



MAFL Funds : Season 2007

Where Statistics Meets Leather and Grass

23 September 2007

Season 2007, Number 25.1 (Preliminary Finals)

In this Edition of the newsletter:

- Results of wager and tips for the Preliminary Finals
- Which Quarter Do Grand Final Winners Win?
- Simple Wagering Strategies

The Cream Rises

PRELIM FINAL #1



Collingwood
v
Geelong

MCG

21st September, 7:50pm

Head-to-Head

Col \$3.65 / Gee \$1.27
(Geelong 73-79%)

Line Betting

Collingwood +23½ pts

Heritage Fund Bet

LOST 7.82% (5.95%)

Alpha Fund Bet

-

Beta Fund Bet

-

Line Fund Bet

-



Chi's Tip
Geelong by 7

Quila's Tip
Geelong by 9



Geelong 13.14 (92)
def.

Collingwood 13.9 (87)

Line Betting

Collingwood by 18½ pts

PRELIM FINAL #2



Port Adelaide
v
Kangaroos

Football Park

22nd September, 4:30pm

Head-to-Head

PA \$1.30 / Kan \$3.40
(Port Adelaide 71-77%)

Line Betting

Port Adelaide -19½ pts

Heritage Fund Bet

-

Alpha Fund Bet

-

Beta Fund Bet

-

Line Fund Bet

-



Chi's Tip
Port Adelaide by 11

Quila's Tip
Port Adelaide by 6



Port Adelaide 20.13 (133)
def.

Kangaroos 5.16 (46)

Line Betting

Port Adelaide by 67½ pts

With wins to the Cats and to Port, we got pretty much what everyone expected, though the Pies turned out to be much crustier and more indigestible Cat food than many were tipping.

In the end though, we have 1st playing 2nd in the Grand Final, the third time we've had such a pairing in the eight years we've had the current system of Finals. In 2001, 2nd-placed Brisbane overcame a 14-point half-time deficit against Essendon to eventually run out 26 point winners. Then, in 2004, Brisbane again finished second, but this time they were beaten by Port Adelaide by 40 points after Brisbane had led by 1 point at half-time.

For anyone who's curious, Chi is 5 and 3 for Finals tipping, moving him to 117½ and 66½ (64%) for the season. The Port Adelaide blowout hurt Chi's Average Prediction Error, and he now needs to tip the margin in the Grand Final to within 17 points in order to finish the season with an Average Prediction Error under 30 points.

- One bet; one team; one loss.

Within a Whisker

If all our \$3.65 (and thereabouts) bets this season had provided as much interest and come as close to winning as our wager on the Pies this weekend, I'd have had many more pleasant weekends over the past 6 months. (Assuming, of course, that a few of them had gone on with it.)

In the end, though, the Heritage Fund records another loss – its fourth in the last six weeks (including a week of abstention) – and Investors shed between 1½% and 4¾% of NIF, so there's no reason to be too joyous.

Here's the detail:

