Figure S2. EXTENDED. Obtaining Adviser 1's reduced payoff matrix in the last round (Related to Figure 1). a-e. In each panel the top matrices show Adviser 1's predicted (updated) weights, conditional on whether the winning colour is black (top left) or white (top right) for all possible combinations s_1 and s_2. Weights greater than or equal to 0.5 are shown in purple, resulting in Adviser 1 being selected for the following round. Weights below 0.5 are shown in yellow, resulting in Adviser 2 being selected for the following round. Note that $w_1 + w_2 = 1$. The bottom left matrix shows Adviser 1's expected payoffs (i.e., probabilities of being selected for the following round). These are obtained by taking *p* in each cell where Adviser 1's predicted weight, conditional on the winning colour being black, is shown in purple, and adding *q* where Adviser 1's predicted weight, conditional on the winning colour being white, is shown in purple. The highlighted strategies are deleted during iterative deletion of weakly dominated strategies. Bottom right is the reduced payoff matrix after these deletions, where strategies that are equivalent in terms of potential payoffs are lumped together. Matrices are shown for **a.** $w_1 = 0.9$. **b.** $w_1 = 0.8$. **c.** $w_1 = 0.7$. **d.** $w_1 = 0.6$. **e.** $w_1 = 0.5$.

a

Adviser 1's strategy s1 \ Adviser 2's strategy s2

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1/9	1.00	0.90	0.69	0.50	0.36	0.26	0.20	0.16	0.12	0.10
2/9	1.00	0.97	0.90	0.80	0.69	0.59	0.50	0.42	0.36	0.31
3/9	1.00	0.99	0.95	0.90	0.84	0.76	0.69	0.62	0.56	0.50
4/9	1.00	0.99	0.97	0.94	0.90	0.85	0.80	0.75	0.69	0.64
5/9	1.00	1.00	0.98	0.96	0.93	0.90	0.86	0.82	0.78	0.74
6/9	1.00	1.00	0.99	0.97	0.95	0.93	0.90	0.87	0.84	0.80
7/9	1.00	1.00	0.99	0.98	0.96	0.95	0.92	0.90	0.87	0.84
8/9	1.00	1.00	0.99	0.98	0.97	0.96	0.94	0.92	0.90	0.88
1	1.00	1.00	0.99	0.99	0.98	0.97	0.95	0.94	0.92	0.90

Adviser 2's strategy s2

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.90	0.92	0.94	0.95	0.97	0.98	0.99	0.99	1.00	1.00
1/9	0.88	0.90	0.92	0.94	0.96	0.97	0.98	0.99	1.00	1.00
2/9	0.84	0.87	0.90	0.92	0.95	0.96	0.98	0.99	1.00	1.00
3/9	0.80	0.84	0.87	0.90	0.93	0.95	0.97	0.99	1.00	1.00
4/9	0.74	0.78	0.82	0.86	0.90	0.93	0.96	0.98	1.00	1.00
5/9	0.64	0.69	0.75	0.80	0.85	0.90	0.94	0.97	0.99	1.00
6/9	0.50	0.56	0.62	0.69	0.76	0.84	0.90	0.95	0.99	1.00
7/9	0.31	0.36	0.42	0.50	0.59	0.69	0.80	0.90	0.97	1.00
8/9	0.10	0.12	0.16	0.20	0.26	0.36	0.50	0.69	0.90	1.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90

Adviser 1's strategy s1

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	1	q	q	q	q	q	q	q	q	q
1/9	1	1	1	1	q	q	q	q	q	q
2/9	1	1	1	1	1	1	1	q	q	q
3/9	1	1	1	1	1	1	1	1	1	1
4/9	1	1	1	1	1	1	1	1	1	1
5/9	1	1	1	1	1	1	1	1	1	1
6/9	1	1	1	1	1	1	1	1	1	1
7/9	p	p	p	1	1	1	1	1	1	1
8/9	p	p	p	p	p	p	1	1	1	1
1	p	p	p	p	p	p	p	p	p	1

	y_1
x_1	1

b

Adviser 2's strategy s2

Adviser 1's strategy s1	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1/9	1.00	0.80	0.50	0.31	0.20	0.14	0.10	0.08	0.06	0.05
2/9	1.00	0.94	0.80	0.64	0.50	0.39	0.31	0.25	0.20	0.16
3/9	1.00	0.97	0.90	0.80	0.69	0.59	0.50	0.42	0.36	0.31
4/9	1.00	0.98	0.94	0.88	0.80	0.72	0.64	0.57	0.50	0.44
5/9	1.00	0.99	0.96	0.92	0.86	0.80	0.74	0.67	0.61	0.55
6/9	1.00	0.99	0.97	0.94	0.90	0.85	0.80	0.75	0.69	0.64
7/9	1.00	0.99	0.98	0.96	0.92	0.89	0.84	0.80	0.75	0.71
8/9	1.00	1.00	0.98	0.97	0.94	0.91	0.88	0.84	0.80	0.76
1	1.00	1.00	0.99	0.97	0.95	0.93	0.90	0.87	0.84	0.80

