

# Using Big Data and Machine Learning to Uncover How Players Choose Mixed Strategies

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## Appendix A Details of Machine Learning Models

### A.1 Decision Tree

In this section, we show the decision trees for the red player and the black player in each cross-validation (CV- $i$ ) ( $i = 1, \dots, 5$ ). Each node except for the terminal nodes corresponds to a feature, a property of three-period history whose occurrences can be answered by Yes or No. If the answer to the question is Yes, we go to the bottom right, and if it is No, we go to the bottom left.

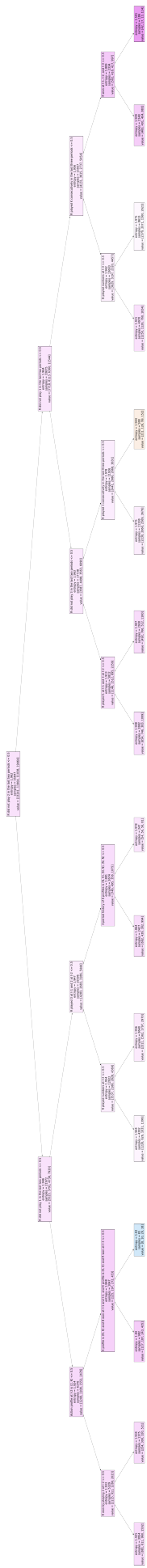


Figure 21. The decision tree for the red player (CV-1)

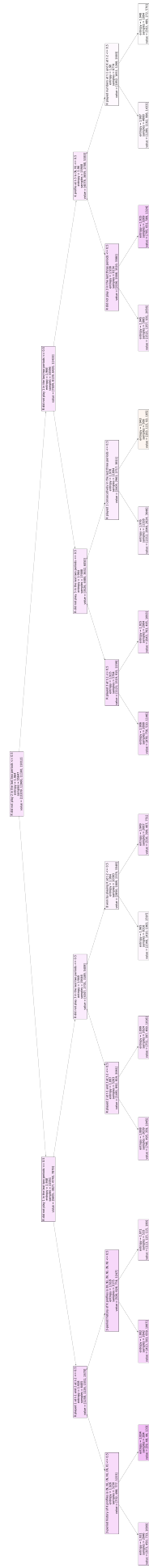


Figure 22. The decision tree for the red player (CV-2)

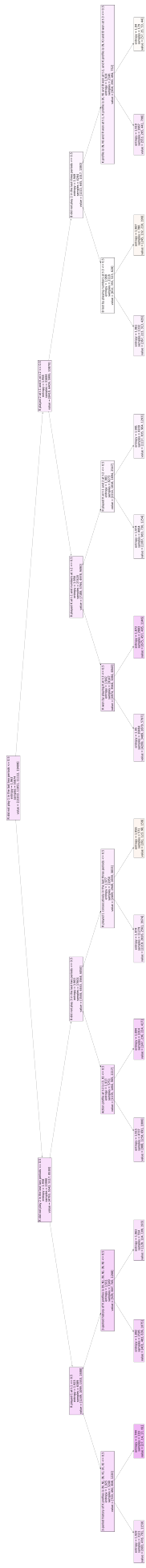


Figure 23. The decision tree for the red player (CV-3)

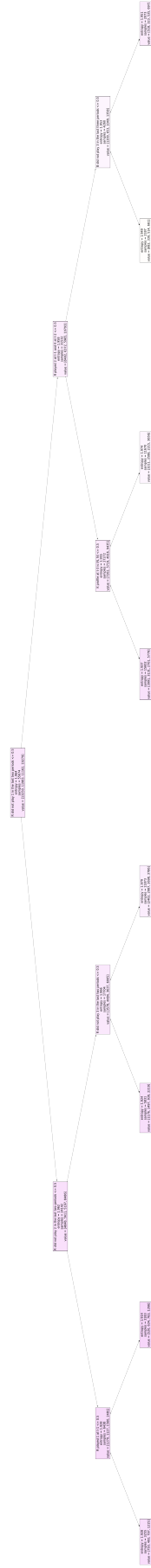


Figure 24. The decision tree for the red player (CV-4)

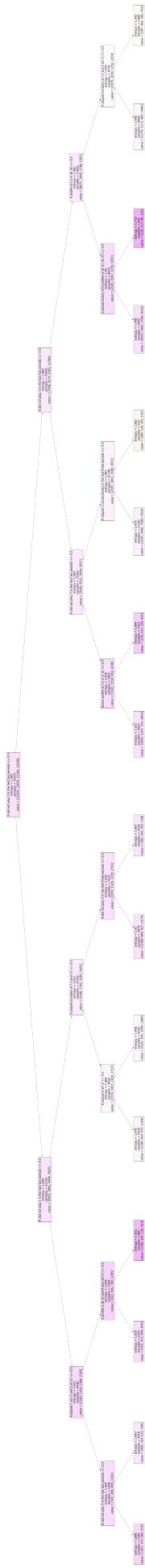


Figure 25. The decision tree for the red player (CV-5)

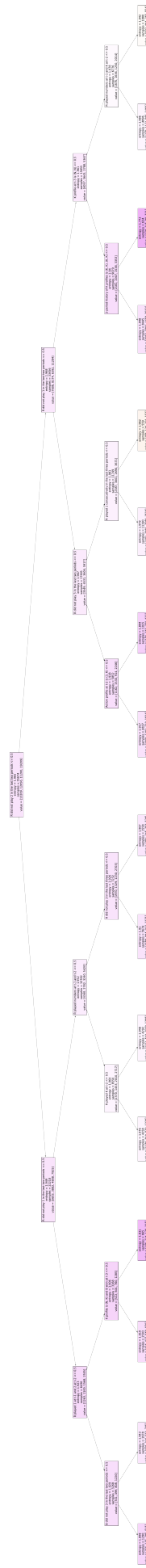


Figure 26. The decision tree for the black player (CV-1)

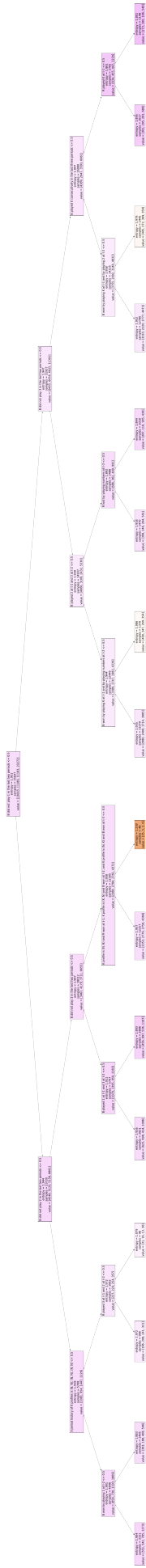


Figure 27. The decision tree for the black player (CV-2)

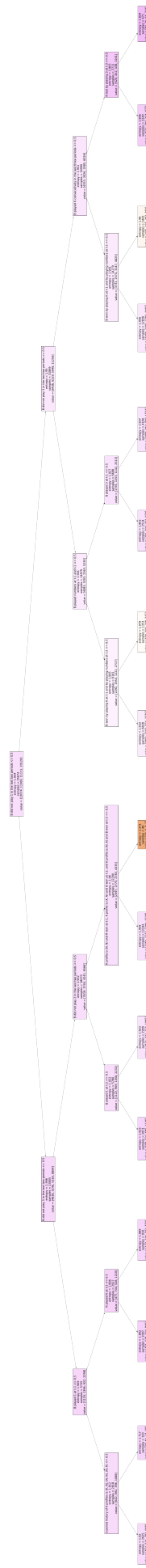


Figure 28. The decision tree for the black player (CV-3)

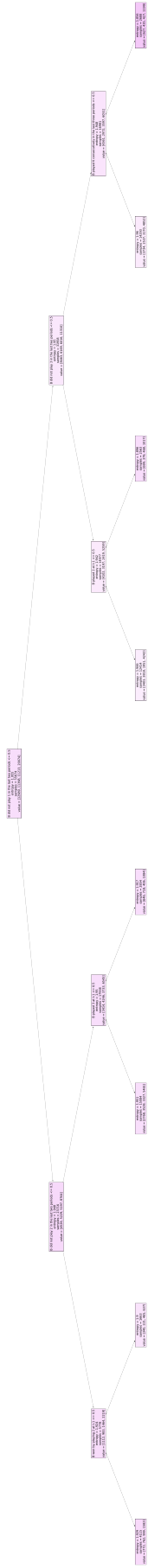


Figure 29. The decision tree for the black player (CV-4)

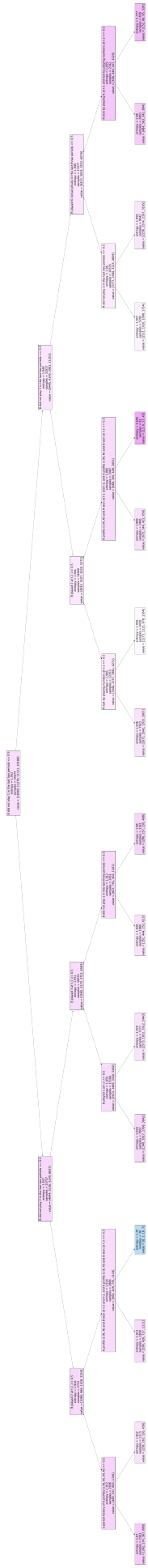


Figure 30. The decision tree for the black player (CV-5)

Also, we show the full list of the feature importance and the number of occurrences in five trees for the red player and the black player.

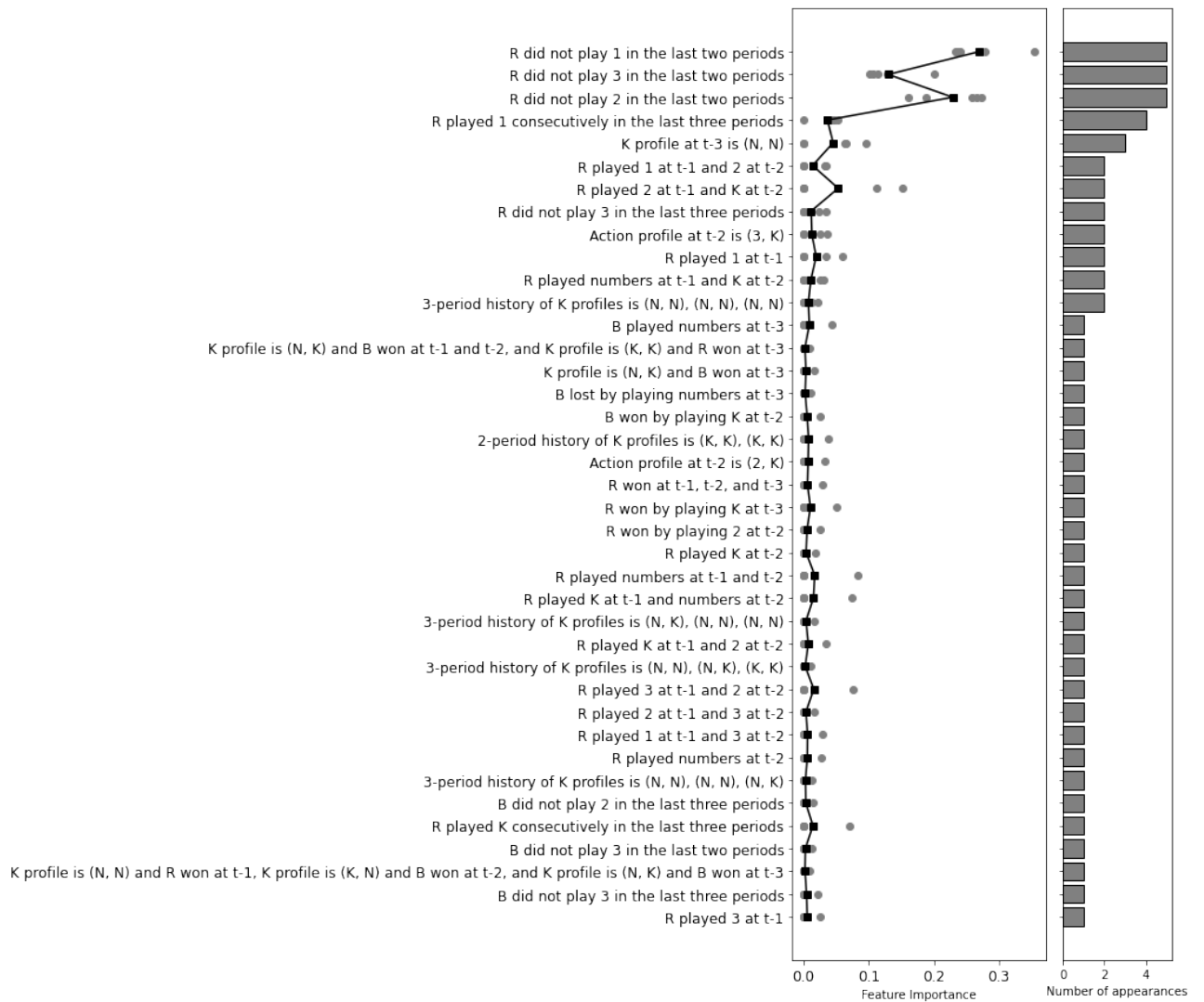


Figure 31. Feature importance and the number of occurrences (duplicates within a single tree do not count) in five trees for the red player.



