

Online supplement to

“On the Use of Probit Based Models for Ranking Data Analysis”

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TABLE A.1 Parameters estimated using ROL, ROP, HROL and HROP models on the gaming console dataset

(This table is to be read along with section 6.1 of the original paper. The values in parenthesis indicate standard errors.)

Model	ROL	ROP	HROL	HROP
Alternative specific constants (Base: PC)				
PlayStation	0.9381 (0.26)	0.8938 (0.32)	0.9306 (0.33)	0.8314 (0.33)
PlayStation Portable	0.8018 (0.27)	0.6032 (0.33)	0.6498 (0.38)	0.5343 (0.36)
Gamecube	0.0460 (0.29)	-0.0017 (0.34)	0.0266 (0.44)	0.0431 (0.36)
Gameboy	0.0922 (0.27)	-0.2286 (0.33)	-0.4758 (0.54)	-0.3037 (0.4)
X-box	1.3965 (0.28)	1.3283 (0.33)	1.4297 (0.35)	1.2642 (0.35)
Hours spent playing (Base: PC)				
PlayStation	-0.1296 (0.04)	-0.1221 (0.05)	-0.1127 (0.05)	-0.1133 (0.05)
PlayStation Portable	-0.2342 (0.05)	-0.2166 (0.05)	-0.2661 (0.08)	-0.2140 (0.06)
Gamecube	-0.1865 (0.05)	-0.1952 (0.06)	-0.2865 (0.09)	-0.2156 (0.07)
Gameboy	-0.235 (0.05)	-0.2205 (0.06)	-0.3451 (0.11)	-0.2428 (0.07)
X-box	-0.1729 (0.04)	-0.1595 (0.05)	-0.1524 (0.05)	-0.1526 (0.05)
Platform ownership	0.9639 (0.19)	1.2409 (0.22)	1.4423 (0.30)	1.2310 (0.29)
Log scaling parameter				
Rank level 1 (Fixed)	--	--	0.0000	0.0000
Rank level 2	--	--	-0.4495 (0.26)	-0.0958 (0.24)
Rank level 3	--	--	-0.4093 (0.26)	0.1478 (0.24)
Rank level 4	--	--	-1.1033 (0.52)	-0.2852 (0.50)
Rank level 5	--	--	-1.4055 (0.80)	-0.3928 (0.71)

TABLE A.2 Parameters estimated using ROL, ROP, HROL and HROP models on the LPG bus utility dataset

(This table is to be read along with section 6.2 of the original paper. The values in parenthesis indicate standard errors.)

Model	ROL	ROP	HROL	HROP
Fuel type is LPG	-3.3495 (0.38)	-4.2307 (0.43)	-5.8498 (0.62)	-5.1101 (0.54)
Fuel price (in HK\$)	-0.9972 (0.08)	-1.1716 (0.09)	-1.4173 (0.13)	-1.3078 (0.11)
Vehicle price (in 100,000 HK\$)	-1.1344 (0.39)	-1.048 (0.45)	-0.9478 (0.60)	-0.8964 (0.53)
Refueling distance (km)	-0.2431 (0.03)	-0.2793 (0.04)	-0.2591 (0.05)	-0.2788 (0.04)
Vehicle range (in 100 km)	0.3399 (0.06)	0.3932 (0.07)	0.3348 (0.08)	0.3779 (0.07)
Vehicle life (years)	0.2736 (0.04)	0.3307 (0.05)	0.3446 (0.06)	0.3496 (0.05)
Number of seats	0.5399 (0.04)	0.6121 (0.05)	0.7663 (0.06)	0.6784 (0.05)
Horse Power (kW@3600 rpm)	0.0222 (0.00)	0.026 (0.00)	0.0237 (0.01)	0.0258 (0.01)
Log scaling parameter				
Rank level 1 (fixed)	--	--	0.0000	0.0000
Rank level 2	--	--	-0.7306 (0.11)	-0.2205 (0.10)
Rank level 3	--	--	-1.6911 (0.29)	-0.8365 (0.24)