Spurious Correlations

Steve Borgatti

Spurious Correlation

Tuesday, October 23, 2001 10:28 AM
Hi Prof. Borgatti,

How's the semester treating you??? I remember you saying that you were going to try to teach extra classes so you could have next semester off. Is that working out? I heard something funny this morning on the radio and I thought I'd share it with you. The VJ said that the **stock market has been doing well and is predicted to go up. They said that the reason behind this was because the Yankees have been doing well too.** I thought there was a funny relationship between the two.

Have a good day. Don't work too hard!!!

Victoria Roger

Stock Market & the Super Bowl

When an old *nfl* team wins, the stock market goes up

Year	Winner	League	DJIA	S&P
1967	Green Bay	nfl	8.38	17.18
1968	Green Bay	nfl	4.98	11.73
1969	New York Jets	afl	-13.52	-14.43
1970	Kansas City	afl	5.11	-1.16
1971	Baltimore	nfl	5.26	10.13
1972	Dallas	nfl	12.5	18.48
1973	Miami	afl	-18.14	-19.34
1974	Miami	afl	-26.77	-29.24
1975	Pittsburgh	nfl	29.39	32.25
1976	Pittsburgh	nfl	8.07	17.99
1977	Oakland	afl	-15.46	-10.36
1978	Dallas	nfl	3.77	2.44
1979	Pittsburgh	nfl	0.15	12.14
1980	Pittsburgh	nfl	11.17	23.84
1981	Oakland	afl	-6.93	-7.26
1982	San Francisco	nfl	23.85	12.59
1983	Washington	nfl	18.21	17.93

Year	Winner	League	DJIA	S&P
1983	Washington	nfl	18.21	17.93
1984	L.A. Raiders	afl	-3.78	0.07
1985	San Francisco	nfl	26.02	26.01
1986	Chicago	nfl	23.92	19.95
1987	New York Giants	nfl	-7.74	-3.08
1988	Washington	nfl	10.74	14.75
1989	San Francisco	nfl	23.17	26.06
1990	San Francisco	nfl	2.91	-5.69
1991	New York Giants	nfl	19.16	18.18
1992	Washington	nfl	2.11	12.13
1993	Dallas	nfl	13.42	6.96
1994	Dallas	nfl	-2.81	-2.31
1995	San Francisco	nfl	32.64	35.02
1996	Dallas	nfl	22.32	20.94
1997	Green Bay	nfl	18.1	30.73
1998	Denver	afl	20.61	
1999	Denver	afl	22.85	

- Other theories: the miniskirt predictor

Average State IQ and 2004 Vote*

Rank	State	Avg IQ	2004 Vote
1	Connecticut	113	Kerry
2	Massachusetts	111	Kerry
3	New Jersey	111	Kerry
4	New York	109	Kerry
5	Rhode Island	107	Kerry
6	Hawaii	106	Kerry
7	Maryland	105	Kerry
8	New Hampshire	105	Kerry
9	Illinois	104	Kerry
10	Delaware	103	Kerry
11	Minnesota	102	Kerry
12	Vermont	102	Kerry
13	Washington	102	Kerry
14	California	101	Kerry
15	Pennsylvania	101	Kerry
16	Maine	100	Kerry
17	Virginia	100	Bush
18	Wisconsin	100	Kerry
19	Colorado	99	Bush
20	Iowa	99	Bush?
21	Michigan	99	Kerry
22	Nevada	99	Bush
23	Ohio	99	Bush
24	Oregon	99	Kerry
25	Alaska	98	Bush
26	Florida	98	Bush
27	Missouri	98	Bush
28	Kansas	96	Bush
29	Nebraska	95	Bush
30	Arizona	94	Bush
31	Indiana	94	Bush
32	Tennessee	94	Bush
33	North Carolina	93	Bush
34	West Virginia	93	Bush
35	Arkansas	92	Bush
36	Georgia	92	Bush
37	Kentucky	92	Bush
38	New Mexico	92	Bush?
39	North Dakota	92	Bush
40	Texas	92	Bush
41	Alabama	90	Bush
42	Louisiana	90	Bush
43	Montana	90	Bush
44	Oklahoma	90	Bush
45	South Dakota	90	Bush
46	South Carolina	89	Bush
47	Wyoming	89	Bush
48	Idaho	87	Bush
49	Utah	87	Bush
50	Mississippi	85	Bush

*Taken from the internet. Not to be taken seriously.

Evidence for "Hot-Hand"

Philadelphia 76ers, 1980-81 Season

Player	P(x|ooo)	P(x|oo)	P(x|o)	P(x)	P(x|x)	P(x|xx)	P(x|xxx)
Richardson	0.5	0.47	0.56	0.5	0.49	0.5	0.48
Erving	0.52	0.51	0.51	0.52	0.53	0.52	0.48
Hollins	0.5	0.49	0.46	0.46	0.46	0.46	0.32
Cheeks	0.77	0.6	0.6	0.56	0.55	0.54	0.59
C. Jones	0.5	0.48	0.47	0.47	0.45	0.43	0.27
Toney	0.52	0.53	0.51	0.46	0.43	0.4	0.34
B. Jones	0.61	0.58	0.58	0.54	0.53	0.47	0.53
Mix	0.7	0.56	0.52	0.52	0.51	0.48	0.36
Dawkins	0.88	0.73	0.71	0.62	0.57	0.58	0.51
Average:	0.611111	0.55	0.546667	0.516667	0.502222	0.486667	0.431111

- Players become **less** accurate after hitting, not more