Adviser 2's strategy s2

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.80	0.84	0.87	0.90	0.93	0.95	0.97	0.99	1.00	1.00
1/9	0.76	0.80	0.84	0.88	0.91	0.94	0.97	0.98	1.00	1.00
2/9	0.71	0.75	0.80	0.84	0.89	0.92	0.96	0.98	0.99	1.00
3/9	0.64	0.69	0.75	0.80	0.85	0.90	0.94	0.97	0.99	1.00
4/9	0.55	0.61	0.67	0.74	0.80	0.86	0.92	0.96	0.99	1.00
5/9	0.44	0.50	0.57	0.64	0.72	0.80	0.88	0.94	0.98	1.00
6/9	0.31	0.36	0.42	0.50	0.59	0.69	0.80	0.90	0.97	1.00
7/9	0.16	0.20	0.25	0.31	0.39	0.50	0.64	0.80	0.94	1.00
8/9	0.05	0.06	0.08	0.10	0.14	0.20	0.31	0.50	0.80	1.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80

Adviser 1's strategy s1	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	1	q	q	q	q	q	q	q	q	q
1/9	1	1	1	q	q	q	q	q	q	q
2/9	1	1	1	1	1	q	q	q	q	q
3/9	1	1	1	1	1	1	1	q	q	q
4/9	1	1	1	1	1	1	1	1	1	q
5/9	p	1	1	1	1	1	1	1	1	1
6/9	p	p	p	1	1	1	1	1	1	1
7/9	p	p	p	p	p	1	1	1	1	1
8/9	p	p	p	p	p	p	p	1	1	1
1	p	p	p	p	p	p	p	p	p	1

	y_1	y_2
x_1	1	q
x_2	p	1

c

Adviser 2's strategy s2

Adviser 1's strategy s1	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1/9	1.00	0.70	0.37	0.21	0.13	0.09	0.06	0.05	0.04	0.03
2/9	1.00	0.90	0.70	0.51	0.37	0.27	0.21	0.16	0.13	0.10
3/9	1.00	0.95	0.84	0.70	0.57	0.46	0.37	0.30	0.25	0.21
4/9	1.00	0.97	0.90	0.81	0.70	0.60	0.51	0.43	0.37	0.32
5/9	1.00	0.98	0.94	0.87	0.78	0.70	0.62	0.54	0.48	0.42
6/9	1.00	0.99	0.95	0.90	0.84	0.77	0.70	0.63	0.57	0.51
7/9	1.00	0.99	0.97	0.93	0.88	0.82	0.76	0.70	0.64	0.59
8/9	1.00	0.99	0.97	0.94	0.90	0.86	0.81	0.75	0.70	0.65
1	1.00	0.99	0.98	0.95	0.92	0.88	0.84	0.79	0.75	0.70

Adviser 2's strategy s2

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.70	0.75	0.79	0.84	0.88	0.92	0.95	0.98	0.99	1.00
1/9	0.65	0.70	0.75	0.81	0.86	0.90	0.94	0.97	0.99	1.00
2/9	0.59	0.64	0.70	0.76	0.82	0.88	0.93	0.97	0.99	1.00
3/9	0.51	0.57	0.63	0.70	0.77	0.84	0.90	0.95	0.99	1.00
4/9	0.42	0.48	0.54	0.62	0.70	0.78	0.87	0.94	0.98	1.00
5/9	0.32	0.37	0.43	0.51	0.60	0.70	0.81	0.90	0.97	1.00
6/9	0.21	0.25	0.30	0.37	0.46	0.57	0.70	0.84	0.95	1.00
7/9	0.10	0.13	0.16	0.21	0.27	0.37	0.51	0.70	0.90	1.00
8/9	0.03	0.04	0.05	0.06	0.09	0.13	0.21	0.37	0.70	1.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70

Adviser 1's strategy s1	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	1	q	q	q	q	q	q	q	q	q
1/9	1	1	q	q	q	q	q	q	q	q
2/9	1	1	1	1	q	q	q	q	q	q
3/9	1	1	1	1	1	q	q	q	q	q
4/9	p	p	1	1	1	1	1	q	q	q
5/9	p	p	p	1	1	1	1	1	q	q
6/9	p	p	p	p	p	1	1	1	1	1
7/9	p	p	p	p	p	p	1	1	1	1
8/9	p	p	p	p	p	p	p	p	1	1
1	p	p	p	p	p	p	p	p	p	1

	y_1	y_2
x_1	1	q
x_2	p	1

d

Adviser 1's strategy s1 \ Adviser 2's strategy s2

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1/9	1.00	0.60	0.27	0.14	0.09	0.06	0.04	0.03	0.02	0.02
2/9	1.00	0.86	0.60	0.40	0.27	0.19	0.14	0.11	0.09	0.07
3/9	1.00	0.93	0.77	0.60	0.46	0.35	0.27	0.22	0.17	0.14
4/9	1.00	0.96	0.86	0.73	0.60	0.49	0.40	0.33	0.27	0.23
5/9	1.00	0.97	0.90	0.81	0.70	0.60	0.51	0.43	0.37	0.32
6/9	1.00	0.98	0.93	0.86	0.77	0.68	0.60	0.52	0.46	0.40
7/9	1.00	0.99	0.95	0.89	0.82	0.75	0.67	0.60	0.53	0.48
8/9	1.00	0.99	0.96	0.91	0.86	0.79	0.73	0.66	0.60	0.54
1	1.00	0.99	0.97	0.93	0.88	0.83	0.77	0.71	0.65	0.60