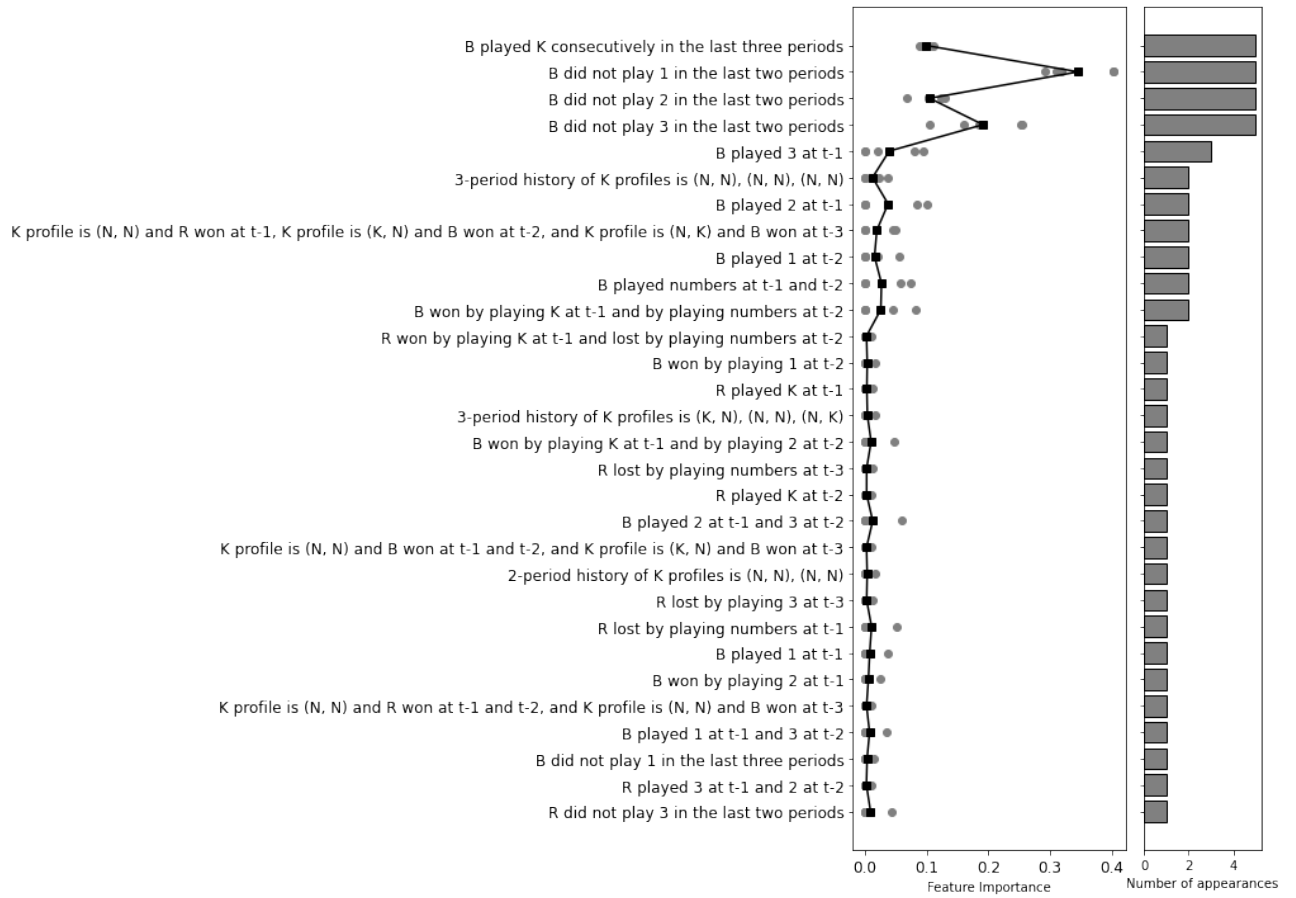


Figure 32. Feature importance and the number of occurrences (duplicates within a single tree do not count) in five trees for the black player.

## A.2 LASSO

In this section, we list all 1731 variables we include in the LASSO model and show the maximum likelihood estimates of the coefficients (when we use all the sample data).

First, we summarize in Table 16 to 21 the list of coefficients that appear in all five CVs. Since we already showed the table for the red player, card 1 (Table 8) and for the red player, card K (Table 9) in Section 5.3, we do not repeat these here.

Table 16. Parameters that LASSO does not eliminate in all five train-test splits (the red player, card 2)

	$\beta_{R,2}$	
	Value	Count
Constant	-0.214	53586
R played 2 at t-1	-0.072	11505
R played 2 at t-2	0.100	11483
R played K and B played 1 at t-1	0.049	4260
R played K and B played 2 at t-1	-0.036	3420
R played 1 and B played 3 at t-2	-0.073	2577
R played K and B played K at t-3	-0.034	7503
R consecutively played 1 in the last 2 periods	0.159	1823
R did not play 2 in the last 2 periods	0.311	32421
B did not play 2 in the last 2 periods	0.000	33591
R consecutively played 1 in the last 3 periods	0.003	356
R did not play 1 in the last 3 periods	-0.034	22266
R did not play 2 in the last 3 periods	0.089	24588
B did not play 3 in the last 3 periods	-0.026	26137
B consecutively played the numbers in the last 5 periods	-0.062	5306
R played 2 and won at t-1	-0.028	5102
B played 1 and won at t-1	0.008	7447
B played 2 and won at t-4	-0.067	5918
B played the numbers and won at t-1, and played the numbers and lost at t-2	-0.037	5438
Period Constant (t=8)	-0.003	2061
Period Constant (t=11)	0.011	2061

*Notes:* The value column indicates the point estimates. The count column specifies the number of histories in which each dummy variable should be equal to 1.

Table 17. Parameters that LASSO does not eliminate in all five train-test splits (the red player, card 3)

	$\beta_{R,3}$	
	Value	Count
Constant	-0.296	53586
R played 3 at t-1	-0.123	10663
R played 3 at t-2	0.046	10703
B played 3 at t-2	0.000	10792
R played 3 and B played K at t-1	0.096	3721
Both R and B played the numbers in the last two periods	-0.008	9729
R consecutively played 3 in the last 2 periods	0.133	1535
B did not play 2 in the last 2 periods	0.000	33591
R did not play 3 in the last 2 periods	0.230	33755
B did not play 2 in the last 3 periods	-0.022	26199
R did not play 3 in the last 3 periods	0.119	26252
B did not play 3 in the last 3 periods	0.008	26137
R consecutively played the numbers in the last 8 periods	0.087	1525
R won at t-1, t-3, and B won at t-2	-0.082	5531
R played 1 and won at t-4	-0.009	5296
B played 2 and won at t-4	0.000	5918
Period Constant (t=11)	-0.042	2061
Period Constant (t=18)	0.003	2061

*Notes:* The value column indicates the point estimates. The count column specifies the number of histories in which each dummy variable should be equal to 1.

Table 18. Parameters that LASSO does not eliminate in all five train-test splits (the black player, card 1)

	$\beta_{B,1}$	
	Value	Count
Constant	-0.086	67002
R played 1 at t-1	-0.114	15945
B played 1 at t-1	-0.081	15713
B played 1 at t-2	0.086	15674
R played K at t-4	0.013	23209
R played the numbers at t-4	-0.010	43793
R played 3 and B played 2 at t-1	0.070	2777
R played the numbers and B played K at t-3	-0.025	15039
R played K and B played K at t-4	0.003	9301
R and B played numbers in the last four periods except for B playing K at t-3	-0.142	1227
R played 2 at t-1 and 1 at t-2	-0.069	3882
R played 2 at t-1 and 3 at t-2	0.068	3115
B played 1 at t-1 and 1 at t-2	0.148	2802
B played 1 at t-1 and 3 at t-2	-0.046	3505
B played K at t-1 and 1 at t-2	-0.043	5962
R did not play 1 in the last 2 periods	0.013	38079
B did not play 1 in the last 2 periods	0.341	38417
B consecutively played 1 in the last 3 periods	0.139	643
R did not play 1 in the last 3 periods	0.025	27887
B did not play 1 in the last 3 periods	0.072	28229
R did not play 2 in the last 3 periods	-0.049	30662
B won at t-1, and R won at t-2 and t-3	0.057	6797
R played 3 and won at t-2	-0.048	5767
R played 2 and won at t-3	-0.075	6364
R played 1 and lost at t-1, and R played 1 and lost at t-2	0.111	952
R played 1 and lost at t-1, and R played 3 and lost at t-2	-0.133	1168
B played 1 and won at t-1, and B played 1 and won at t-2	0.090	935
Both R and B played numbers and B won at t-1, t-2, and t-3	0.460	300
Period Constant (t=10)	0.101	2577
Period Constant (t=16)	-0.071	2577

*Notes:* The value column indicates the point estimates. The count column specifies the number of histories in which each dummy variable should be equal to 1.

Table 19. Parameters that LASSO does not eliminate in all five train-test splits (the black player, card 2)

	$\beta_{B,2}$	
	Value	Count
Constant	-0.220	67002
R played 2 at t-1	-0.061	14465
B played 2 at t-1	-0.104	13625
B played 2 at t-2	0.057	13592
R played 1 at t-4	0.050	16059
B played 2 at t-4	0.047	13566
B played K at t-4	-0.017	24393
B played numbers at t-4	0.014	42609
R played 1 and B played 3 at t-2	-0.054	3195
B played 2 at t-1 and 2 at t-2	0.118	2112
R did not play 2 in the last 2 periods	0.070	40430
B did not play 2 in the last 2 periods	0.217	41897
R did not play 3 in the last 2 periods	-0.022	42050
B consecutively played 2 in the last 3 periods	0.271	403
R did not play 1 in the last 3 periods	-0.033	27887
B did not play 2 in the last 3 periods	0.021	32603
B did not play 3 in the last 3 periods	-0.035	32724
R played numbers in the last six periods	0.086	4311
B played numbers in the last six periods	0.092	4310
R won at t-1, t-4, and B won at t-2, t-3	-0.040	3969
R played 1 and won at t-3	-0.025	6625
R played 1 and lost at t-4	0.006	9433
R played 2 and won at t-4	0.097	6306
R played 3 and won at t-4	-0.057	5727
R played 2 and won at t-1, and R played K and won at t-2	-0.177	910
B played 2 and won at t-1	-0.048	7429
B played 3 and won at t-1	0.067	7308
B played numbers and won at t-4	0.010	23950
B played K and lost at t-1, and B played numbers and won at t-2	0.102	3265
Period Constant (t=8)	-0.103	2577
Period Constant (t=12)	-0.096	2577

*Notes:* The value column indicates the point estimates. The count column specifies the number of histories in which each dummy variable should be equal to 1.