Result of Preliminary Finals Wager

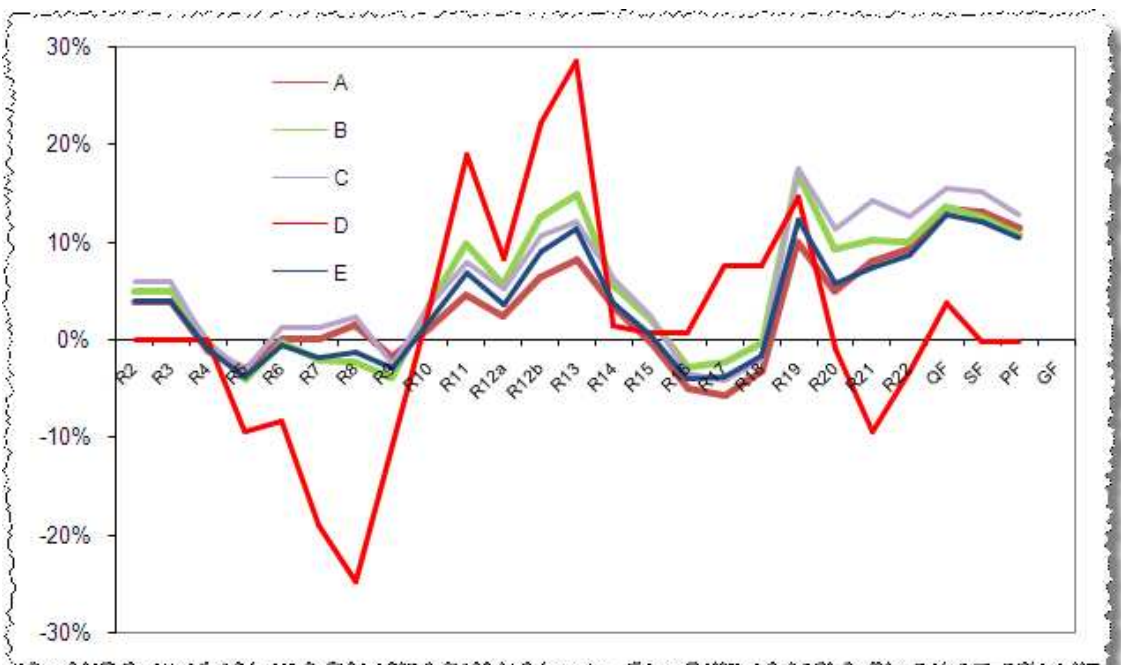
Heritage Fund		ROI (100.0%)		
	Bet*	Price	Net Return*	
Collingwood	7.82%	\$3.65	(7.8%)	Lost by 5 pts
Total	7.8%		(7.8%)	

Investor Returns			
	Bet*	Net Return*	ROI
Strategy A	1.56%	(1.56%)	(100.00%)
Strategy B	1.96%	(1.96%)	(100.00%)
Strategy C	2.35%	(2.35%)	(100.00%)
Strategy C+	4.69%	(4.69%)	(100.00%)
Strategy D	0.00%	0.00%	-
Strategy E	1.56%	(1.56%)	(100.00%)

*all bets and net returns are calculated as a percentage of Notional Initial Funds

Which leaves most Investors with a return for the season of around 10½ to 11½%, excepting those who've adopted Strategy D who've instead suffered a tiny loss in the season to date.

Here's the detail in graphical form:



Here's the current position for all Investors, in tabular form:

Overall Fund Performance						
		Heritage	Alpha	Beta	Line	
Fund Return		+23.59%	+14.68%	+4.80%		(-0.17%)
Joined [Swapped]	Strategy	Heritage	Alpha	Beta	Line	Overall Return
(Percentage in each Fund)						
Pre-Season	A*	20%	35%	35%	10%	+11.52%
Pre-Season	B	25%	25%	25%	25%	+10.72%
Pre-Season	C	30%	30%	30%	10%	+12.90%
Pre-Season	D	0%	0%	0%	100%	(-0.17%)
Pre-Season	E	20%	30%	30%	20%	+10.53%
Round 6	A*	20%	35%	35%	10%	+14.92%
Pre-Season [Round 7 & 10]	A ▶ C ▶ A	20%	35%	35%	10%	+10.16%
Pre-Season [Round 13]	C ▶ C+	60%	10%	10%	20%	+3.55%

* Recommended portfolio weightings

Still one more shot at redemption for the Line Fund.

Which Quarter Do GF Winners Win?

Over this newsletter and the next I want to take a look at the history of AFL Grand Finals. During the season you'll recall that we've looked at the relative importance of winning particular quarters and leading at the end of particular quarters in regular season games. Well here we'll take a look at the equivalent analysis for Grand Finals.

First then, how important has it been to lead at the end of the 1st, 2nd or 3rd quarters?

