

An Examination of the Super Bowl Anomaly: Is it Spurious or Real?

Charles Rayhorn and James Drosen

Introduction

New England has won the Super Bowl in three of the last four years (2005, 2004, and 2002). If Leonard Koppett, the man who “discovered” the Super Bowl/stock market phenomenon, was correct, the stock market should have had down years in 2002, 2004 and 2005. The S&P 500 was down only in 2002. This is hardly the accurate predictor of yore. Koppett’s Super Bowl phenomenon states that when the winner of the Super Bowl is a team that belonged to the old American Football League (AFL) before it merged into the National Football League, the market will be lower at the end of the year than at the beginning. The opposite is true when the winner of the Super Bowl is a team that belonged to the old National Football League (NFL), the market will be higher at the end of the year than at the beginning. (For this article, “AFL” refers to teams that belonged to the old AFL before it merged into the NFL, and “NFL” refers to pre-merger NFL teams).

Dyl and Schatzberg in their 1989 article found that in 14 of 15 up-market years, an NFL team won the Super Bowl; that in six of seven down-market years, an AFL team won the Super Bowl; and that the probability that the results occurred by chance is roughly one out of 1,780. They also found that a comparison of the two periods before and after 1978 (the year of Koppett’s discovery) shows that the market’s short-term reaction has been more pronounced since 1978. Dyl and Schatzberg’s results are corroborated by many stories in the press, including a Barron’s piece from the 1/23/95 issue in which the author finds that since 1967 the Super Bowl as a stock market predictor has been 85.7% to 89.3% accurate in calling the market. Dyl and Schatzberg, however, concluded that the correlation between stock market returns and the result of who wins the Super Bowl must be a statistical coincidence.

Krueger and Kennedy (1990) using a different methodology (and the same time period) than Dyl and Schatzberg found similar results and their conclusion was the same—a statistical coincidence.

Rayhorn and Guenther in 2000 also found similar results. Besides looking at the Super Bowl they also looked to see if the Super Bowl anomaly was a proxy for a large NFL market effect. They found large market team wins tended to be associated with up years and small market teams tended to correlate with down years. These correlations were much weaker than who won the Super Bowl. They rejected the idea that Koppett’s Super Bowl anomaly is a proxy for of a large vs. small market effect. Given no credible explanation why who wins the Super Bowl would determine which way the market moves, they also concluded this correlation must be spurious.

The purpose of this study is to update the Rayhorn and Guenther (2000); Dyl and Schatzberg (1989); and Krueger and Kennedy (1990) papers. In their paper Krueger and

Charles Rayhorn is a Professor of Finance at Northern Michigan University. James Drosen is an Associate Professor of Management at Northern Michigan University.

Kennedy (1990) coined the phrase ‘SBSMP’ the Super Bowl Stock Market Predictor. SBSMP will be used throughout the rest of this paper.

Data, Methodology, and Results

The SBSMP states that when the winner of the Super Bowl is a team that belonged to the old American Football League (AFL) before it merged into the National Football League, the market will be lower at the end of the year than at the beginning. The opposite is true when the winner of the Super Bowl is a team that belonged to the old National Football League (NFL), the market will be higher at the end of the year than at the beginning. (For this article, “AFL” refers to teams that belonged to the old AFL before it merged into the NFL, and “NFL” refers to pre-merger NFL teams). The NFL and AFL merger began in 1966. The first Super Bowl was played in January of 1967 as part of this merger. By 1970 there were a total of 26 franchises. The NFC had 13 teams all from the original NFL. The AFC had 13 teams, 10 were from the original AFL and 3 from the original NFL teams. Since 1970 three expansion teams have been added to each conference. 1971, 1975, 1976, 1979, 1980, and 2001 saw both teams in the Super Bowl from the old NFL. These are counted as wins for teams from the old NFL. In 2003 an expansion team won the Super Bowl. The Super Bowl rule doesn’t offer a market forecast for an expansion team win from either conference.

The data used in our study are 91-day T-bill bond equivalent yields and capital gains. Capital gains are calculated using the closing prices of the two indexes in this study, the Dow Jones Industrial Average (DJIA) and the S&P 500. The index prices (daily) and the 91-day T-bill yields are from Yahoo finance. These price indexes do not include dividends. The various tests will be explained along with the discussion of the results listed in the Tables.