Table 20. Parameters that LASSO does not eliminate in all five train-test splits (the black player, card 3)

	$\beta_{B,3}$	
	Value	Count
Constant	-0.261	67002
B played 1 at t-3	-0.019	15681
B played 1 at t-4	-0.026	15760
B played 3 at t-4	0.043	13283
R played 3 and B played 3 at t-1	-0.120	2971
R played 3 and B played 1 at t-2	0.070	3005
R played K and B played 3 at t-2	0.073	4327
B played 2 at t-1 and 1 at t-2	0.055	3491
B played 3 at t-1 and 1 at t-2	-0.121	3419
B played 3 at t-1 and K at t-2	-0.097	4962
R did not play 3 in the last 2 periods	0.118	42050
B did not play 3 in the last 2 periods	0.223	42098
B consecutively played K in the last 3 periods	-0.075	3250
B did not play 3 in the last 3 periods	0.069	32724
R won at t-1, t-3, and B won at t-2	-0.030	6850
R played K and lose at t-1 and played 3 and lost in t-2	0.095	1657
B played 2 and won at t-1	0.082	7429
B played 2 and won at t-4	0.061	7408
Period Constant (t=6)	-0.097	2577
Period Constant (t=23)	-0.039	2577
Period Constant (t=25)	-0.056	2577

*Notes:* The value column indicates the point estimates. The count column specifies the number of histories in which each dummy variable should be equal to 1.

Table 21. Parameters that LASSO does not eliminate in all five train-test splits (the black player, card K)

	$\beta_{B,K}$	
	Value	Count
Constant	0.567	67002
R played numbers at t-1	-0.010	43855
B played 2 at t-3	-0.031	13566
B played K at t-3	0.023	24341
B played numbers at t-3	-0.018	42661
B played 2 at t-4	-0.011	13566
B played K at t-4	0.099	24393
B played numbers at t-4	-0.045	42609
R played K and B played K at t-1	0.049	9251
R played numbers and B played K at t-1	-0.046	14954
R played numbers and B played K at t-1, and R played K and B played numbers at t-2	-0.083	3436
R played numbers and B played K at t-3	0.068	15039
R played numbers and B played numbers at t-3	-0.005	28813
3-period K history is ((K, K), (N, K), (N, N))	-0.160	772
3-period K history is ((K, K), (N, N), (N, N))	-0.146	1787
3-period K history is ((K, N), (N, N), (N, N))	0.093	2638
3-period K history is ((N, N), (K, N), (K, K))	0.152	769
Both R and B played numbers at t-4	-0.055	28701
B consecutively played K in the last 2 periods	0.071	8346
R played K at t-1 and numbers at t-2	0.084	15569
B played K at t-1 and numbers at t-2	-0.059	15859
B consecutively played K in the last 3 periods	0.127	3250
R did not play 3 in the last 3 periods	0.032	32641
B played K consequently in the last 5 periods	0.133	702
B played numbers consequently in the last 4 periods	0.139	10459
B played numbers consequently in the last 5 periods	-0.038	6587
B played numbers consequently in the last 7 periods	-0.071	2919
B played numbers consequently in the last 8 periods	-0.168	2055
B played numbers consequently in the last 9 periods	-0.144	1498
B played numbers consequently in the last 11 periods	-0.265	852
R won at t-1, t-2, and B won at t-3	0.024	6841
R won at t-1, t-3, and B won at t-2, t-4	0.032	3993
R played K and lost at t-1, and R played 2 and won at t-2	-0.086	1375
R played K and won at t-1, and R played numbers and won at t-2	0.072	2788
R played numbers and lost at t-1, and R played numbers and won at t-2	-0.055	6914
B played 3 and lost at t-1, and B played 3 and lost at t-2	-0.135	404
B played K and won at t-1, and B played numbers and won at t-2	-0.202	5605
B played numbers and won at t-1, and B played K and lost at t-2	-0.165	3072
B played numbers and won at t-1, and B played numbers and won at t-2	0.058	8354
Both R and B played numbers and B won at t-2	-0.079	10106
Period Constant (t=5)	0.130	2577
Period Constant (t=14)	-0.023	2577
Period Constant (t=20)	-0.061	2577
Period Constant (t=24)	-0.039	2577
Period Constant (t=30)	0.090	2577

*Notes:* The value column indicates the point estimates. The count column specifies the number of histories in which each dummy variable should be equal to 1.

We only show the full estimation table for the red player in Table 22 because the table is quite long. Note that the full list of potential covariates in our LASSO model can be seen in this table. Each line corresponds to one variable. For example, take the line with “history of my actions and winners” in the variable type column, R in the player column,  $t - 1, t - 2$  in the period column, 3, 2 in the card column, and  $R, B$  in the winner column. This indicates the coefficients of the dummy variable saying that the red player played 3 and won in the previous period, and played 2 and lost two periods ago. If an estimate of a coefficient is blank, it means that the variable is eliminated during model selection. If an estimate is 0.000, this implies that the variable is not removed during model selection but that the absolute estimated value is less than 0.0005.

Table 22. Full coefficients table of LASSO (the red player)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
const					-0.084	-0.214	-0.296	0.595
my action	R	t-1	1		-0.132			
my action	R	t-1	2			-0.072	0.005	
my action	R	t-1	3		0.000	0.000	-0.123	0.000
my action	R	t-1	K					
my action	R	t-1	N		0.000	0.000	0.000	0.000
opponent action	B	t-1	1		0.000	0.000	-0.025	0.000
opponent action	B	t-1	2					
opponent action	B	t-1	3					
opponent action	B	t-1	K					
opponent action	B	t-1	N		0.000	0.000	0.000	0.000
my action	R	t-2	1		0.068			
my action	R	t-2	2		0.000	0.100	0.000	0.000
my action	R	t-2	3		-0.054		0.046	
my action	R	t-2	K					
my action	R	t-2	N		0.000	0.000	0.000	0.000
opponent action	B	t-2	1					
opponent action	B	t-2	2		0.030			
opponent action	B	t-2	3				0.000	
opponent action	B	t-2	K		0.000	0.000	0.000	0.014
opponent action	B	t-2	N					-0.011
my action	R	t-3	1				-0.009	
my action	R	t-3	2					
my action	R	t-3	3				0.022	-0.006
my action	R	t-3	K		0.000	0.000	0.000	0.007
my action	R	t-3	N					-0.006
opponent action	B	t-3	1					
opponent action	B	t-3	2					
opponent action	B	t-3	3		0.000	0.000	0.000	0.000
opponent action	B	t-3	K					0.060
opponent action	B	t-3	N		0.000	0.000	0.000	-0.032
my action	R	t-4	1					
my action	R	t-4	2		0.004	0.000	0.000	-0.021
my action	R	t-4	3				0.010	
my action	R	t-4	K					0.029
my action	R	t-4	N		0.000	0.000	0.000	-0.024
opponent action	B	t-4	1		-0.016			
opponent action	B	t-4	2		0.000	0.000	0.000	-0.059
opponent action	B	t-4	3		0.011			
opponent action	B	t-4	K					0.119
opponent action	B	t-4	N		0.000	0.000	0.000	-0.027
action profile		t-1	(1,1)					-0.012

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
action profile		t-1	(1,2)					
action profile		t-1	(1,3)					0.024
action profile		t-1	(1,K)					
action profile		t-1	(2,1)			-0.051		
action profile		t-1	(2,2)					
action profile		t-1	(2,3)					
action profile		t-1	(2,K)					
action profile		t-1	(3,1)		0.000	0.000	0.000	0.000
action profile		t-1	(3,2)					
action profile		t-1	(3,3)					
action profile		t-1	(3,K)		0.002			
action profile		t-1	(K,1)		-0.063	0.049	-0.001	0.005
action profile		t-1	(K,2)			-0.036		
action profile		t-1	(K,3)					-0.062
action profile		t-1	(K,K)				-0.005	
action profile		t-2	(1,1)					
action profile		t-2	(1,2)					
action profile		t-2	(1,3)			-0.073		0.042
action profile		t-2	(1,K)					
action profile		t-2	(2,1)					
action profile		t-2	(2,2)					
action profile		t-2	(2,3)					
action profile		t-2	(2,K)		-0.081	0.000	0.000	0.000
action profile		t-2	(3,1)					
action profile		t-2	(3,2)					
action profile		t-2	(3,3)					
action profile		t-2	(3,K)		0.000		0.096	
action profile		t-2	(K,1)					
action profile		t-2	(K,2)				0.019	
action profile		t-2	(K,3)					
action profile		t-2	(K,K)					
history of action profiles		t-1,t-2	(1,1),(1,1)					
history of action profiles		t-1,t-2	(1,1),(1,2)					
history of action profiles		t-1,t-2	(1,1),(1,3)					
history of action profiles		t-1,t-2	(1,1),(1,K)					
history of action profiles		t-1,t-2	(1,1),(2,1)					
history of action profiles		t-1,t-2	(1,1),(2,2)					
history of action profiles		t-1,t-2	(1,1),(2,3)					
history of action profiles		t-1,t-2	(1,1),(2,K)					
history of action profiles		t-1,t-2	(1,1),(3,1)					
history of action profiles		t-1,t-2	(1,1),(3,2)					
history of action profiles		t-1,t-2	(1,1),(3,3)					
history of action profiles		t-1,t-2	(1,1),(3,K)					
history of action profiles		t-1,t-2	(1,1),(K,1)					
history of action profiles		t-1,t-2	(1,1),(K,2)					
history of action profiles		t-1,t-2	(1,1),(K,3)					
history of action profiles		t-1,t-2	(1,1),(K,K)					
history of action profiles		t-1,t-2	(1,2),(1,1)					
history of action profiles		t-1,t-2	(1,2),(1,2)					
history of action profiles		t-1,t-2	(1,2),(1,3)					
history of action profiles		t-1,t-2	(1,2),(1,K)					
history of action profiles		t-1,t-2	(1,2),(2,1)					
history of action profiles		t-1,t-2	(1,2),(2,2)					
history of action profiles		t-1,t-2	(1,2),(2,3)					
history of action profiles		t-1,t-2	(1,2),(2,K)					
history of action profiles		t-1,t-2	(1,2),(3,1)					
history of action profiles		t-1,t-2	(1,2),(3,2)					
history of action profiles		t-1,t-2	(1,2),(3,3)					
history of action profiles		t-1,t-2	(1,2),(3,K)					
history of action profiles		t-1,t-2	(1,2),(K,1)					
history of action profiles		t-1,t-2	(1,2),(K,2)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of action profiles		t-1,t-2	(1,2),(K,3)					
history of action profiles		t-1,t-2	(1,2),(K,K)					-0.022
history of action profiles		t-1,t-2	(1,3),(1,1)					
history of action profiles		t-1,t-2	(1,3),(1,2)					
history of action profiles		t-1,t-2	(1,3),(1,3)					
history of action profiles		t-1,t-2	(1,3),(1,K)					
history of action profiles		t-1,t-2	(1,3),(2,1)					
history of action profiles		t-1,t-2	(1,3),(2,2)					
history of action profiles		t-1,t-2	(1,3),(2,3)					
history of action profiles		t-1,t-2	(1,3),(2,K)					
history of action profiles		t-1,t-2	(1,3),(3,1)					
history of action profiles		t-1,t-2	(1,3),(3,2)					
history of action profiles		t-1,t-2	(1,3),(3,3)					
history of action profiles		t-1,t-2	(1,3),(3,K)					
history of action profiles		t-1,t-2	(1,3),(K,1)					
history of action profiles		t-1,t-2	(1,3),(K,2)					
history of action profiles		t-1,t-2	(1,3),(K,3)					
history of action profiles		t-1,t-2	(1,3),(K,K)					
history of action profiles		t-1,t-2	(1,K),(1,1)					
history of action profiles		t-1,t-2	(1,K),(1,2)					
history of action profiles		t-1,t-2	(1,K),(1,3)					
history of action profiles		t-1,t-2	(1,K),(1,K)					
history of action profiles		t-1,t-2	(1,K),(2,1)					
history of action profiles		t-1,t-2	(1,K),(2,2)					
history of action profiles		t-1,t-2	(1,K),(2,3)					
history of action profiles		t-1,t-2	(1,K),(2,K)					
history of action profiles		t-1,t-2	(1,K),(3,1)					
history of action profiles		t-1,t-2	(1,K),(3,2)					
history of action profiles		t-1,t-2	(1,K),(3,3)					
history of action profiles		t-1,t-2	(1,K),(3,K)					
history of action profiles		t-1,t-2	(1,K),(K,1)					
history of action profiles		t-1,t-2	(1,K),(K,2)					
history of action profiles		t-1,t-2	(1,K),(K,3)					
history of action profiles		t-1,t-2	(1,K),(K,K)					
history of action profiles		t-1,t-2	(2,1),(1,1)					
history of action profiles		t-1,t-2	(2,1),(1,2)					
history of action profiles		t-1,t-2	(2,1),(1,3)					
history of action profiles		t-1,t-2	(2,1),(1,K)					
history of action profiles		t-1,t-2	(2,1),(2,1)					
history of action profiles		t-1,t-2	(2,1),(2,2)					
history of action profiles		t-1,t-2	(2,1),(2,3)					
history of action profiles		t-1,t-2	(2,1),(2,K)					
history of action profiles		t-1,t-2	(2,1),(3,1)					
history of action profiles		t-1,t-2	(2,1),(3,2)					
history of action profiles		t-1,t-2	(2,1),(3,3)					
history of action profiles		t-1,t-2	(2,1),(3,K)					
history of action profiles		t-1,t-2	(2,1),(K,1)					
history of action profiles		t-1,t-2	(2,1),(K,2)					
history of action profiles		t-1,t-2	(2,1),(K,3)					
history of action profiles		t-1,t-2	(2,1),(K,K)					
history of action profiles		t-1,t-2	(2,2),(1,1)					
history of action profiles		t-1,t-2	(2,2),(1,2)					
history of action profiles		t-1,t-2	(2,2),(1,3)					
history of action profiles		t-1,t-2	(2,2),(1,K)					
history of action profiles		t-1,t-2	(2,2),(2,1)					
history of action profiles		t-1,t-2	(2,2),(2,2)					
history of action profiles		t-1,t-2	(2,2),(2,3)					
history of action profiles		t-1,t-2	(2,2),(2,K)					
history of action profiles		t-1,t-2	(2,2),(3,1)					
history of action profiles		t-1,t-2	(2,2),(3,2)					
history of action profiles		t-1,t-2	(2,2),(3,3)					