Leader at the End of 1st Quarter				Leader at the End of 2nd Quarter				Leader at the End of 3rd Quarter			
Year	Loser	Neither	Winner	Year	Loser	Neither	Winner	Year	Loser	Neither	Winner
⊕ 1898 - 1909	2	1	9	⊕ 1898 - 1909	2	2	8	⊕ 1898 - 1909	1		11
⊕ 1910 - 1919	3		7	⊕ 1910 - 1919	1		9	⊕ 1910 - 1919	1		9
⊕ 1920 - 1929	3	1	5	⊕ 1920 - 1929	3		6	⊕ 1920 - 1929	1		8
⊕ 1930 - 1939	3		7	⊕ 1930 - 1939	2		8	⊕ 1930 - 1939		1	9
⊕ 1940 - 1949	3		7	⊕ 1940 - 1949	2		8	⊕ 1940 - 1949	2		8
⊕ 1950 - 1959	3		7	⊕ 1950 - 1959	1		9	⊕ 1950 - 1959			10
⊕ 1960 - 1969	2		8	⊕ 1960 - 1969	3		7	⊕ 1960 - 1969	1		9
⊕ 1970 - 1979	2		8	⊕ 1970 - 1979	3		7	⊕ 1970 - 1979	2		8
⊕ 1980 - 1989	3		7	⊕ 1980 - 1989	2		8	⊕ 1980 - 1989	2		8
⊕ 1990 - 1999	5		5	⊕ 1990 - 1999	3		7	⊕ 1990 - 1999			10
⊕ 2000 - 2006	1		6	⊕ 2000 - 2006	2		5	⊕ 2000 - 2006			7
Grand Total	30	2	76	Grand Total	24	2	82	Grand Total	10	1	97
Winner in front at end of Q1			70%	Winner in front at end of Q2			76%	Winner in front at end of Q3			90%

(NB: The 1970-1979 results exclude the drawn Grand Final of 1977. Also, there was no Grand Final in 1897 or 1924)

Extremely important, as it turns out. Some 70% of winning Grand Finalists have led at the first change; 76% have led at the half; and 90% have led at three-quarter time. In fact, no team has come from behind in the final term to win a Grand Final since 1984, when Essendon trailed Hawthorn 5.5 to 10.8 but then kicked 9.6 to 2.1 in the 4th to run out winners by 24 points.

Also,

- No Grand Final has been tied as quarter time since 1920
- No Grand Final has been tied at the half since 1909
- No Grand Final has been tied at three-quarter time since 1937
- Only one Grand Final has been tied at full time, requiring a replay. That was in 1977.

Next, let's take a look at the winning of the various quarters.

Winner of 2nd Quarter				Winner of 3rd Quarter				Winner of 4th Quarter			
Year	Losers	Neither	Winner	Year	Losers	Neither	Winner	Year	Losers	Winner	
⊕ 1898 - 1909	4	1	7	⊕ 1898 - 1909	5		7	⊕ 1898 - 1909	7	5	
⊕ 1910 - 1919	2	1	7	⊕ 1910 - 1919	5		5	⊕ 1910 - 1919	4	6	
⊕ 1920 - 1929	3	2	4	⊕ 1920 - 1929	2	2	5	⊕ 1920 - 1929	3	6	
⊕ 1930 - 1939	1	1	8	⊕ 1930 - 1939	2		8	⊕ 1930 - 1939	4	6	
⊕ 1940 - 1949	4		6	⊕ 1940 - 1949	3	1	6	⊕ 1940 - 1949	4	6	
⊕ 1950 - 1959	4		6	⊕ 1950 - 1959	2		8	⊕ 1950 - 1959	3	7	
⊕ 1960 - 1969	3		7	⊕ 1960 - 1969	4		6	⊕ 1960 - 1969	4	6	
⊕ 1970 - 1979	4		6	⊕ 1970 - 1979	3		7	⊕ 1970 - 1979	5	5	
⊕ 1980 - 1989	4		6	⊕ 1980 - 1989	2		8	⊕ 1980 - 1989	3	7	
⊕ 1990 - 1999	2		8	⊕ 1990 - 1999		1	9	⊕ 1990 - 1999	1	9	
⊕ 2000 - 2006	2		5	⊕ 2000 - 2006	4		3	⊕ 2000 - 2006	1	6	
Grand Total	33	5	70	Grand Total	32	4	72	Grand Total	39	69	