Table 1 looks at the accuracy of the Super Bowl for the 1967-2005 time period. The average return when an old NFL won was 13.39% for the DJIA and 13.48% for the S&P 500. The average when an old AFL won was much lower at -5.00% and -3.61% for the Dow and 500 respectively. The accuracy of the Super Bowl forecast is 78.95% and 73.68% for the Dow and 500 respectively. These numbers (in absolute terms) are lower than results reported in Krueger and Kennedy (1990). Our time period covers 17 more Super Bowls and yearly returns. Has predictive power changed by decade? Panels a, b, c, and d of Table 2, address this issue.

Table 2 reports the mean, standard deviation, and accuracy of the SBSMP by decade. The accuracy of the Super Bowl forecast declines markedly beginning in 1990. The last five years have exhibited less than 50% accuracy, the amount one would expect by pure chance alone. The Dyl and Schatzberg (1989); and Krueger and Kennedy (1990) articles covered the years where the Super Bowl predictions were at their peak accuracy. The Rayhorn and Guenther (2000) article’s time period included the 90’s when the accuracy was reduced. They didn’t see the decline in accuracy.

Table 3 reports the statistical significance of one week returns after the Super Bowl. This Table looks at whether the Super Bowl phenomenon had strengthened since its discovery; not because investors believe that the Super Bowl has anything to do with stock prices, but because the outcome may affect other investors’ behavior (the Keynesian idea that the stock market is a

beauty contest). Thus, if investors have been using the outcome of the Super Bowl in their decision-making process, the reaction would be more conspicuous after 1978. If this 'Beauty Contest or the Greater Fool Theory' suggested in the Dyl and Schatzberg (1989) paper is working, we would expect the AFL group to show more negative or smaller returns after 1978 and the NFL group more positive returns. There is little or no evidence of this phenomenon in our data. Dyl and Schatzberg (1989); and Krueger and Kennedy (1990) found highly significant results! Why the difference? Their data didn't include the decade of the 90's and the first 5 years of the 21st century. As Table 2a, b, c, and d indicate, there seems to be little support for the SBSMP.

Table 4 presents the up/down markets for the DJIA, and the S&P 500 in NFL and AFL winning years for the last 38 years (there are 39 years but an expansion team won the super bowl in 2003 and Koppett's rule is silent regarding expansion team wins). An up market has a positive yearly return while a down market has a negative return.

T-tests (one tail—the null hypothesis is no difference while the alternative hypothesis is the super bowl anomaly is correct) reveal that there is a statistical difference in mean values between returns for the NFL and the AFL for the Dow and 500 at an alpha level of less than 1%. The gap between the average return for NFL and AFL win years is about the same as it was in Dyl and Schatzberg (1989) and in Rayhorn and Guenther (2000).

The standard statistical test of independence is the Chi-Squared Test (who wins the super bowl and market returns are assumed independent for the null hypothesis). This test is appropriate when the expected frequency in each cell is at least five. In our situation, many times this is not the case because of the small sample sizes and the preponderance of NFL wins.

An alternative test developed by Fisher is known as Fisher's Exact Test (www.unc.edu/~preacher.fisher/fisher.htm). It is based on the hyper-geometric distribution, and calculates a p-value which is equal to the conditional probability of getting a result as extreme or more extreme than that observed, given the current row and column sums. By more extreme we mean farther from what you would expect under independence, given the row and column sums. For example, suppose we observe the following (see Exhibit I):

Under independence, with these row and column sums, we would expect to see 9 and 6 in the first row and 6 and 4 in the second. We observe larger counts on the diagonal and smaller counts off the diagonal. More extreme results with the same row and column sums would be (14, 1, 1, 9) and (15, 0, 0, and 10). Adding up the conditional probabilities of these three configurations given the row and column sums gives us:

$$.00144550227 + .000045888 + .0000003059 = .00149....$$

The (one tailed) p-value is considerably less than 1%, so we feel comfortable rejecting the null hypothesis that Up and NFL are statistically independent.

The Super Bowl phenomenon has been observed in 30 (22+8) of the last 38 years for the DJIA. For the S&P 500 the Super Bowl phenomenon has been observed in 28 (22+6) of the last 38 years. The p-values for the Fisher's Exact tests are 0.0030 for the Dow and 0.03393 for the

S&P 500. Statistically it appears that the Super Bowl Anomaly occurring by chance is quite small for the 38 years.

As was noted in Table 2 the SBSMP seems to have lost its predictive power as measured by the simple accuracy measure. To ensure an appropriate number of observations for Fishers Exact Test the sample was broken into two periods—1967-1986 and 1987-2005.