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of action profiles		t-1,t-2	(2,2),(3,K)					
history of action profiles		t-1,t-2	(2,2),(K,1)					
history of action profiles		t-1,t-2	(2,2),(K,2)					
history of action profiles		t-1,t-2	(2,2),(K,3)					
history of action profiles		t-1,t-2	(2,2),(K,K)					
history of action profiles		t-1,t-2	(2,3),(1,1)					
history of action profiles		t-1,t-2	(2,3),(1,2)					
history of action profiles		t-1,t-2	(2,3),(1,3)					
history of action profiles		t-1,t-2	(2,3),(1,K)					
history of action profiles		t-1,t-2	(2,3),(2,1)					
history of action profiles		t-1,t-2	(2,3),(2,2)					
history of action profiles		t-1,t-2	(2,3),(2,3)					
history of action profiles		t-1,t-2	(2,3),(2,K)					
history of action profiles		t-1,t-2	(2,3),(3,1)					
history of action profiles		t-1,t-2	(2,3),(3,2)					
history of action profiles		t-1,t-2	(2,3),(3,3)					
history of action profiles		t-1,t-2	(2,3),(3,K)					
history of action profiles		t-1,t-2	(2,3),(K,1)					
history of action profiles		t-1,t-2	(2,3),(K,2)					
history of action profiles		t-1,t-2	(2,3),(K,3)					
history of action profiles		t-1,t-2	(2,3),(K,K)					
history of action profiles		t-1,t-2	(2,K),(1,1)					
history of action profiles		t-1,t-2	(2,K),(1,2)					
history of action profiles		t-1,t-2	(2,K),(1,3)					
history of action profiles		t-1,t-2	(2,K),(1,K)					
history of action profiles		t-1,t-2	(2,K),(2,1)					
history of action profiles		t-1,t-2	(2,K),(2,2)					
history of action profiles		t-1,t-2	(2,K),(2,3)					
history of action profiles		t-1,t-2	(2,K),(2,K)					
history of action profiles		t-1,t-2	(2,K),(3,1)					
history of action profiles		t-1,t-2	(2,K),(3,2)					
history of action profiles		t-1,t-2	(2,K),(3,3)					
history of action profiles		t-1,t-2	(2,K),(3,K)					
history of action profiles		t-1,t-2	(2,K),(K,1)					
history of action profiles		t-1,t-2	(2,K),(K,2)					
history of action profiles		t-1,t-2	(2,K),(K,3)					
history of action profiles		t-1,t-2	(2,K),(K,K)					
history of action profiles		t-1,t-2	(3,1),(1,1)					
history of action profiles		t-1,t-2	(3,1),(1,2)					
history of action profiles		t-1,t-2	(3,1),(1,3)					
history of action profiles		t-1,t-2	(3,1),(1,K)					
history of action profiles		t-1,t-2	(3,1),(2,1)					
history of action profiles		t-1,t-2	(3,1),(2,2)					
history of action profiles		t-1,t-2	(3,1),(2,3)					
history of action profiles		t-1,t-2	(3,1),(2,K)		0.000	0.000	0.000	0.000
history of action profiles		t-1,t-2	(3,1),(3,1)					
history of action profiles		t-1,t-2	(3,1),(3,2)					
history of action profiles		t-1,t-2	(3,1),(3,3)					
history of action profiles		t-1,t-2	(3,1),(3,K)					
history of action profiles		t-1,t-2	(3,1),(K,1)					
history of action profiles		t-1,t-2	(3,1),(K,2)					
history of action profiles		t-1,t-2	(3,1),(K,3)					
history of action profiles		t-1,t-2	(3,1),(K,K)					
history of action profiles		t-1,t-2	(3,2),(1,1)					
history of action profiles		t-1,t-2	(3,2),(1,2)					
history of action profiles		t-1,t-2	(3,2),(1,3)					
history of action profiles		t-1,t-2	(3,2),(1,K)					
history of action profiles		t-1,t-2	(3,2),(2,1)					
history of action profiles		t-1,t-2	(3,2),(2,2)					
history of action profiles		t-1,t-2	(3,2),(2,3)					
history of action profiles		t-1,t-2	(3,2),(2,K)					

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of action profiles		t-1,t-2	(3,2),(3,1)					
history of action profiles		t-1,t-2	(3,2),(3,2)					
history of action profiles		t-1,t-2	(3,2),(3,3)					
history of action profiles		t-1,t-2	(3,2),(3,K)					
history of action profiles		t-1,t-2	(3,2),(K,1)					
history of action profiles		t-1,t-2	(3,2),(K,2)					
history of action profiles		t-1,t-2	(3,2),(K,3)					
history of action profiles		t-1,t-2	(3,2),(K,K)					
history of action profiles		t-1,t-2	(3,3),(1,1)					
history of action profiles		t-1,t-2	(3,3),(1,2)					
history of action profiles		t-1,t-2	(3,3),(1,3)					
history of action profiles		t-1,t-2	(3,3),(1,K)					
history of action profiles		t-1,t-2	(3,3),(2,1)					
history of action profiles		t-1,t-2	(3,3),(2,2)					
history of action profiles		t-1,t-2	(3,3),(2,3)					
history of action profiles		t-1,t-2	(3,3),(2,K)					
history of action profiles		t-1,t-2	(3,3),(3,1)					
history of action profiles		t-1,t-2	(3,3),(3,2)					
history of action profiles		t-1,t-2	(3,3),(3,3)					
history of action profiles		t-1,t-2	(3,3),(3,K)					
history of action profiles		t-1,t-2	(3,3),(K,1)					
history of action profiles		t-1,t-2	(3,3),(K,2)					
history of action profiles		t-1,t-2	(3,3),(K,3)					
history of action profiles		t-1,t-2	(3,3),(K,K)					
history of action profiles		t-1,t-2	(3,K),(1,1)					
history of action profiles		t-1,t-2	(3,K),(1,2)					
history of action profiles		t-1,t-2	(3,K),(1,3)					
history of action profiles		t-1,t-2	(3,K),(1,K)					
history of action profiles		t-1,t-2	(3,K),(2,1)					
history of action profiles		t-1,t-2	(3,K),(2,2)					
history of action profiles		t-1,t-2	(3,K),(2,3)					
history of action profiles		t-1,t-2	(3,K),(2,K)					
history of action profiles		t-1,t-2	(3,K),(3,1)					
history of action profiles		t-1,t-2	(3,K),(3,2)					
history of action profiles		t-1,t-2	(3,K),(3,3)					
history of action profiles		t-1,t-2	(3,K),(3,K)					
history of action profiles		t-1,t-2	(3,K),(K,1)					
history of action profiles		t-1,t-2	(3,K),(K,2)					
history of action profiles		t-1,t-2	(3,K),(K,3)					
history of action profiles		t-1,t-2	(3,K),(K,K)					
history of action profiles		t-1,t-2	(K,1),(1,1)					
history of action profiles		t-1,t-2	(K,1),(1,2)					
history of action profiles		t-1,t-2	(K,1),(1,3)					
history of action profiles		t-1,t-2	(K,1),(1,K)					
history of action profiles		t-1,t-2	(K,1),(2,1)					
history of action profiles		t-1,t-2	(K,1),(2,2)					
history of action profiles		t-1,t-2	(K,1),(2,3)					
history of action profiles		t-1,t-2	(K,1),(2,K)					
history of action profiles		t-1,t-2	(K,1),(3,1)					
history of action profiles		t-1,t-2	(K,1),(3,2)					
history of action profiles		t-1,t-2	(K,1),(3,3)					
history of action profiles		t-1,t-2	(K,1),(3,K)					
history of action profiles		t-1,t-2	(K,1),(K,1)					
history of action profiles		t-1,t-2	(K,1),(K,2)					
history of action profiles		t-1,t-2	(K,1),(K,3)					
history of action profiles		t-1,t-2	(K,1),(K,K)					
history of action profiles		t-1,t-2	(K,2),(1,1)					
history of action profiles		t-1,t-2	(K,2),(1,2)					
history of action profiles		t-1,t-2	(K,2),(1,3)					
history of action profiles		t-1,t-2	(K,2),(1,K)					
history of action profiles		t-1,t-2	(K,2),(2,1)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of action profiles		t-1,t-2	(K,2),(2,2)					
history of action profiles		t-1,t-2	(K,2),(2,3)					
history of action profiles		t-1,t-2	(K,2),(2,K)					
history of action profiles		t-1,t-2	(K,2),(3,1)					
history of action profiles		t-1,t-2	(K,2),(3,2)					
history of action profiles		t-1,t-2	(K,2),(3,3)					
history of action profiles		t-1,t-2	(K,2),(3,K)					
history of action profiles		t-1,t-2	(K,2),(K,1)					
history of action profiles		t-1,t-2	(K,2),(K,2)					
history of action profiles		t-1,t-2	(K,2),(K,3)					
history of action profiles		t-1,t-2	(K,2),(K,K)					
history of action profiles		t-1,t-2	(K,3),(1,1)					
history of action profiles		t-1,t-2	(K,3),(1,2)					
history of action profiles		t-1,t-2	(K,3),(1,3)					
history of action profiles		t-1,t-2	(K,3),(1,K)					
history of action profiles		t-1,t-2	(K,3),(2,1)					
history of action profiles		t-1,t-2	(K,3),(2,2)					
history of action profiles		t-1,t-2	(K,3),(2,3)					
history of action profiles		t-1,t-2	(K,3),(2,K)					
history of action profiles		t-1,t-2	(K,3),(3,1)					
history of action profiles		t-1,t-2	(K,3),(3,2)					
history of action profiles		t-1,t-2	(K,3),(3,3)					
history of action profiles		t-1,t-2	(K,3),(3,K)					
history of action profiles		t-1,t-2	(K,3),(K,1)					
history of action profiles		t-1,t-2	(K,3),(K,2)					
history of action profiles		t-1,t-2	(K,3),(K,3)					
history of action profiles		t-1,t-2	(K,3),(K,K)					
history of action profiles		t-1,t-2	(K,K),(1,1)					
history of action profiles		t-1,t-2	(K,K),(1,2)					
history of action profiles		t-1,t-2	(K,K),(1,3)					
history of action profiles		t-1,t-2	(K,K),(1,K)					
history of action profiles		t-1,t-2	(K,K),(2,1)					
history of action profiles		t-1,t-2	(K,K),(2,2)					
history of action profiles		t-1,t-2	(K,K),(2,3)					
history of action profiles		t-1,t-2	(K,K),(2,K)					
history of action profiles		t-1,t-2	(K,K),(3,1)					
history of action profiles		t-1,t-2	(K,K),(3,2)					
history of action profiles		t-1,t-2	(K,K),(3,3)					
history of action profiles		t-1,t-2	(K,K),(3,K)					
history of action profiles		t-1,t-2	(K,K),(K,1)					
history of action profiles		t-1,t-2	(K,K),(K,2)					
history of action profiles		t-1,t-2	(K,K),(K,3)					
history of action profiles		t-1,t-2	(K,K),(K,K)					0.075
K-profile		t-1	(K,N)					
K-profile		t-1	(N,K)				0.014	
K-profile		t-1	(N,N)		0.000	0.000	0.000	0.000
K-profile		t-2	(K,N)					
K-profile		t-2	(N,K)		0.000	0.000	0.000	0.006
K-profile		t-2	(N,N)			0.044		-0.006
history of K-profiles		t-1,t-2	(K,K),(K,N)					
history of K-profiles		t-1,t-2	(K,K),(N,K)					
history of K-profiles		t-1,t-2	(K,K),(N,N)					-0.022
history of K-profiles		t-1,t-2	(K,N),(K,K)					
history of K-profiles		t-1,t-2	(K,N),(K,N)					
history of K-profiles		t-1,t-2	(K,N),(N,K)					
history of K-profiles		t-1,t-2	(K,N),(N,N)					
history of K-profiles		t-1,t-2	(N,K),(K,K)					
history of K-profiles		t-1,t-2	(N,K),(K,N)					
history of K-profiles		t-1,t-2	(N,K),(N,K)					
history of K-profiles		t-1,t-2	(N,K),(N,N)					
history of K-profiles		t-1,t-2	(N,N),(K,K)					-0.020