Winner wins Q2 65%
Winner wins Q3 67%
Winner wins Q4 64%

Whilst winning Grand Finalists tend to win each quarter more often than they lose it, the dominance for each quarter is not as great as we see in the earlier table. Further, recognising that the results for the 1st quarter are as per the Leader at the End of the 1st Quarter table above, the most important quarter to win is not the 3rd (as it is in the regular season), but the 1st.

Though winning the 1st quarter is important, it's rarely definitive as evidenced by the relative infrequency of coast-to-coast winners - that is, winners that lead at every change. Over all 108 Grand Finals (excluding the drawn GF in 1977), only 56% of winners have been coast-to-coast winners; in the last 17 Grand Finals, there's only been 8.

Coast-to-Coast Winners

Year	No	Yes
⊕ 1898 - 1909	6	6
⊕ 1910 - 1919	3	7
⊕ 1920 - 1929	5	4
⊕ 1930 - 1939	4	6
⊕ 1940 - 1949	4	6
⊕ 1950 - 1959	4	6
⊕ 1960 - 1969	5	5
⊕ 1970 - 1979	4	6
⊕ 1980 - 1989	4	6
⊕ 1990 - 1999	6	4
⊕ 2000 - 2006	3	4
Grand Total	48	60

Coast-to-Coast Winners 55.6%
1990-2006 47.1%

That said, there have been blowout Grand Finals, most notably in the 1980s and 1990s where 11 of 20 Grand Finals were decided by 7 goals or more. In fact, in the 1990s, no Grand Final was decided by less than 4 goals.

Fortunately, this trend has been somewhat reversed in the 2000s, particularly in the last two years, which have seen 1 point and 4 points victory margins.

Margin of Victory

Year	1-5	6-11	12-17	18-23	24-29	30-35	36-41	42+	Ave
1898 - 1909	5	1	2	0	2	1	0	1	15.3
1910 - 1919	1	2	3	0	2	2	0	0	18.0
1920 - 1929	1	2	3	0	1	1	0	1	21.1
1930 - 1939	0	2	1	2	0	2	1	2	27.1
1940 - 1949	2	0	1	0	2	0	2	3	34.5
1950 - 1959	0	1	1	1	1	0	2	4	37.5
1960 - 1969	3	1	0	0	1	2	0	3	24.9
1970 - 1979	1	2	0	1	2	2	1	1	25.0
1980 - 1989	0	1	0	2	1	1	0	5	48.1
1990 - 1999	0	0	0	0	1	3	0	6	45.8
2000 - 2006	2	1	0	0	1	0	1	2	27.1
Total	15	13	11	6	14	14	7	28	29.4
% of Total	14%	12%	10%	6%	13%	13%	6%	26%	

More Grand Final stats and trivia on Thursday.

Simple Wagering Strategies

I've taken the analysis we looked at last weekend a step further by looking at the level-staking ROIs for eight simple strategies for seasons 2006 and 2007.

Here's the first two strategies: level-staking on the Home Teams and level-staking on the Away Teams.

