

Electronic Companion Pages to “A Quantitative Measurement of Regret Theory” by Han Bleichrodt, Alessandra Cillo, and Enrico Diecidue

These pages show extra results that supplement the analysis in the paper. Section 1 gives the full results of the exponential and power specifications for $u(\cdot)$ and $Q(\cdot)$ based on the 56 subjects included in the main analyses. Section 2 gives the results when the 16 most risk seeking subjects were excluded.

1. Full results for exponential and power specifications.

Table 1 gives an overview of all the estimation results for the exponential functions for $u(\cdot)$ and $Q(\cdot)$ based on the 56 subjects included in the main analyses. The p-values indicate whether the estimates for the exponential coefficient were significantly different from 0. Table 2 does the same for the power function. The p-values in Table 2 indicate whether estimates for the power coefficient were significantly different from 1.

Table 1: Estimation Results for the Exponential Specifications of $u(\cdot)$ and $Q(\cdot)$ (n = 56)

	Utility	Q on [0,1]	Q on [1/5,1]	Q on [0,2/5]
Concave	31	21	8	41
Convex	21	33	44	15
Linear	4	2	4	0
Median ind. estimates	-0.17	0.19	1.13	-1.28
Based on median data	-0.06 (p = 0.201)	0.45 (p = 0.043)	1.01 (p < 0.01)	-1.28
Based on mean data	-0.22 (p < 0.01)	0.76 (p < 0.01)	1.06 (p < 0.01)	-1.06

Table 2: Estimation Results for the Power Specifications of $u(\cdot)$ and $Q(\cdot)$ (n = 56)

	Utility	Q on [0,1]	Q on [1/5,1]	Q on [0,2/5]
Concave	29	19	7	42
Convex	19	30	45	14
Linear	8	7	4	0
Median ind. estimates	0.94	1.08	1.48	0.61
Based on median data	0.96 (p = 0.120)	1.14 (p = 0.085)	1.40 (p < 0.01)	0.61
Based on mean data	0.88 (p < 0.01)	1.27 (p < 0.01)	1.42 (p < 0.01)	0.66

2. Results after exclusion of 16 most risk-seeking subjects.

The median values of the standard sequence x_1, \dots, x_5 elicited in the first stage of our method were 410, 670, 930, 1180, and 1420. Table 3 shows the full results on utility both for the power and for the exponential specification. The p-values for the power specification indicate whether the estimates were significantly different from 1; for the exponential specification they indicate whether the estimates were significantly different from 0.

Table 3. Results on utility (n = 40).

	Power	Exponential
Concave	21	23
Convex	13	14
Linear	6	3
Median ind. estimates	0.94	-0.18
Based on median data	0.94 (p = 0.050)	-0.09 (p = 0.166)
Based on mean data	0.88 (p < 0.01)	-0.22 (p < 0.01)

The median values of p_2, \dots, p_5 elicited in the second stage of our method were 0.40, 0.42, 0.42, and 0.43 and the median values of $Q(2/5)$, $Q(3/5)$, $Q(4/5)$, and $Q(1)$ were 1.50, 2.25, 2.98, and 3.80. Table 4 shows the full results on $Q(\cdot)$ both for the power and for the exponential specification. The p-values for the power specification indicate whether the estimates were significantly different from 1; for the exponential specification they indicate whether the estimates were significantly different from 0.

Table 4. Results on $Q(\cdot)$ (n = 40).

	Power on [0,1]	Power on [1/5,1]	Power on [0,2/5]	Expo on [0,1]	Expo on [1/5,1]	Expo on [0,2/5]
Concave	15	4	31	17	5	30
Convex	19	33	9	22	32	10
Linear	6	3	0	1	3	0
Median ind. estimates	1.01	1.51	0.58	0.17	1.23	-1.42
Based on median data	0.96 (p = 0.277)	1.20 (p < 0.01)	0.58	-0.05 (p = 0.716)	0.52 (p < 0.01)	-1.42
Based on mean data	1.31 (p < 0.01)	1.49 (p < 0.01)	0.64	0.86 (p < 0.01)	1.19 (p < 0.01)	-1.15