Table 5 shows that while the SBSMP had statistically significant predictive ability in the earlier period (67 through 86); none exists in the last 18 years.

Table 6 presents' simulated results for a buy and hold strategy vs. a Super Bowl strategy. Panel 6a compares the terminal value of \$1.00 invested in January 1967 through 2005. Panel 6b compares the terminal value of \$1.00 invested in January 1967 through 1986. Panel 6c compares the terminal value of \$1.00 invested in January 1987 through 2005. Each panel shows the FVIF when a client is entirely invested in the two indices, in T-Bills, or a combination of the two indices and T-Bills. The rules are:

- 100% in the Market: Fully invested
- Super Bowl Rule: Always in the market for January, once the outcome of the Super Bowl is known stay in the market if an old NFL team wins, get into T-bills if an old AFL team wins.

It is interesting to note that in the first and second panels of Table 6 the Super Bowl Stock Market Predictor overwhelms the buy and hold strategy. Panel c shows a different result. For the last 19 years, the buy and hold strategy beat the SBSMP for the S&P 500, but not for the DJIA.

Conclusions

Is there any logical explanation of the Super Bowl phenomenon (anomaly)? In Koppett's own words: "What does all this mean? Absolutely nothing on any rational level—and that's exactly the point. Just because two sets of numbers coincide in some way, don't leap to the conclusion that one set 'causes' the other...Statistics, always, are the starting point of an investigation, not the conclusion." The results tend to support Koppett's conclusion that the Super Bowl Stock Market Predictor was just spurious correlation after all. While it had a great run from 1967-1989 it fell apart in the last 15 years. One might speculate that once the phenomenon was documented it became a self-fulfilling prophesy. The three studies cited earlier in this work seem to support such a notion. But even if this was true there is no support for it now. Table 3 is similar to Table II in Kruger and Kennedy (1990); and Dyl and Shatzberg's (1989). While they found very significant differences in the returns before and after 1978 this is clearly not the case for the longer time period in this study. The p-values in Table 5 (Fishers Exact Test) also indicate that whatever, if anything, was causing the predictive power it has diminished over time.

Well, as I write this, 2006 is into its fourth month; the Super Bowl was won by an old NFL team, and the Dow and 500 are solidly up. Hmmmmmmm. Koppett's 'theory' forecasts an up year. Should investors use the Super Bowl, or combination rule? In 2000 I would have ended this study with "Probably not but....." But this isn't 2000. It appears that the Super Bowl Anomaly was just spurious correlation and is no longer evident. Or is it?

Table 1
Super Bowl Outcomes and Stock Market Behavior

Super Bowl outcomes (+ or -) and annual changes (%) in the Dow Jones Industrial Average and the S & P 500 for the period 1967-2005. The accuracy for each index is simply if who won the Super Bowl correctly forecast the directional change in the two indices used in this study. The Super Bowl was won by an expansion team in 2003. The returns were not included in the mean, standard deviation or accuracy calculations.