Season 2007

Home Teams

Price	\$ Bet	Return	# of Winning Bets	ROI
< \$2.00	\$105	\$0.36	73	0.3%
\$2.00 < \$2.50	\$27	\$7.61	16	28.2%
\$2.50 < \$3.00	\$10	\$4.10	5	41.0%
\$3.00 < \$3.50	\$12	(\$6.00)	2	(50.0%)
\$3.50 < \$4.00	\$5	(\$3.25)	1	(65.0%)
\$4.00 or more	\$5	\$1.25	1	25.0%
Total	\$164	\$4.07	98	2.5%

Away Teams

Price	\$ Bet	Return	# of Winning Bets	ROI
< \$2.00	\$80	(\$14.08)	43	(17.6%)
\$2.00 < \$2.50	\$30	(\$12.81)	8	(42.7%)
\$2.50 < \$3.00	\$10	(\$2.00)	3	(20.0%)
\$3.00 < \$3.50	\$11	\$5.30	5	48.2%
\$3.50 < \$4.00	\$6	\$1.30	2	21.7%
\$4.00 or more	\$27	\$0.15	5	0.6%
Grand Total	\$164	(\$22.14)	66	(13.5%)

Season 2006

Home Teams

Price	\$ Bet	Return	# of Winning Bets	ROI
< \$2.00	\$111	\$4.35	79	3.9%
\$2.00 < \$2.50	\$25	(\$1.27)	11	(5.1%)
\$2.50 < \$3.00	\$9	(\$3.50)	2	(38.9%)
\$3.00 < \$3.50	\$8	(\$4.80)	1	(60.0%)
\$3.50 < \$4.00	\$2	\$1.55	1	77.5%
\$4.00 or more	\$7	(\$2.50)	1	(35.7%)
Total	\$162	(\$6.17)	95	(3.8%)

Away Teams

Price	\$ Bet	Return	# of Winning Bets	ROI
< \$2.00	\$65	(\$14.05)	35	(21.6%)
\$2.00 < \$2.50	\$31	\$0.45	15	1.4%
\$2.50 < \$3.00	\$23	(\$1.35)	8	(5.9%)
\$3.00 < \$3.50	\$19	(\$3.25)	5	(17.1%)
\$3.50 < \$4.00	\$6	\$1.40	2	23.3%
\$4.00 or more	\$18	(\$13.00)	1	(72.2%)
Grand Total	\$162	(\$29.81)	66	(18.4%)

Level-staking Home Teams priced under \$3.00 would have been a profitable strategy in 2007. You'd have made 142 bets, winning 94 of them for a return of 12.07 units - an ROI of 8½%, delivered mainly by Home Teams priced in the \$2.00 to \$2.99 range. Regrettably, this same strategy would not have also produced profits in 2006, though focusing on a subset - those priced at less than \$2.00 - would have done so.

Alternatively, focusing on Away Teams priced at \$3.00 or more would have yielded success in 2007, with 44 bets generating a profit of 6.75 units for an ROI of 15%. Once again, though the same strategy would not have produced profits in 2006. Only an incredibly foresighted strategy of wagering on Away Teams priced between \$2.00 and \$2.49 or between \$3.50 and \$3.99 would have produced any joy in 2006.

Next let's consider Favourites and Underdogs.

Season 2007					Season 2006				
Favourites					Favourites				
Price	\$ Bet	Return	# of Winning Bets	ROI	Price	\$ Bet	Return	# of Winning Bets	ROI
< \$1.25	\$37	(\$1.75)	31	(4.7%)	< \$1.25	\$31	(\$0.20)	27	(0.6%)
\$1.25 < \$1.50	\$53	(\$6.45)	34	(12.2%)	\$1.25 < \$1.50	\$72	(\$5.19)	49	(7.2%)
\$1.50 < \$1.75	\$60	(\$2.45)	35	(4.1%)	\$1.50 < \$1.75	\$61	(\$7.35)	33	(12.0%)
\$1.75 < \$2.00	\$32	\$5.34	20	16.7%	\$1.75 < \$2.00	\$16	(\$0.94)	8	(5.9%)
Grand Total	\$182	(\$5.31)	120	(2.9%)	Grand Total	\$180	(\$13.68)	117	(7.6%)

