.700}
North East 174 0.678 0.809 0.720 0.907 1.249 1.737 (0.024) (0.033) (0.054) {0.836, 0.993} {1.039, 1.585} {1.210, 2.564} North West 490 0.670 0.816 0.729 0.932 1.307 1.842	Equality test		p = 0.039	p = 0.081				
(0.024) (0.033) (0.054) {0.836, 0.993} {1.039, 1.585} {1.210, 2.564} North West 490 0.670 0.816 0.729 0.932 1.307 1.842	Region							
	North East	174						1.737 {1.210, 2.564}
	North West	490						1.842 {1.421, 2.373}

Characteristic	N	α	β	λ	$\Lambda(5)$	$\Lambda(50)$	$\Lambda(500)$
Yorkshire and the Humber	370	0.676 (0.017)	0.820 (0.024)	0.718 (0.026)	0.912 {0.862, 0.979}	1.274 {1.082, 1.542}	1.789 {1.339, 2.417}
East Midlands	292	0.675 (0.019)	0.860 (0.029)	0.705 (0.033)	0.971 {0.893, 1.107}	1.506 {1.224, 2.025}	2.354 {1.663, 3.607}
West Midlands	300	0.725 (0.021)	0.865 (0.029)	0.702 (0.039)	0.889 {0.841, 0.955}	1.235 {1.052, 1.502}	1.728 {1.267, 2.326}
East of England	352	0.677 (0.018)	0.857 (0.026)	0.733 (0.027)	0.997 {0.909, 1.113}	1.525 {1.248, 1.896}	2.344 {1.687, 3.263}
London	509	0.709 (0.017)	0.825 (0.021)	0.724 (0.033)	0.877 {0.839, 0.919}	1.149 {1.017, 1.326}	1.511 {1.203, 1.928}
South East	499	0.671 (0.014)	0.842 (0.022)	0.707 (0.024)	0.935 {0.890, 0.999}	1.392 {1.206, 1.639}	2.082 {1.623, 2.647}
South West	343	0.685 (0.018)	0.866 (0.027)	0.683 (0.026)	0.930 {0.859, 1.027}	1.427 {1.185, 1.782}	2.207 {1.625, 3.095}
Wales	192	0.662 (0.023)	0.771 (0.032)	0.753 (0.054)	0.914 {0.860, 0.988}	1.188 {0.995, 1.470}	1.560 {1.102, 2.261}
Scotland	391	0.703 (0.019)	0.818 (0.024)	0.736 (0.038)	0.895 {0.854, 0.950}	1.170 {1.005, 1.383}	1.540 {1.152, 2.028}
Northern Ireland	104	0.674 (0.038)	0.818 (0.051)	0.772 (0.092)	1.048 {0.889, 1.406}	1.547 {1.002, 2.536}	2.343 {1.118, 4.581}
Equality test (excl oth)		p = 0.495	p = 0.505				
Newspaper							
Express / Mail	560	0.678 (0.015)	0.796 (0.020)	0.742 (0.025)	0.905 {0.867, 0.957}	1.190 {1.049, 1.383}	1.570 {1.236, 2.014}
Sun / Star	571	0.672 (0.014)	0.807 (0.020)	0.667 (0.027)	0.831 {0.800, 0.873}	1.131 {1.007, 1.311}	1.545 {1.249, 1.992}
Mirror / Record	402	0.701 (0.018)	0.807 (0.025)	0.707 (0.041)	0.846 {0.813, 0.886}	1.087 {0.953, 1.278}	1.405 {1.077, 1.866}
Guardian / Independent	378	0.670 (0.015)	0.892 (0.024)	0.748 (0.027)	1.074 {0.983, 1.193}	1.795 {1.482, 2.181}	3.015 {2.241, 4.024}