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of K-profiles		t-1,t-2	(N,N),(K,N)					
history of K-profiles		t-1,t-2	(N,N),(N,K)		-0.017	0.000	0.000	0.000
history of K-profiles		t-1,t-2	(N,N),(N,N)		0.050		-0.008	
K-profile		t-3	(K,K)			-0.034		0.002
K-profile		t-3	(K,N)		0.000	0.000	0.000	0.000
K-profile		t-3	(N,K)					
K-profile		t-3	(N,N)					-0.130
history of K-profiles		t-1 to t-3	(K,K),(K,K), (K,K)					
history of K-profiles		t-1 to t-3	(K,K),(K,K), (K,N)					
history of K-profiles		t-1 to t-3	(K,K),(K,K), (N,K)					
history of K-profiles		t-1 to t-3	(K,K),(K,K), (N,N)				0.005	
history of K-profiles		t-1 to t-3	(K,K),(K,N), (K,K)					
history of K-profiles		t-1 to t-3	(K,K),(K,N), (K,N)					
history of K-profiles		t-1 to t-3	(K,K),(K,N), (N,K)					
history of K-profiles		t-1 to t-3	(K,K),(K,N), (N,N)					
history of K-profiles		t-1 to t-3	(K,K),(N,K), (K,K)					
history of K-profiles		t-1 to t-3	(K,K),(N,K), (K,N)					
history of K-profiles		t-1 to t-3	(K,K),(N,K), (N,N)					
history of K-profiles		t-1 to t-3	(K,K),(N,N), (K,K)				0.060	
history of K-profiles		t-1 to t-3	(K,K),(N,N), (K,N)					
history of K-profiles		t-1 to t-3	(K,K),(N,N), (N,K)					
history of K-profiles		t-1 to t-3	(K,K),(N,N), (N,N)					
history of K-profiles		t-1 to t-3	(K,N),(K,K), (K,K)					
history of K-profiles		t-1 to t-3	(K,N),(K,K), (K,N)					
history of K-profiles		t-1 to t-3	(K,N),(K,K), (N,K)					
history of K-profiles		t-1 to t-3	(K,N),(K,K), (N,N)					
history of K-profiles		t-1 to t-3	(K,N),(K,N), (K,K)					
history of K-profiles		t-1 to t-3	(K,N),(K,N), (K,N)					
history of K-profiles		t-1 to t-3	(K,N),(K,N), (N,K)					
history of K-profiles		t-1 to t-3	(K,N),(K,N), (N,N)				-0.004	
history of K-profiles		t-1 to t-3	(K,N),(N,K), (K,K)					
history of K-profiles		t-1 to t-3	(K,N),(N,K), (K,N)					
history of K-profiles		t-1 to t-3	(K,N),(N,K), (N,K)					
history of K-profiles		t-1 to t-3	(K,N),(N,K), (N,N)					-0.030
history of K-profiles		t-1 to t-3	(K,N),(N,N), (K,K)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of K-profiles		t-1 to t-3	(K,N),(N,N), (K,N)				0.004	
history of K-profiles		t-1 to t-3	(K,N),(N,N), (N,K)					
history of K-profiles		t-1 to t-3	(K,N),(N,N), (N,N)					
history of K-profiles		t-1 to t-3	(N,K),(K,K), (K,K)					
history of K-profiles		t-1 to t-3	(N,K),(K,K), (K,N)					
history of K-profiles		t-1 to t-3	(N,K),(K,K), (N,K)					
history of K-profiles		t-1 to t-3	(N,K),(K,K), (N,N)					
history of K-profiles		t-1 to t-3	(N,K),(K,N), (K,K)					
history of K-profiles		t-1 to t-3	(N,K),(K,N), (K,N)			-0.072		0.084
history of K-profiles		t-1 to t-3	(N,K),(K,N), (N,N)					
history of K-profiles		t-1 to t-3	(N,K),(N,K), (K,K)					
history of K-profiles		t-1 to t-3	(N,K),(N,K), (K,N)					
history of K-profiles		t-1 to t-3	(N,K),(N,K), (N,N)					
history of K-profiles		t-1 to t-3	(N,K),(N,N), (K,K)					
history of K-profiles		t-1 to t-3	(N,K),(N,N), (K,N)					
history of K-profiles		t-1 to t-3	(N,K),(N,N), (N,K)					
history of K-profiles		t-1 to t-3	(N,K),(N,N), (N,N)					
history of K-profiles		t-1 to t-3	(N,N),(K,K), (K,K)					
history of K-profiles		t-1 to t-3	(N,N),(K,K), (K,N)					
history of K-profiles		t-1 to t-3	(N,N),(K,K), (N,K)					
history of K-profiles		t-1 to t-3	(N,N),(K,K), (N,N)					
history of K-profiles		t-1 to t-3	(N,N),(K,N), (K,K)					
history of K-profiles		t-1 to t-3	(N,N),(K,N), (K,N)				-0.034	
history of K-profiles		t-1 to t-3	(N,N),(K,N), (N,K)					-0.144
history of K-profiles		t-1 to t-3	(N,N),(K,N), (N,N)				0.006	
history of K-profiles		t-1 to t-3	(N,N),(N,K), (K,K)					0.087
history of K-profiles		t-1 to t-3	(N,N),(N,K), (K,N)		0.000	0.000	0.000	-0.076
history of K-profiles		t-1 to t-3	(N,N),(N,K), (N,K)					
history of K-profiles		t-1 to t-3	(N,N),(N,K), (N,N)					0.000
history of K-profiles		t-1 to t-3	(N,N),(N,N), (K,K)					
history of K-profiles		t-1 to t-3	(N,N),(N,N), (K,N)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of K-profiles		t-1 to t-3	(N,N),(N,N), (N,K)					
history of K-profiles		t-1 to t-3	(N,N),(N,N), (N,N)					
K-profile		t-4	(K,K)			-0.035		0.021
K-profile		t-4	(K,N)					
K-profile		t-4	(N,K)		-0.005			
K-profile		t-4	(N,N)		0.008	0.000	0.000	-0.131
history of K-profiles		t-1 to t-4	(K,K),(K,K), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (N,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (N,N),(K,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (N,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,K), (N,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (N,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,K),(K,N), (N,N),(K,K)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of K-profiles		t-1 to t-4	(K,K),(N,N), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(K,K),(N,N), (N,N),(N,N)				-0.007	
history of K-profiles		t-1 to t-4	(K,N),(K,K), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (N,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (N,N),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (N,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,K), (N,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (N,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (N,N),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (N,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(K,N), (N,N),(N,K)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of K-profiles		t-1 to t-4	(K,N),(K,N), (N,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (N,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (N,N),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (N,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,K), (N,N),(N,K)					0.000
history of K-profiles		t-1 to t-4	(K,N),(N,K), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (N,N),(K,N)		0.046			
history of K-profiles		t-1 to t-4	(K,N),(N,N), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(K,N),(N,N), (N,N),(N,N)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(K,K),(K,K),					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(K,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(K,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(K,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(K,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(K,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(K,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(N,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(N,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(N,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(N,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(N,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,K),					
history of K-profiles		t-1 to t-4	(N,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(K,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(K,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(K,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(K,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(K,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(K,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(K,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(K,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(N,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(N,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(N,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(N,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(N,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(N,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(N,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(K,N),					
history of K-profiles		t-1 to t-4	(N,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,K),					
history of K-profiles		t-1 to t-4	(K,K),(K,K)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of K-profiles		t-1 to t-4	(N,K),(N,K), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (N,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (N,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,K), (N,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (N,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (N,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,K),(N,N), (N,N),(N,N)					0.176
history of K-profiles		t-1 to t-4	(N,N),(K,K), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (K,K),(K,N)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of K-profiles		t-1 to t-4	(N,N),(K,K), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (N,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (N,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (N,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,K), (N,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,K),(N,N)					-0.007
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(K,N), (N,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (K,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (K,K),(N,K)					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of K-profiles		t-1 to t-4	(N,N),(N,K), (K,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (K,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (K,N),(N,N)		0.000	0.000	0.000	0.000
history of K-profiles		t-1 to t-4	(N,N),(N,K), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (N,K),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (N,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (N,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (N,N),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,K), (N,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (K,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (K,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (K,K),(N,K)					-0.027
history of K-profiles		t-1 to t-4	(N,N),(N,N), (K,K),(N,N)					0.060
history of K-profiles		t-1 to t-4	(N,N),(N,N), (K,N),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (K,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (K,N),(N,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (N,K),(K,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (N,K),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (N,K),(N,K)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (N,K),(N,N)					0.076
history of K-profiles		t-1 to t-4	(N,N),(N,N), (N,N),(K,K)					0.018
history of K-profiles		t-1 to t-4	(N,N),(N,N), (N,N),(K,N)					
history of K-profiles		t-1 to t-4	(N,N),(N,N), (N,N),(N,K)					-0.025
history of K-profiles		t-1 to t-4	(N,N),(N,N), (N,N),(N,N)					
history of my actions	R	t-1,t-2	1,1		0.097			
history of my actions	R	t-1,t-2	1,2		-0.046		0.015	
history of my actions	R	t-1,t-2	1,3					0.024
history of my actions	R	t-1,t-2	1,K			0.049		-0.002
history of my actions	R	t-1,t-2	2,1					
history of my actions	R	t-1,t-2	2,2			0.159		
history of my actions	R	t-1,t-2	2,3					
history of my actions	R	t-1,t-2	2,K					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
history of my actions	R	t-1,t-2	3,1			0.005	-0.010	
history of my actions	R	t-1,t-2	3,2		0.000	0.000	0.000	0.009
history of my actions	R	t-1,t-2	3,3				0.133	
history of my actions	R	t-1,t-2	3,K					
history of my actions	R	t-1,t-2	K,1					
history of my actions	R	t-1,t-2	K,2					
history of my actions	R	t-1,t-2	K,3					-0.003
history of my actions	R	t-1,t-2	K,K					0.109
history of opponent actions	B	t-1,t-2	1,1			0.033		
history of opponent actions	B	t-1,t-2	1,2		0.010			
history of opponent actions	B	t-1,t-2	1,3					0.001
history of opponent actions	B	t-1,t-2	1,K		0.000	0.000	0.000	0.000
history of opponent actions	B	t-1,t-2	2,1					
history of opponent actions	B	t-1,t-2	2,2					0.000
history of opponent actions	B	t-1,t-2	2,3					
history of opponent actions	B	t-1,t-2	2,K			-0.024		
history of opponent actions	B	t-1,t-2	3,1			-0.019		0.041
history of opponent actions	B	t-1,t-2	3,2					
history of opponent actions	B	t-1,t-2	3,3					
history of opponent actions	B	t-1,t-2	3,K			0.007		
history of opponent actions	B	t-1,t-2	K,1					
history of opponent actions	B	t-1,t-2	K,2					
history of opponent actions	B	t-1,t-2	K,3					
history of opponent actions	B	t-1,t-2	K,K					
history of my actions	R	t-1,t-2	K,N					-0.044
history of my actions	R	t-1,t-2	N,K					-0.044
history of my actions	R	t-1,t-2	N,N		0.000	0.000	0.000	0.007
history of opponent actions	B	t-1,t-2	K,N					-0.099
history of opponent actions	B	t-1,t-2	N,K		0.000	0.000	0.000	0.000
history of opponent actions	B	t-1,t-2	N,N					
I did not play a card in the last periods	R	t-1,t-2	1		0.275	0.000	0.000	0.000
the opponent did not play a card in the last periods	B	t-1,t-2	1					
I did not play a card in the last periods	R	t-1,t-2	2			0.311		-0.006
the opponent did not play a card in the last periods	B	t-1,t-2	2		0.000	0.000	0.000	0.000
I did not play a card in the last periods	R	t-1,t-2	3				0.230	
the opponent did not play a card in the last periods	B	t-1,t-2	3		0.000	0.000	0.059	0.000
I played a card consecutively in the last three periods	R	t-1 to t-3	1		0.618			
the opponent played a card consecutively in the last three periods	B	t-1 to t-3	1					
I played a card consecutively in the last three periods	R	t-1 to t-3	2			0.003		
the opponent played a card consecutively in the last three periods	B	t-1 to t-3	2					
I played a card consecutively in the last three periods	R	t-1 to t-3	3				0.160	
the opponent played a card consecutively in the last three periods	B	t-1 to t-3	3					
I played a card consecutively in the last three periods	R	t-1 to t-3	K					0.231
the opponent played a card consecutively in the last three periods	B	t-1 to t-3	K				-0.022	0.168
I did not play a card in the last periods	R	t-1 to t-3	1		0.071	-0.034	-0.004	0.005