Season 2007					Season 2006				
Underdogs					Underdogs				
Price	\$ Bet	Return	# of Winning Bets	ROI	Price	\$ Bet	Return	# of Winning Bets	ROI
< \$2.00	\$25	(\$13.49)	6	(54.0%)	< \$2.00	\$10	\$0.57	5	5.7%
\$2.00 < \$2.50	\$66	(\$1.76)	29	(2.7%)	\$2.00 < \$2.50	\$67	(\$3.33)	30	(5.0%)
\$2.50 < \$3.00	\$22	\$2.90	9	13.2%	\$2.50 < \$3.00	\$38	(\$2.35)	13	(6.2%)
\$3.00 < \$3.50	\$24	\$1.60	8	6.7%	\$3.00 < \$3.50	\$30	(\$4.50)	8	(15.0%)
\$3.50 < \$4.00	\$11	(\$1.95)	3	(17.7%)	\$3.50 < \$4.00	\$8	\$2.95	3	36.9%
\$4.00 or more	\$34	(\$0.60)	6	(1.8%)	\$4.00 or more	\$27	(\$12.15)	3	(45.0%)
Grand Total	\$182	(\$13.30)	61	(7.3%)	Grand Total	\$180	(\$18.81)	62	(10.4%)

Again you can see that there's no strategy that would have profitable in both seasons.

Now let's combine these two strategies, firstly for Home Teams.

Season 2007					Season 2006				
Home Team Favourites					Home Team Favourites				
Price	\$ Bet	Return	# of Winning Bets	ROI	Price	\$ Bet	Return	# of Winning Bets	ROI
< \$1.25	\$30	(\$1.52)	25	(5.1%)	< \$1.25	\$21	\$0.50	19	2.4%
\$1.25 < \$1.50	\$23	(\$4.02)	14	(17.5%)	\$1.25 < \$1.50	\$45	(\$2.72)	31	(6.0%)
\$1.50 < \$1.75	\$29	\$6.67	22	23.0%	\$1.50 < \$1.75	\$29	(\$4.32)	15	(14.9%)
\$1.75 < \$2.00	\$13	\$3.60	9	27.7%	\$1.75 < \$2.00	\$6	\$2.90	5	48.3%
Grand Total	\$95	\$4.73	70	5.0%	Grand Total	\$101	(\$3.64)	70	(3.6%)

Season 2007					Season 2006				
Home Team Underdogs					Home Team Underdogs				
Price	\$ Bet	Return	# of Winning Bets	ROI	Price	\$ Bet	Return	# of Winning Bets	ROI
< \$2.00	\$10	(\$4.30)	3	(43.0%)	< \$2.00	\$6	\$4.57	5	76.2%
\$2.00 < \$2.50	\$27	\$7.61	16	28.2%	\$2.00 < \$2.50	\$25	(\$1.27)	11	(5.1%)
\$2.50 < \$3.00	\$10	\$4.10	5	41.0%	\$2.50 < \$3.00	\$9	(\$3.50)	2	(38.9%)
\$3.00 < \$3.50	\$12	(\$6.00)	2	(50.0%)	\$3.00 < \$3.50	\$8	(\$4.80)	1	(60.0%)
\$3.50 < \$4.00	\$5	(\$3.25)	1	(65.0%)	\$3.50 < \$4.00	\$2	\$1.55	1	77.5%
\$4.00 or more	\$5	\$1.25	1	25.0%	\$4.00 or more	\$7	(\$2.50)	1	(35.7%)
Grand Total	\$69	(\$0.60)	28	(0.9%)	Grand Total	\$57	(\$5.95)	21	(10.4%)

Wagering on Home Team Favourites priced \$1.75 to \$1.99 would have produced a profit in both seasons, but you couldn't place much store in the long-term success of a strategy whose provenance is based on 19 bets across 2 seasons.