Characteristic	N	α	β	λ	Λ(5)	Λ(50)	Λ(500)
FT / Times / Telegraph	316	0.763 (0.021)	0.830 (0.025)	0.836 (0.077)	0.942 {0.891, 1.009}	1.091 {1.003, 1.215}	1.270 {1.020, 1.624}
Other paper	419	0.687 (0.017)	0.840 (0.022)	0.712 (0.024)	0.918 {0.865, 0.991}	1.320 {1.119, 1.578}	1.907 {1.442, 2.525}
No paper	1370	0.675 (0.009)	0.850 (0.014)	0.735 (0.014)	0.973 {0.930, 1.022}	1.452 {1.315, 1.627}	2.170 {1.842, 2.606}
Equality test		p = 0.006	p = 0.027				
Party identification							
Conservative	950	0.710 (0.011)	0.828 (0.015)	0.715 (0.026)	0.869 {0.848, 0.887}	1.141 {1.063, 1.249}	1.502 {1.296, 1.763}
Labour	1339	0.685 (0.010)	0.828 (0.013)	0.717 (0.015)	0.908 {0.880, 0.944}	1.264 {1.157, 1.390}	1.763 {1.509, 2.042}
Liberal Democrat	333	0.657 (0.017)	0.888 (0.027)	0.710 (0.032)	1.040 {0.922, 1.194}	1.784 {1.385, 2.332}	3.079 {2.057, 4.531}
SNP or Plaid Cymru	100	0.729 (0.039)	0.808 (0.046)	0.750 (0.185)	0.889 {0.792, 1.035}	1.052 {0.908, 1.307}	1.280 {0.827, 1.964}
Other party	351	0.654 (0.018)	0.847 (0.028)	0.761 (0.047)	1.065 {0.926, 1.294}	1.693 {1.320, 2.324}	2.708 {1.866, 4.149}
No party	760	0.679 (0.013)	0.813 (0.017)	0.754 (0.022)	0.937 {0.907, 0.976}	1.265 {1.143, 1.429}	1.712 {1.421, 2.095}
Don't know / NA	183	0.678 (0.026)	0.862 (0.040)	0.696 (0.040)	0.950 {0.871, 1.088}	1.456 {1.119, 2.051}	2.263 {1.418, 3.797}
Equality test (excl DK/NA)		p = 0.028	p = 0.265				
Religion							
None	498	0.707 (0.017)	0.832 (0.023)	0.770 (0.029)	0.952 {0.910, 1.019}	1.284 {1.109, 1.515}	1.740 {1.335, 2.299}
Ch of England	560	0.649 (0.014)	0.812 (0.020)	0.702 (0.021)	0.921 {0.865, 1.004}	1.354 {1.165, 1.601}	1.999 {1.555, 2.584}
Roman Catholic	171	0.681 (0.029)	0.817 (0.040)	0.720 (0.051)	0.934 {0.845, 1.094}	1.326 {0.979, 1.915}	1.923 {1.106, 3.396}

Characteristic	N	α	β	λ	$\Lambda(5)$	$\Lambda(50)$	$\Lambda(500)$
Protestant	158	0.617 (0.023)	0.829 (0.032)	0.773 (0.082)	1.109 {0.919, 1.418}	1.825 {1.276, 2.590}	3.035 {1.761, 4.824}
Other	121	0.656 (0.030)	0.822 (0.040)	0.695 (0.043)	0.925 {0.836, 1.084}	1.357 {1.035, 1.865}	2.020 {1.251, 3.220}
NA	2508	0.695 (0.007)	0.840 (0.010)	0.715 (0.011)	0.903 {0.884, 0.925}	1.261 {1.179, 1.344}	1.763 {1.567, 1.956}
Equality test (NA)		p = 0.017	p = 0.975				
Religiosity							
Religious	843	0.644 (0.011)	0.811 (0.017)	0.720 (0.018)	0.948 {0.887, 1.024}	1.396 {1.199, 1.630}	2.063 {1.610, 2.585}
Not religious	904	0.705 (0.012)	0.837 (0.016)	0.742 (0.021)	0.928 {0.893, 0.971}	1.273 {1.142, 1.458}	1.752 {1.435, 2.199}
Don't know / NA	2269	0.693 (0.007)	0.839 (0.010)	0.711 (0.012)	0.903 {0.885, 0.924}	1.265 {1.185, 1.343}	1.775 {1.576, 1.964}
Equality test (excl DK/NA)		p = 0.000	p = 0.000				