Year	Old NFL	Old AFL	Prediction	DJIA	S&P 500
2005	Philadelphia Eagles	<i>New England Patriots</i>	-	-0.61%	3.00%
2004	Expansion	<i>New England Patriots</i>	-	3.15%	8.99%
2003	Expansion-won	Oakland Raiders	N/A	25.32%	26.38%
2002	St. Louis Rams	<i>New England Patriots</i>	-	-16.76%	-23.37%
2001	New York Giants vs. <i>Baltimore Ravens</i>		+	-7.10%	-13.04%
2000	<i>St. Louis Rams</i>	Tennessee Titans	+	-6.17%	-10.14%
1999	Atlanta Falcons	<i>Denver Broncos</i>	-	22.85%	19.53%
1998	Green Bay	<i>Denver Broncos</i>	-	16.10%	26.67%
1997	<i>Green Bay</i>	New England Patriots	+	22.64%	31.01%
1996	<i>Dallas Cowboys</i>	Pitt Steelers	+	26.01%	20.26%
1995	<i>SF 49'ers</i>	San Diego Chargers	+	33.45%	34.11%
1994	<i>Dallas Cowboys</i>	Buffalo Bills	+	2.14%	-1.54%
1993	<i>Dallas Cowboys</i>	Buffalo Bills	+	13.72%	7.06%
1992	<i>Washington Redskins</i>	Buffalo Bills	+	4.17%	4.46%
1991	<i>New York Giants</i>	Buffalo Bills	+	20.32%	26.31%
1990	<i>SF 49'ers</i>	Denver Broncos	+	-4.34%	-6.56%
1989	<i>SF 49'ers</i>	Cincinnati Bengals	+	26.96%	27.25%
1988	<i>Washington Redskins</i>	Denver Broncos	+	11.85%	12.40%
1987	<i>New York Giants</i>	Denver Broncos	+	2.26%	2.03%
1986	<i>Chicago Bears</i>	New England Patriots	+	22.58%	14.62%
1985	<i>SF 49'ers</i>	Miami Dolphins	+	27.66%	26.33%
1984	Washington Redskins	<i>LA Raiders</i>	-	-3.74%	1.40%
1983	<i>Washington Redskins</i>	Miami Dolphins	+	20.27%	17.27%
1982	<i>SF 49'ers</i>	Cincinnati Bengals	+	19.60%	14.76%
1981	Philadelphia Eagles	<i>Oakland Raiders</i>	-	-9.23%	-9.73%
1980	LA Rams vs. <i>Pitt Steelers</i>		+	14.93%	25.77%
1979	Dallas Cowboys vs. <i>Pitt Steelers</i>		+	4.19%	12.31%
1978	<i>Dallas Cowboys</i>	Denver Broncos	+	-3.15%	1.06%
1977	Minn Vikings	<i>Oakland Raiders</i>	-	-17.27%	-11.50%
1976	Dallas Cowboys vs. <i>Pitt Steelers</i>		+	17.86%	19.15%
1975	Minn Vikings vs. <i>Pitt Steelers</i>		+	38.32%	31.55%
1974	Minn Vikings	<i>Miami Dolphins</i>	-	-27.57%	-29.72%
1973	Washington Redskins	<i>Miami Dolphins</i>	-	-16.58%	-17.37%
1972	<i>Dallas Cowboys</i>	Miami Dolphins	+	14.58%	15.63%
1971	<i>Balt Colts</i> vs. Dallas Cowboys		+	6.11%	10.79%
1970	Minn Vikings	<i>KC Chiefs</i>	-	4.82%	0.10%
1969	Balt Colts	<i>NY Jets</i>	-	-15.19%	-11.36%
1968	<i>Green Bay</i>	Oakland Raiders	+	4.27%	7.66%
1967	<i>Green Bay</i>	KC Chiefs	+	15.10%	20.09%
		Mean Annual Return When Old National League Team Won 38 years		13.39%	13.48%
		Standard Deviation When Old National League Team Won 38 years		12.15%	12.73%
		Mean Annual Return When Old American League Team Won 38 years		-5.00%	-3.61%
		Standard Deviation When Old American League Team Won 38 years		14.31%	16.11%
		Accuracy 38 years		78.95%	73.68%

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Table 2a
Super Bowl Outcomes and Stock Market Behavior 2000-05

Super Bowl outcomes (+ or -) and annual changes (%) in the Dow Jones Industrial Average and the S & P 500. The accuracy for each index is simply if who won the Super Bowl correctly forecast the directional change in the two indices used in this study. The Super Bowl was won by an expansion team in 2003. The returns were not included in the mean, standard deviation or accuracy calculations.

Year	Old NFL	Old AFL	Prediction	DJIA	S&P 500
2005	Philadelphia Eagles	<i>New England Patriots</i>	-	-0.61%	3.00%
2004	Expansion	<i>New England Patriots</i>	-	3.15%	8.99%
2003	Expansion-won	Oakland Raiders	N/A	25.32%	26.38%
2002	St. Louis Rams	<i>New England Patriots</i>	-	-16.76%	-23.37%
2001	New York Giants vs. <i>Baltimore Ravens</i>		+	-7.10%	-13.04%
2000	<i>St. Louis Rams</i>	Tennessee Titans	+	-6.17%	-10.14%
Mean Annual Return When Old National League Team Won 2000-2005				-6.64%	-11.59%
Standard Deviation When Old National League Team Won 2000-2005				0.47%	1.45%
Mean Annual Return When Old American League Team Won 2000-2005				-4.74%	-3.79%
Standard Deviation When Old American League Team Won 2000-2005				8.64%	14.06%
Accuracy 2000-2005				40.00%	20.00%

Table 2b
Super Bowl Outcomes and Stock Market Behavior 1990-1999

Super Bowl outcomes (+ or -) and annual changes (%) in the Dow Jones Industrial Average and the S & P 500. The accuracy for each index is simply if who won the Super Bowl correctly forecast the directional change in the two indices used in this study.