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
the opponent did not play a card in the last periods	B	t-1 to t-3	1		0.081		-0.014	
I did not play a card in the last periods	R	t-1 to t-3	2			0.089		
the opponent did not play a card in the last periods	B	t-1 to t-3	2		-0.021	0.018	-0.022	0.022
I did not play a card in the last periods	R	t-1 to t-3	3		-0.020		0.119	
the opponent did not play a card in the last periods	B	t-1 to t-3	3			-0.026	0.008	
I did not play a card in the last periods	R	t-1 to t-3	K		-0.033			0.113
the opponent did not play a card in the last periods	B	t-1 to t-3	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-4	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-5	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-6	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-7	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-8	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-9	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-10	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-11	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-12	K					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-4	N					0.058
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-5	N			0.025		
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-6	N					-0.021
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-7	N				0.000	-0.096
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-8	N				0.087	-0.118
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-9	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-10	N					-0.115
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-11	N					-0.231
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-12	N		0.049			
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-13	N					-0.117
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-14	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-15	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-16	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-17	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-18	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-19	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-20	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-21	N					

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-22	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-23	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-24	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-25	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-26	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-27	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-28	N					
I played K or N in t-1,...,t-n consecutively	R	t-1 to t-29	N					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		K					
the opponent played K or N in t-1,...,t-n consecutively	B		N					0.034
the opponent played K or N in t-1,...,t-n consecutively	B		N		0.015	-0.062	0.002	-0.005
the opponent played K or N in t-1,...,t-n consecutively	B		N					-0.066
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					-0.260
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N		0.012			
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					-0.054
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
the opponent played K or N in t-1,...,t-n consecutively	B		N					
I won or lost		t-1		B				
I won or lost		t-1		R	0.000	0.000	0.000	0.000
I won or lost		t-2		B	0.000	0.000	0.000	0.000
I won or lost		t-2		R				
I won or lost		t-3		B	0.000	0.000	0.000	0.000
I won or lost		t-3		R	0.000			
I won or lost		t-4		B	0.000	0.000	0.000	0.000
I won or lost		t-4		R				
history of winners		t-1,t-2		B,B				
history of winners		t-1,t-2		B,R				
history of winners		t-1,t-2		R,B	0.000	0.000	0.000	0.000
history of winners		t-1,t-2		R,R				
history of winners		t-1 to t-3		B,B,B	-0.004			0.020
history of winners		t-1 to t-3		B,B,R		-0.001		
history of winners		t-1 to t-3		B,R,B				-0.011
history of winners		t-1 to t-3		B,R,R				
history of winners		t-1 to t-3		R,B,B	0.000	0.000	0.000	0.000
history of winners		t-1 to t-3		R,B,R			-0.082	
history of winners		t-1 to t-3		R,R,B				
history of winners		t-1 to t-3		R,R,R				0.046
history of winners		t-1 to t-4		B,B,B,B			-0.008	
history of winners		t-1 to t-4		B,B,B,R	-0.001			
history of winners		t-1 to t-4		B,B,R,B		-0.029		
history of winners		t-1 to t-4		B,B,R,R				
history of winners		t-1 to t-4		B,R,B,B			0.001	
history of winners		t-1 to t-4		B,R,B,R		0.000		
history of winners		t-1 to t-4		B,R,R,B				
history of winners		t-1 to t-4		B,R,R,R				
history of winners		t-1 to t-4		R,B,B,B	0.000	0.000	0.000	0.000
history of winners		t-1 to t-4		R,B,B,R				
history of winners		t-1 to t-4		R,B,R,B				
history of winners		t-1 to t-4		R,B,R,R	0.003		-0.010	
history of winners		t-1 to t-4		R,R,B,B	-0.020	0.019		
history of winners		t-1 to t-4		R,R,B,R	0.035			
history of winners		t-1 to t-4		R,R,R,B				
history of winners		t-1 to t-4		R,R,R,R	-0.006			0.036

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
my action and winner	R	t-1	1	B				
my action and winner	R	t-1	1	R				
my action and winner	R	t-1	2	B				
my action and winner	R	t-1	2	R		-0.028	0.058	
my action and winner	R	t-1	3	B				
my action and winner	R	t-1	3	R	0.000	0.000	-0.005	0.076
my action and winner	R	t-2	1	B				-0.019
my action and winner	R	t-2	1	R				
my action and winner	R	t-2	2	B	0.000	0.000	0.000	0.013
my action and winner	R	t-2	2	R		0.001		
my action and winner	R	t-2	3	B				
my action and winner	R	t-2	3	R				
my action and winner	R	t-3	1	B				
my action and winner	R	t-3	1	R	0.041			
my action and winner	R	t-3	2	B				
my action and winner	R	t-3	2	R				
my action and winner	R	t-3	3	B				
my action and winner	R	t-3	3	R				
my action and winner	R	t-4	1	B	-0.013			
my action and winner	R	t-4	1	R			-0.009	
my action and winner	R	t-4	2	B	0.000	0.000	0.000	0.000
my action and winner	R	t-4	2	R				-0.024
my action and winner	R	t-4	3	B				
my action and winner	R	t-4	3	R	-0.026		0.012	
hisotry of my actions and winners	R	t-1,t-2	1,1	B,B	0.139			
hisotry of my actions and winners	R	t-1,t-2	1,1	B,R				
hisotry of my actions and winners	R	t-1,t-2	1,1	R,B				
hisotry of my actions and winners	R	t-1,t-2	1,1	R,R				
hisotry of my actions and winners	R	t-1,t-2	1,2	B,B		-0.019	0.060	
hisotry of my actions and winners	R	t-1,t-2	1,2	B,R				
hisotry of my actions and winners	R	t-1,t-2	1,2	R,B				
hisotry of my actions and winners	R	t-1,t-2	1,2	R,R				
hisotry of my actions and winners	R	t-1,t-2	1,3	B,B				
hisotry of my actions and winners	R	t-1,t-2	1,3	B,R				
hisotry of my actions and winners	R	t-1,t-2	1,3	R,B				
hisotry of my actions and winners	R	t-1,t-2	1,3	R,R				
hisotry of my actions and winners	R	t-1,t-2	1,K	B,B				
hisotry of my actions and winners	R	t-1,t-2	1,K	B,R				
hisotry of my actions and winners	R	t-1,t-2	1,K	R,B				
hisotry of my actions and winners	R	t-1,t-2	1,K	R,R				
hisotry of my actions and winners	R	t-1,t-2	2,1	B,B				
hisotry of my actions and winners	R	t-1,t-2	2,1	B,R				
hisotry of my actions and winners	R	t-1,t-2	2,1	R,B	0.017			
hisotry of my actions and winners	R	t-1,t-2	2,1	R,R				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of my actions and winners	R	t-1,t-2	2,2	B,B			-0.022	
hisotry of my actions and winners	R	t-1,t-2	2,2	B,R				
hisotry of my actions and winners	R	t-1,t-2	2,2	R,B				
hisotry of my actions and winners	R	t-1,t-2	2,2	R,R				
hisotry of my actions and winners	R	t-1,t-2	2,3	B,B				
hisotry of my actions and winners	R	t-1,t-2	2,3	B,R				
hisotry of my actions and winners	R	t-1,t-2	2,3	R,B				
hisotry of my actions and winners	R	t-1,t-2	2,3	R,R				
hisotry of my actions and winners	R	t-1,t-2	2,K	B,B				
hisotry of my actions and winners	R	t-1,t-2	2,K	B,R				
hisotry of my actions and winners	R	t-1,t-2	2,K	R,B				
hisotry of my actions and winners	R	t-1,t-2	2,K	R,R				
hisotry of my actions and winners	R	t-1,t-2	3,1	B,B				
hisotry of my actions and winners	R	t-1,t-2	3,1	B,R				
hisotry of my actions and winners	R	t-1,t-2	3,1	R,B				
hisotry of my actions and winners	R	t-1,t-2	3,1	R,R				
hisotry of my actions and winners	R	t-1,t-2	3,2	B,B				
hisotry of my actions and winners	R	t-1,t-2	3,2	B,R				
hisotry of my actions and winners	R	t-1,t-2	3,2	R,B	0.000	0.000	0.000	0.000
hisotry of my actions and winners	R	t-1,t-2	3,2	R,R				
hisotry of my actions and winners	R	t-1,t-2	3,3	B,B			0.017	
hisotry of my actions and winners	R	t-1,t-2	3,3	B,R				
hisotry of my actions and winners	R	t-1,t-2	3,3	R,B				
hisotry of my actions and winners	R	t-1,t-2	3,3	R,R				
hisotry of my actions and winners	R	t-1,t-2	3,K	B,B				
hisotry of my actions and winners	R	t-1,t-2	3,K	B,R				
hisotry of my actions and winners	R	t-1,t-2	3,K	R,B				
hisotry of my actions and winners	R	t-1,t-2	3,K	R,R				
hisotry of my actions and winners	R	t-1,t-2	K,1	B,B			0.072	
hisotry of my actions and winners	R	t-1,t-2	K,1	B,R				
hisotry of my actions and winners	R	t-1,t-2	K,1	R,B				
hisotry of my actions and winners	R	t-1,t-2	K,1	R,R				
hisotry of my actions and winners	R	t-1,t-2	K,2	B,B				
hisotry of my actions and winners	R	t-1,t-2	K,2	B,R				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of my actions and winners	R	t-1,t-2	K,2	R,B				
hisotry of my actions and winners	R	t-1,t-2	K,2	R,R				
hisotry of my actions and winners	R	t-1,t-2	K,3	B,B		0.022		
hisotry of my actions and winners	R	t-1,t-2	K,3	B,R				
hisotry of my actions and winners	R	t-1,t-2	K,3	R,B				
hisotry of my actions and winners	R	t-1,t-2	K,3	R,R				
my action and winner	R	t-1	N	B				
my action and winner	R	t-1	N	R	0.000	0.000	0.000	0.000
my action and winner	R	t-1	N	B	0.000	0.000	0.000	0.000
my action and winner	R	t-1	N	R				
my action and winner	R	t-1	N	B				
my action and winner	R	t-1	N	R	0.017			
my action and winner	R	t-1	N	B	0.000	0.000	0.001	0.000
my action and winner	R	t-1	N	R				
hisotry of my actions and winners	R	t-1,t-2	K,N	B,B	-0.009			
hisotry of my actions and winners	R	t-1,t-2	K,N	B,R				
hisotry of my actions and winners	R	t-1,t-2	K,N	R,B				
hisotry of my actions and winners	R	t-1,t-2	K,N	R,R				-0.138
hisotry of my actions and winners	R	t-1,t-2	N,K	B,B				
hisotry of my actions and winners	R	t-1,t-2	N,K	B,R				-0.011
hisotry of my actions and winners	R	t-1,t-2	N,K	R,B				
hisotry of my actions and winners	R	t-1,t-2	N,K	R,R				
hisotry of my actions and winners	R	t-1,t-2	N,N	B,B				
hisotry of my actions and winners	R	t-1,t-2	N,N	B,R				
hisotry of my actions and winners	R	t-1,t-2	N,N	R,B	0.000	0.000	0.000	0.000
hisotry of my actions and winners	R	t-1,t-2	N,N	R,R			-0.030	
opponent action and winner	B	t-1	1	B		0.008		
opponent action and winner	B	t-1	1	R	0.000	0.000	0.000	0.000
opponent action and winner	B	t-1	2	B				
opponent action and winner	B	t-1	2	R	-0.002			
opponent action and winner	B	t-1	3	B				-0.019
opponent action and winner	B	t-1	3	R				
opponent action and winner	B	t-2	1	B				
opponent action and winner	B	t-2	1	R	-0.031			
opponent action and winner	B	t-2	2	B				
opponent action and winner	B	t-2	2	R				-0.012
opponent action and winner	B	t-2	3	B		0.027		-0.004
opponent action and winner	B	t-2	3	R				
opponent action and winner	B	t-3	1	B				
opponent action and winner	B	t-3	1	R				
opponent action and winner	B	t-3	2	B	-0.021			
opponent action and winner	B	t-3	2	R				
opponent action and winner	B	t-3	3	B	0.000	0.000	0.000	-0.005
opponent action and winner	B	t-3	3	R	0.000		-0.056	
opponent action and winner	B	t-4	1	B				
opponent action and winner	B	t-4	1	R				
opponent action and winner	B	t-4	2	B	0.000	-0.067	0.000	0.000