Adviser 2's strategy s2

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.60	0.65	0.71	0.77	0.83	0.88	0.93	0.97	0.99	1.00
1/9	0.54	0.60	0.66	0.73	0.79	0.86	0.91	0.96	0.99	1.00
2/9	0.48	0.53	0.60	0.67	0.75	0.82	0.89	0.95	0.99	1.00
3/9	0.40	0.46	0.52	0.60	0.68	0.77	0.86	0.93	0.98	1.00
4/9	0.32	0.37	0.43	0.51	0.60	0.70	0.81	0.90	0.97	1.00
5/9	0.23	0.27	0.33	0.40	0.49	0.60	0.73	0.86	0.96	1.00
6/9	0.14	0.17	0.22	0.27	0.35	0.46	0.60	0.77	0.93	1.00
7/9	0.07	0.09	0.11	0.14	0.19	0.27	0.40	0.60	0.86	1.00
8/9	0.02	0.02	0.03	0.04	0.06	0.09	0.14	0.27	0.60	1.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60

Adviser 1's strategy s1

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	1	q	q	q	q	q	q	q	q	q
1/9	1	1	q	q	q	q	q	q	q	q
2/9	p	1	1	q	q	q	q	q	q	q
3/9	p	p	1	1	q	q	q	q	q	q
4/9	p	p	p	1	1	q	q	q	q	q
5/9	p	p	p	p	p	1	1	q	q	q
6/9	p	p	p	p	p	p	1	1	q	q
7/9	p	p	p	p	p	p	p	1	1	q
8/9	p	p	p	p	p	p	p	p	1	1
1	p	p	p	p	p	p	p	p	p	1

	y_1	y_2	y_3	y_4	y_5	y_6
x_1	1	q	q	q	q	q
x_2	p	1	q	q	q	q
x_3	p	p	1	q	q	q
x_4	p	p	p	1	q	q
x_5	p	p	p	p	1	q
x_6	p	p	p	p	p	1

e

Adviser 1's strategy s1 \ Adviser 2's strategy s2

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1/9	1.00	0.50	0.20	0.10	0.06	0.04	0.03	0.02	0.02	0.01
2/9	1.00	0.80	0.50	0.31	0.20	0.14	0.10	0.08	0.06	0.05
3/9	1.00	0.90	0.69	0.50	0.36	0.26	0.20	0.16	0.12	0.10
4/9	1.00	0.94	0.80	0.64	0.50	0.39	0.31	0.25	0.20	0.16
5/9	1.00	0.96	0.86	0.74	0.61	0.50	0.41	0.34	0.28	0.24
6/9	1.00	0.97	0.90	0.80	0.69	0.59	0.50	0.42	0.36	0.31
7/9	1.00	0.98	0.92	0.84	0.75	0.66	0.58	0.50	0.43	0.38
8/9	1.00	0.98	0.94	0.88	0.80	0.72	0.64	0.57	0.50	0.44
1	1.00	0.99	0.95	0.90	0.84	0.76	0.69	0.62	0.56	0.50

Adviser 2's strategy s2

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	0.50	0.56	0.62	0.69	0.76	0.84	0.90	0.95	0.99	1.00
1/9	0.44	0.50	0.57	0.64	0.72	0.80	0.88	0.94	0.98	1.00
2/9	0.38	0.43	0.50	0.58	0.66	0.75	0.84	0.92	0.98	1.00
3/9	0.31	0.36	0.42	0.50	0.59	0.69	0.80	0.90	0.97	1.00
4/9	0.24	0.28	0.34	0.41	0.50	0.61	0.74	0.86	0.96	1.00
5/9	0.16	0.20	0.25	0.31	0.39	0.50	0.64	0.80	0.94	1.00
6/9	0.10	0.12	0.16	0.20	0.26	0.36	0.50	0.69	0.90	1.00
7/9	0.05	0.06	0.08	0.10	0.14	0.20	0.31	0.50	0.80	1.00
8/9	0.01	0.02	0.02	0.03	0.04	0.06	0.10	0.20	0.50	1.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50

Adviser 1's strategy s1

	0	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	1
0	1	q	q	q	q	q	q	q	q	q
1/9	p	1	q	q	q	q	q	q	q	q
2/9	p	p	1	q	q	q	q	q	q	q
3/9	p	p	p	1	q	q	q	q	q	q
4/9	p	p	p	p	1	q	q	q	q	q
5/9	p	p	p	p	p	1	q	q	q	q
6/9	p	p	p	p	p	p	1	q	q	q
7/9	p	p	p	p	p	p	p	1	q	q
8/9	p	p	p	p	p	p	p	p	1	q
1	p	p	p	p	p	p	p	p	p	1