Year	Old NFL	Old AFL	Prediction	DJIA	S&P 500
1999	Atlanta Falcons	<i>Denver Broncos</i>	-	22.85%	19.53%
1998	Green Bay	<i>Denver Broncos</i>	-	16.10%	26.67%
1997	<i>Green Bay</i>	New England Patriots	+	22.64%	31.01%
1996	<i>Dallas Cowboys</i>	Pitt Steelers	+	26.01%	20.26%
1995	<i>SF 49'ers</i>	San Diego Chargers	+	33.45%	34.11%
1994	<i>Dallas Cowboys</i>	Buffalo Bills	+	2.14%	-1.54%
1993	<i>Dallas Cowboys</i>	Buffalo Bills	+	13.72%	7.06%
1992	<i>Washington Redskins</i>	Buffalo Bills	+	4.17%	4.46%
1991	<i>New York Giants</i>	Buffalo Bills	+	20.32%	26.31%
1990	<i>SF 49'ers</i>	Denver Broncos	+	-4.34%	-6.56%
Mean Annual Return When Old National League Team Won 1990-1999				14.77%	14.39%
Standard Deviation When Old National League Team Won 1990-1999				12.28%	14.52%
Mean Annual Return When Old American League Team Won 1990-1999				19.47%	23.10%
Standard Deviation When Old American League Team Won 1990-1999				3.37%	3.57%
Accuracy 1990-1999				70.00%	60.00%

Table 2c
Super Bowl Outcomes and Stock Market Behavior 1980-1989

Super Bowl outcomes (+ or -) and annual changes (%) in the Dow Jones Industrial Average and the S & P 500. The accuracy for each index is simply if who won the Super Bowl correctly forecast the directional change in the two indices used in this study.

Year	Old NFL	Old AFL	Prediction	DJIA	S&P 500
1989	<i>SF 49'ers</i>	Cincinnati Bengals	+	26.96%	27.25%
1988	<i>Washington Redskins</i>	Denver Broncos	+	11.85%	12.40%
1987	<i>New York Giants</i>	Denver Broncos	+	2.26%	2.03%
1986	<i>Chicago Bears</i>	New England Patriots	+	22.58%	14.62%
1985	<i>SF 49'ers</i>	Miami Dolphins	+	27.66%	26.33%
1984	Washington Redskins	<i>LA Raiders</i>	-	-3.74%	1.40%
1983	<i>Washington Redskins</i>	Miami Dolphins	+	20.27%	17.27%
1982	<i>SF 49'ers</i>	Cincinnati Bengals	+	19.60%	14.76%
1981	Philadelphia Eagles	<i>Oakland Raiders</i>	-	-9.23%	-9.73%
1980	LA Rams vs. <i>Pitt Steelers</i>		+	14.93%	25.77%
Mean Annual Return When Old National League Team Won 1980-1989				18.26%	17.55%
Standard Deviation When Old National League Team Won 1980-1989				7.88%	8.08%
Mean Annual Return When Old American League Team Won 1980-1989				-6.49%	-4.16%
Standard Deviation When Old American League Team Won 1980-1989				2.75%	5.57%
Accuracy 1980-1989				100.00%	90.00%

Table 2d
Super Bowl Outcomes and Stock Market Behavior 1967-1979

Super Bowl outcomes (+ or -) and annual changes (%) in the Dow Jones Industrial Average and the S & P 500. The accuracy for each index is simply if who won the Super Bowl correctly forecast the directional change in the two indices used in this study.