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
opponent action and winner	B	t-4	2	R				0.000
opponent action and winner	B	t-4	3	B		0.010	-0.021	
opponent action and winner	B	t-4	3	R		-0.022		
hisotry of opponent actions and winners	B	t-1,t-2	1,1	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	1,1	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	1,1	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	1,1	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	1,2	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	1,2	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	1,2	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	1,2	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	1,3	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	1,3	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	1,3	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	1,3	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	1,K	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	1,K	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	1,K	R,B	0.006	0.000	0.000	0.000
hisotry of opponent actions and winners	B	t-1,t-2	1,K	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	2,1	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	2,1	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	2,1	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	2,1	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	2,2	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	2,2	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	2,2	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	2,2	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	2,3	B,B			-0.004	
hisotry of opponent actions and winners	B	t-1,t-2	2,3	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	2,3	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	2,3	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	2,K	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	2,K	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	2,K	R,B				0.015
hisotry of opponent actions and winners	B	t-1,t-2	2,K	R,R				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of opponent actions and winners	B	t-1,t-2	3,1	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	3,1	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	3,1	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	3,1	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	3,2	B,B	0.009			
hisotry of opponent actions and winners	B	t-1,t-2	3,2	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	3,2	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	3,2	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	3,3	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	3,3	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	3,3	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	3,3	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	3,K	B,B		0.001		
hisotry of opponent actions and winners	B	t-1,t-2	3,K	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	3,K	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	3,K	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	K,1	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	K,1	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	K,1	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	K,1	R,R			0.036	
hisotry of opponent actions and winners	B	t-1,t-2	K,2	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	K,2	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	K,2	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	K,2	R,R				
hisotry of opponent actions and winners	B	t-1,t-2	K,3	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	K,3	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	K,3	R,B				
hisotry of opponent actions and winners	B	t-1,t-2	K,3	R,R				
opponent action and winner	B	t-1	N	B	0.024			
opponent action and winner	B	t-1	N	B				-0.020
opponent action and winner	B	t-1	N	B	-0.005	0.000	0.003	0.000
opponent action and winner	B	t-1	N	B	0.000	0.000	0.000	0.000
hisotry of opponent actions and winners	B	t-1,t-2	K,N	B,B		-0.030		
hisotry of opponent actions and winners	B	t-1,t-2	K,N	B,R				
hisotry of opponent actions and winners	B	t-1,t-2	K,N	R,B		0.013		
hisotry of opponent actions and winners	B	t-1,t-2	N,K	B,B				

» Continue to the next page.



Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of opponent actions and winners	B	t-1,t-2	N,K	B,R	0.047			-0.036
hisotry of opponent actions and winners	B	t-1,t-2	N,K	R,B	0.000	0.000	0.000	0.028
hisotry of opponent actions and winners	B	t-1,t-2	N,N	B,B				
hisotry of opponent actions and winners	B	t-1,t-2	N,N	B,R		-0.037		
hisotry of opponent actions and winners	B	t-1,t-2	N,N	R,B				
hisotry of actions (N or K) and winners		t-1	(N,N)	B				0.000
hisotry of actions (N or K) and winners		t-2	(N,N)	B				-0.017
hisotry of K-profiles and winners		t-1,t-2	(K,K),(N,N)	R,B				
hisotry of K-profiles and winners		t-1,t-2	(K,N),(N,N)	B,B		0.010		
hisotry of K-profiles and winners		t-1,t-2	(N,K),(N,N)	B,B				
hisotry of K-profiles and winners		t-1,t-2	(N,N),(K,K)	B,R				-0.022
hisotry of K-profiles and winners		t-1,t-2	(N,N),(K,N)	B,B				
hisotry of K-profiles and winners		t-1,t-2	(N,N),(N,K)	B,B		0.041		
hisotry of K-profiles and winners		t-1,t-2	(N,N),(N,N)	B,B	0.039			
hisotry of K-profiles and winners		t-1,t-2	(N,N),(N,N)	B,R				
hisotry of K-profiles and winners		t-1,t-2	(N,N),(N,N)	R,B				-0.012
hisotry of actions (N or K) and winners		t-3	(N,N)	B			0.005	
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(K,K), (N,N)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(K,K), (N,N)	R,R,R				-0.005
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(K,N), (N,N)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(K,N), (N,N)	R,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,K), (N,N)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,K), (N,N)	R,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,N), (K,K)	R,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,N), (K,N)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,N), (N,K)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,N), (N,N)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,N), (K,K)	R,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,N), (K,N)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,N), (N,K)	R,R,B				-0.010
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,N), (N,N)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,K),(N,N), (N,N)	R,R,R				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(K,K), (N,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(K,K), (N,N)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(K,N), (N,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(K,N), (N,N)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,K), (N,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,K), (N,N)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,N), (K,K)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,N), (K,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,N), (N,K)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,N), (N,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,N), (N,N)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,N), (K,K)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,N), (K,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,N), (N,K)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(K,N),(N,N), (N,N)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(K,K), (N,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(K,K), (N,N)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(K,N), (N,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(K,N), (N,N)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,K), (N,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,K), (N,N)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,N), (K,K)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,N), (N,K)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,N), (N,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,N), (N,N)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,N), (K,K)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,N), (K,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,N), (N,K)	B,R,B				-0.021
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,N), (N,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,K),(N,N), (N,N)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (K,K)	B,R,R				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (K,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (N,K)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (N,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (N,N)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (K,K)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (K,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (N,K)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (N,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (N,N)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,K), (K,K)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,K), (K,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,K), (N,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,K), (N,N)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,K)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,N)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,K)	B,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,N)	B,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,K)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,K)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,N)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,K)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,N)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,K)	B,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,N)	B,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (K,K)	R,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (K,N)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (N,K)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (N,N)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,K), (N,N)	R,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (K,K)	R,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (K,N)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (N,K)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (N,N)	R,B,B				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(K,N), (N,N)	R,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,K), (K,K)	R,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,K), (K,N)	R,B,B	0.000	0.000	0.000	0.000
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,K), (N,K)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,K), (N,N)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,K), (N,N)	R,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,K)	R,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,N)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,K)	R,B,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,N)	R,B,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,N)	R,R,R				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,K)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (K,N)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,K)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,N)	R,R,B				
hisotry of K-profiles and winners		t-1 to t-3	(N,N),(N,N), (N,N)	R,R,R				
hisotry of actions (N or K) and winners		t-4	(N,N) (N,N)	B	0.000	0.000	0.000	0.000
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (K,K),(N,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (K,K),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (K,N),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (K,N),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,K),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(K,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(N,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(K,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(N,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K), (N,N),(N,N)	R,R,R,R				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N),	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K),	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)					
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N),	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K)					

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	R,R,B,B				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,B,R,B				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N)	B,B,R,B				

» Continue to the next page.



Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,K),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,K),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,K),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(K,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,K),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,K),(K,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,K),(N,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,K),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,K),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(N,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (K,N),(N,N)	B,R,B,R				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(N,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,K),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(K,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N), (N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (K,K),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (K,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (K,K),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (K,N),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (K,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,K),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(N,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(K,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(K,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(N,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K), (N,N),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (K,K),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (K,K),(N,N)	B,B,R,R				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (K,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (K,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,K),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,K),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,N),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,N),(K,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,N),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N), (N,N),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (K,K),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (K,K),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (K,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (K,K),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (N,K),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (N,K),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (N,N),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (N,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (N,N),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (N,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K), (N,N),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N), (K,K),(K,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N), (K,K),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N), (K,K),(N,K)	B,B,R,B				

» Continue to the next page.



Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,B,B				

» Continue to the next page.



Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (K,K),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (K,K),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (K,K),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (K,N),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (K,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (K,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (K,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (K,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(K,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(K,K)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(N,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(K,K)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(N,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(N,N)	B,B,B,R				

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	B,R,B,B				

» Continue to the next page.



Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	B,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K)					

» Continue to the next page.

Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	R,B,B,B	0.000	0.000	0.000	0.000
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,B,B				

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (K,N),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(K,K)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(K,K)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(K,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K), (N,N),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(K,K)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(N,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(N,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(K,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (K,N),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (N,K),(K,K)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (N,K),(K,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (N,N),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (N,K),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (N,K),(N,N)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (N,N),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (N,K),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (N,N),(K,K)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N), (N,N),(K,N)	R,B,B,B				

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,B,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,B,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,B,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(K,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,K),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(K,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(K,N),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,K)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(K,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,K)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,K),(N,N)	R,R,B,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,R,B,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,K)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(K,N)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,K)	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,B				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N),	R,R,R,R				
hisotry of K-profiles and winners		t-1 to t-4	(N,N),(N,N)	R,R,R,R				

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Table 22. Full coefficients table of LASSO (the red player, cont.)

Variable type	Player	Period	Card	Winner	$\beta_{R,1}$	$\beta_{R,2}$	$\beta_{R,3}$	$\beta_{R,K}$
period constant		5						-0.016
period constant		6			0.065			-0.072
period constant		7						
period constant		8				-0.003	0.025	
period constant		9						
period constant		10						
period constant		11				0.011	-0.042	
period constant		12				0.025		
period constant		13						0.001
period constant		14						
period constant		15						
period constant		16						
period constant		17						0.042
period constant		18				-0.036	0.003	
period constant		19			0.000	0.000	0.000	0.000
period constant		20				-0.007		
period constant		21						
period constant		22			0.019			
period constant		23						0.058
period constant		24			-0.024		0.061	
period constant		25						
period constant		26			0.001	-0.013		
period constant		27			-0.035	0.028		
period constant		28						
period constant		29						
period constant		30						0.197

*Notes:* The maximum likelihood estimates of the coefficients of the LASSO model (the red player) using all the data. Each line corresponds to one variable. For example, the line whose variable type is “hisotry of my actions and win ners,” player is R, Period is  $t - 1, t - 2$ , Card is 3, 2, and Winner is  $R, B$ , it indicates the coefficients of the dummy variable that the red player played 3 and won in the previous period, and played 2 and lost two period ago. If an estimate of a coefficient is blank, it means that the variable is eliminated by the model selection. If an estimate is 0.000, then it implies that the variable is not removed by the model selection but the absolute estimated value is less than 0.0005.

## Appendix B Performance Comparison

### B.1 List of KL divergence

Table 23. KL divergence in the five CV splits when we artificially reduce sample sizes (red players, reducing both training and test data).