The strategy of wagering on Home Team Underdogs priced under \$3.00 seems to offer some hope. It would have delivered a profit of 7.41 units in 2007 on the back of 24 successful bets from 47 for an ROI of 16%. In 2006 it wouldn't have been profitable, but it would have gone very close, losing just 0.2 units and producing 18 winning bets from 40 and an ROI of -1/2%.

Finally, let's combine Favouritism (and Underdogrity?) with Away Teams.

Season 2007					Season 2006				
Away Team Favourites					Away Team Favourites				
Price	\$ Bet	Return	# of Winning Bets	ROI	Price	\$ Bet	Return	# of Winning Bets	ROI
< \$1.25	\$5	(\$0.52)	4	(10.4%)	< \$1.25	\$8	\$0.20	7	2.5%
\$1.25 < \$1.50	\$27	(\$0.90)	19	(3.3%)	\$1.25 < \$1.50	\$18	\$1.04	14	5.8%
\$1.50 < \$1.75	\$24	(\$5.27)	11	(22.0%)	\$1.50 < \$1.75	\$22	(\$2.70)	12	(12.3%)
\$1.75 < \$2.00	\$13	(\$0.32)	7	(2.5%)	\$1.75 < \$2.00	\$9	(\$4.59)	2	(51.0%)
Grand Total	\$69	(\$7.01)	41	(10.2%)	Grand Total	\$57	(\$6.05)	35	(10.6%)

Season 2007					Season 2006				
Away Team Underdogs					Away Team Underdogs				
Price	\$ Bet	Return	# of Winning Bets	ROI	Price	\$ Bet	Return	# of Winning Bets	ROI
< \$2.00	\$11	(\$7.07)	2	(64.3%)	< \$2.00	\$8	(\$8.00)	0	(100.0%)
\$2.00 < \$2.50	\$30	(\$12.81)	8	(42.7%)	\$2.00 < \$2.50	\$31	\$0.45	15	1.4%
\$2.50 < \$3.00	\$10	(\$2.00)	3	(20.0%)	\$2.50 < \$3.00	\$23	(\$1.35)	8	(5.9%)
\$3.00 < \$3.50	\$11	\$5.30	5	48.2%	\$3.00 < \$3.50	\$19	(\$3.25)	5	(17.1%)
\$3.50 < \$4.00	\$6	\$1.30	2	21.7%	\$3.50 < \$4.00	\$6	\$1.40	2	23.3%
\$4.00 or more	\$27	\$0.15	5	0.6%	\$4.00 or more	\$18	(\$13.00)	1	(72.2%)
Grand Total	\$95	(\$15.13)	25	(15.9%)	Grand Total	\$105	(\$23.76)	31	(22.6%)

Not much in this either, with only another deucedly foresighted and seldom-wagering strategy producing profit in both seasons: wagering on Away Team Underdogs priced between \$3.50 and \$3.99.

Those bookies are pretty good aren't they?

Looks like we'll need to stick to the Fund Algorithms after all ...

Investors please let me know how you'd like to be paid out. Options are direct credit (please give me your bank account details) or cheque (please let me know to whom you want it made out and where to send it). You can also, of course, leave the money with me ready for next season if you like.

'til Thursday

Tony

23 September 2007

Appendix

Notional Initial Funds

For reasons that are somewhat technical (I'm happy to provide details to anyone who's interested but, broadly, it allows me to describe bets in terms of a common percentage for all Investors and still maintain the same share price for all Investors), I need to calculate what I call "Notional Initial Funds". It's calculated separately for each Fund.

For original Investors, the definition is straightforward:

Notional Initial Funds = Actual Funds Invested

For Investors who join the Fund post Round 1:

Notional Initial Funds = Actual Funds Invested / Share Price at the time of investing

(in other words, it's the notional amount that would need to have been invested at the start of the season in order to have returned an amount equal to the amount actually invested).

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