Year	Old NFL	Old AFL	Prediction	DJIA	S&P 500
1979	Dallas Cowboys vs. <i>Pitt Steelers</i>		+	4.19%	12.31%
1978	<i>Dallas Cowboys</i>	Denver Broncos	+	-3.15%	1.06%
1977	Minn Vikings	<i>Oakland Raiders</i>	-	-17.27%	-11.50%
1976	Dallas Cowboys vs. <i>Pitt Steelers</i>		+	17.86%	19.15%
1975	Minn Vikings vs. <i>Pitt Steelers</i>		+	38.32%	31.55%
1974	Minn Vikings	<i>Miami Dolphins</i>	-	-27.57%	-29.72%
1973	Washington Redskins	<i>Miami Dolphins</i>	-	-16.58%	-17.37%
1972	<i>Dallas Cowboys</i>	Miami Dolphins	+	14.58%	15.63%
1971	<i>Balt Colts</i> vs. Dallas Cowboys		+	6.11%	10.79%
1970	Minn Vikings	<i>KC Chiefs</i>	-	4.82%	0.10%
1969	Balt Colts	<i>NY Jets</i>	-	-15.19%	-11.36%
1968	<i>Green Bay</i>	Oakland Raiders	+	4.27%	7.66%
1967	<i>Green Bay</i>	KC Chiefs	+	15.10%	20.09%
Mean Annual Return When Old National League Team Won 1967-1979				12.16%	14.78%
Standard Deviation When Old National League Team Won 1967-1979				11.88%	8.59%
Mean Annual Return When Old American League Team Won 1967-1979				-14.36%	-13.97%
Standard Deviation When Old American League Team Won 1967-1979				10.55%	9.70%
Accuracy 1967-1979				84.62%	92.31%

Table 3

Mean Stock Returns the Week Following the Super Bowl.

The returns are pre and post 1978—the year the SBSMP was discovered. The t-tests look at pre and post means (DJIA and the S & P 500) for significance.

		# of Years	DJIA	S&P 500
AFL win	Before 78	5	-0.32%	0.026%
	After 78	7	0.09%	-0.537%
NFL win	Before 78	6	<i>0.247%</i>	0.26%
	After 78	19	<i>1.819%</i>	1.60%

The t-test is significant at the 7% level for the NFL and DOW

Table 4

Two By Two Comparisons: Who Won the Super Bowl and Up Vs. Down Market

The sixth column lists p-values for one tailed t-tests. The seventh column gives the p-value for the Fishers Exact Test.

Index	Years	Up	Down	Avg.	t-test	FET
DJIA	67-05 (38*ys)	26	12	7.58%		
	NFL Win	22	4	13.39%	0.0003	0.0029
	AFL Win	4	8	-5.40%		
S & P 500	67-05 (38*ys)	28	10	8.09%		
	NFL Win	22	4	13.48%	0.0015	0.0339
	AFL Win	6	6	-3.61%		

Exhibit I

Example of test

	Up	Not Up (down)	Row sum
NFL	13	2	15
Not NFL (AFL)	2	8	10
Column sum	15	10	

Table 5a
Two By Two Comparisons: Who Won the Super Bowl and Up Vs. Down Market
1967-1986

The sixth column lists p-values for one tailed t-tests. The seventh column gives the p-value for the Fishers Exact Test.

Index	Years	Up	Down	Avg.	t-test	FET
DJIA	67-86 (20 yrs)	13	7	5.88%		
	NFL Win	12	1	15.56%	0.00005	0.0012
	AFL Win	1	6	-12.11%		
S & P 500	67-86 (20 yrs)	15	5	6.94%		
	NFL Win	13	0	16.69%	0.00006	0.0013
	AFL Win	2	5	-11.17%		

Table 5b
Two By Two Comparisons: Who Won the Super Bowl and Up Vs. Down Market
1987-2005

The sixth column lists p-values for one tailed t-tests. The seventh column gives the p-value for the Fishers Exact Test.

Index	Years	Up	Down	Avg.	t-test	FET
DJIA	87-05 (18* yrs)	13	5	9.48%		
	NFL Win	10	3	11.22%	0.22582	0.4325
	AFL Win	3	2	4.94%		
S & P 500	87-05 (18* yrs)	13	5	9.36%		
	NFL Win	9	4	10.28%	0.37240	0.5675
	AFL Win	4	1	6.96%		

Table 6a

FVIF

Future Value Interest Factors for the 39 years in this study. Column one names the investment rule. Columns 2-4 are the FVIF's.

Rule	Dow	S&P 500	T-Bill
100% in Market	13.6	15.5	4.9
Super Bowl	43.8	35.9	N/A

Table 6b

FVIF

Future Value Interest Factors for the period 1967- 1986. Column one names the investment rule. Columns 2-4 are the FVIF's.

Rule	Dow	S&P 500	T-Bill
100% in Market	2.41	3.01	3.81
Super Bowl	8.63	9.67	N/A

Table 6c

FVIF

Future Value Interest Factors for the period 1987- 2005. Column one names the investment rule. Columns 2-4 are the FVIF's.

Rule	Dow	S&P 500	T-Bill
100% in Market	4.43	4.08	2.16
Super Bowl	5.08	3.71	N/A

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