#Training	#Test	Algorithm	CV1	CV2	CV3	CV4	CV5	Average
80	20	Constant (Baseline)	1.370	1.372	1.399	1.358	1.355	1.371
		EWA	1.367	1.367	1.389	1.334	1.349	1.361
		LASSO	1.371	1.371	1.396	1.357	1.354	1.370
		LSTM	1.367	1.374	1.395	1.348	1.356	1.368
		Modified EWA (4)	1.359	1.356	1.369	1.321	1.341	1.349
400	100	Constant (Baseline)	1.373	1.354	1.373	1.353	1.356	1.361
		EWA	1.366	1.348	1.365	1.344	1.345	1.354
		LASSO	1.357	1.350	1.360	1.345	1.346	1.352
		LSTM	1.359	1.341	1.363	1.344	1.344	1.350
		Modified EWA (4)	1.352	1.339	1.355	1.339	1.335	1.344
800	200	Constant (Baseline)	1.372	1.356	1.367	1.354	1.358	1.361
		EWA	1.365	1.349	1.359	1.348	1.349	1.354
		LASSO	1.358	1.344	1.353	1.339	1.341	1.347
		LSTM	1.353	1.339	1.349	1.333	1.335	1.342
		Modified EWA (4)	1.353	1.337	1.348	1.335	1.336	1.342
all	all	Constant (Baseline)	1.366	1.360	1.363	1.358	1.356	1.361
		EWA	1.360	1.351	1.357	1.349	1.347	1.353
		LASSO	1.352	1.342	1.343	1.339	1.338	1.343
		LSTM	1.345	1.335	1.336	1.332	1.330	1.336
		Modified EWA (4)	1.349	1.339	1.342	1.333	1.333	1.339

*Notes:* #Training and #Test display the number of pairs in the training and test data in each CV split. When the value of #Training (#Test) is “all”, we use all pairs in the original training (test) data. The original training (test) sample size in each split is 2062 or 2061 (515 or 516). Average shows the average KL-divergence of the five CV splits.

Table 24. KL divergence in the five CV splits when we artificially reduce sample sizes (black players, reducing both training and test data).

#Training	#Test	Algorithm	CV1	CV2	CV3	CV4	CV5	Average
80	20	Constant (Baseline)	1.356	1.352	1.381	1.351	1.341	1.371
		EWA	1.354	1.356	1.373	1.347	1.338	1.361
		LASSO	1.356	1.352	1.381	1.355	1.340	1.370
		LSTM	1.339	1.344	1.358	1.360	1.325	1.368
		Modified EWA (4)	1.352	1.355	1.353	1.343	1.340	1.349
400	100	Constant (Baseline)	1.348	1.352	1.348	1.336	1.337	1.361
		EWA	1.337	1.339	1.342	1.337	1.330	1.354
		LASSO	1.333	1.336	1.336	1.323	1.325	1.352
		LSTM	1.351	1.360	1.352	1.343	1.358	1.350
		Modified EWA (4)	1.345	1.354	1.346	1.337	1.353	1.344
800	200	Constant (Baseline)	1.333	1.346	1.337	1.329	1.347	1.361
		EWA	1.330	1.341	1.334	1.323	1.341	1.354
		LASSO	1.353	1.359	1.353	1.349	1.356	1.347
		LSTM	1.348	1.355	1.347	1.344	1.351	1.342
		Modified EWA (4)	1.335	1.343	1.335	1.334	1.337	1.342
all	all	Constant (Baseline)	1.328	1.337	1.326	1.328	1.330	1.361
		EWA	1.334	1.344	1.334	1.334	1.338	1.353
		LASSO	1.352	1.342	1.343	1.339	1.338	1.343
		LSTM	1.345	1.335	1.336	1.332	1.330	1.336
		Modified EWA (4)	1.349	1.339	1.342	1.333	1.333	1.339

*Notes:* #Training and #Test display the number of pairs in the training and test data in each CV split. When the value of #Training (#Test) is “all”, we use all pairs in the original training (test) data. The original training (test) sample size in each split is 2062 or 2061 (515 or 516). Average shows the average KL-divergence of the five CV splits.

Table 25. KL divergence in the five CV splits when we artificially reduce sample sizes (red players, reducing training data only).

#Training	#Test	Algorithm	CV1	CV2	CV3	CV4	CV5	Average
80	all	Constant (Baseline)	1.369	1.361	1.366	1.359	1.356	1.362
		EWA	1.364	1.353	1.362	1.349	1.347	1.355
		LASSO	1.368	1.358	1.363	1.348	1.355	1.358
		LSTM	1.366	1.361	1.364	1.353	1.361	1.361
		Modified EWA (4)	1.354	1.343	1.348	1.335	1.336	1.343
400	all	Constant (Baseline)	1.367	1.360	1.364	1.358	1.356	1.361
		EWA	1.361	1.351	1.358	1.349	1.347	1.353
		LASSO	1.356	1.348	1.350	1.344	1.345	1.349
		LSTM	1.356	1.345	1.351	1.342	1.338	1.346
		Modified EWA (4)	1.350	1.339	1.344	1.334	1.334	1.340
800	all	Constant (Baseline)	1.367	1.360	1.364	1.358	1.356	1.361
		EWA	1.361	1.351	1.358	1.349	1.347	1.353
		LASSO	1.355	1.346	1.347	1.341	1.340	1.346
		LSTM	1.352	1.341	1.342	1.334	1.333	1.341
		Modified EWA (4)	1.350	1.339	1.343	1.333	1.334	1.340

*Notes:* #Training and #Test display the number of pairs in the training and test data in each CV split. When the value of #Training (#Test) is “all”, we use all pairs in the original training (test) data. The original training (test) sample size in each split is 2062 or 2061 (515 or 516). Average shows the average KL-divergence of the five CV splits.

Table 26. KL divergence in the five CV splits when we artificially reduce sample sizes (red players, reducing test data only).

#Training	#Test	Algorithm	CV1	CV2	CV3	CV4	CV5	Average
80	20	Constant (Baseline)	1.368	1.365	1.389	1.356	1.358	1.367
		EWA	1.362	1.358	1.382	1.336	1.352	1.358
		LASSO	1.347	1.346	1.362	1.347	1.360	1.352
		LSTM	1.327	1.346	1.343	1.328	1.361	1.341
		Modified EWA (4)	1.349	1.343	1.360	1.324	1.350	1.345
400	100	Constant (Baseline)	1.371	1.354	1.371	1.353	1.357	1.361
		EWA	1.365	1.348	1.363	1.344	1.347	1.353
		LASSO	1.353	1.343	1.355	1.343	1.344	1.348
		LSTM	1.346	1.332	1.345	1.339	1.335	1.339
		Modified EWA (4)	1.350	1.338	1.354	1.338	1.337	1.343
800	200	Constant (Baseline)	1.371	1.356	1.366	1.355	1.358	1.361
		EWA	1.364	1.349	1.358	1.348	1.349	1.354
		LASSO	1.354	1.341	1.349	1.337	1.340	1.344
		LSTM	1.344	1.336	1.342	1.330	1.333	1.337
		Modified EWA (4)	1.351	1.337	1.348	1.335	1.336	1.341

*Notes:* #Training and #Test display the number of pairs in the training and test data in each CV split. When the value of #Training (#Test) is “all”, we use all pairs in the original training (test) data. The original training (test) sample size in each split is 2062 or 2061 (515 or 516). Average shows the average KL-divergence of the five CV splits.



## B.2 Additional Figures

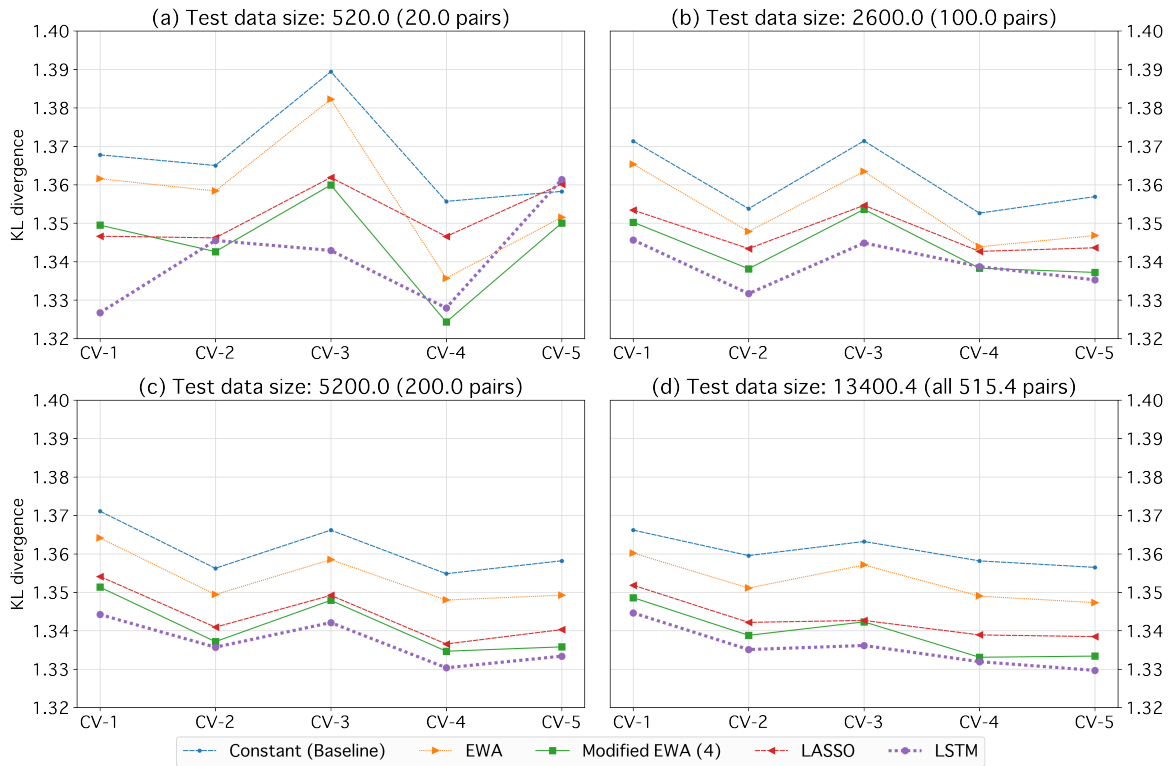


Figure 33. Training data resolution: performance comparison of five representative algorithms for the red player when we artificially reduce **training** data. In the upper right panel, for example, we randomly sampled 80 pairs from the original test data in each CV. We trained the models with the reduced training data and evaluated performance with the original test data. Panels (a)-(d) in this figure correspond to those in Figure 17. Precise KL divergence numbers are shown in Table 27 in the Appendix.

### B.3 Other Performance Measures

Here, we show the log-likelihood, AIC, and BIC (in the training data) of the five representative algorithms when we use all the samples as training data. We can see that these traditional econometric criteria for model selection do not select LSTM (which is the best model according to cross-validation) due to its large parameter size. When we measure the performance of singular models such as DNN and LSTM, these traditional information criteria are known to be inappropriate in the machine learning literature.

Table 27. Prediction Performance Comparison (AIC, BIC, and RC)

	Log-Likelihood	#Params	AIC	BIC	RC
<b>Red Players</b>					
MLE const (Baseline)	-91165.6	4	182339.3	182375.7	0.000
EWA	-90642.1	8	181300.2	181373.1	0.310
Modified EWA (4)	-82896.7	16	165825.4	165971.2	0.853
LASSO	-89713.2	277	179980.4	182504.6	0.710
LSTM	-89098.0	5884	189963.9	243581.7	1.000
<b>Black Players</b>					
MLE const (Baseline)	-90722.3	4	181452.6	181489.1	0.000
EWA	-90389.0	8	180793.9	180866.8	0.201
Modified EWA (4)	-82605.8	16	165243.7	165389.5	0.714
LASSO	-89130.3	447	179154.6	183227.8	0.704
LSTM	-88787.2	4404	186382.5	226513.9	1.000

*Notes:* Log-likelihood shows the sum of the log-likelihood of 26 periods  $\times$  2577 pairs. The number of parameters of LASSO and LSTM are adjusted according to cross-validation in the training data. We repeat RC (relative completeness) of each model in Table 14 and 15 for comparison.