

## MAFL Funds For 2009

2008 was a tumultuous year. Flawed models were devastatingly exposed when faced with a market environment that virtually no-one had contemplated. Many lost substantial amounts, some a little less. Few turned a profit.

Oh and there was that global financial thingy too.

So, reflecting on the carnage that was MAFL 2008 and in keeping with the times, I thought it appropriate to review the market fundamentals, reassess the risk profile, right-size, downsize, unleverage, unhedge, unworry and just generally rebuild the MAFL Funds portfolio. None of the Fund algorithms has gone untouched.

The first piece of major Fund news is that the Heritage, Alpha and Beta Funds are no longer open for subscriptions.

Making the decision to cull the Heritage Fund wasn't difficult. Last year it was repeatedly and exasperatingly profligate with Investor money on close-to-no-chance outsiders, demonstrated perhaps most starkly by its near 14% wager in Round 19 on Melbourne v Geelong, which was a bet that prompted one Investor to privately e-mail me that he thought it more likely a panda would light the Olympic torch that weekend than that the Dees would topple the Cats. Regrettably, neither eventuated.

I agonised a little longer over the decision to shelve the Alpha and Beta Funds, partly because of the relatively short time they've existed and partly because they were both only a couple of wins short of breakevenish performances last year. That said, they each lost around 50% of Initial Funds and lost their four largest bets, which are bets that should have been their safest. So, Alpha and Beta go too.

In place of the three disappearing Funds come three new ones: the New Heritage, Prudence and Hope Funds.

Details of these new Funds and the two other, amended Funds that will operate this year appear below.

### Characteristics of the MAFL Funds

	New Heritage Fund	Prudence Fund	Hope Fund	Chi Squared	Line Redux Fund
<b>First round of wagering</b>	Round 6	Round 6	Round 5	Round 6	Round 1
<b>Bet Types</b>	Head-to-Head	Head-to-Head	Head-to-Head	Head-to-Head	Line/Handicap
<b>Team types wagered on</b>	Whichever team's price justifies a wager <sup>2</sup>	True and notional home teams <sup>1</sup> only	True and notional home teams <sup>1</sup> only	True and notional home teams <sup>1</sup> only	True and notional home teams <sup>1</sup> only
<b>Wagers on teams that it expects to lose?</b>	No	No	No	No	Yes (if they're given sufficient start)
<b>Wager size is determined by ...</b>	Odds offered relative to estimated probability of victory	Predicted margin of victory	Odds offered relative to estimated probability of victory	Odds offered relative to estimated probability of victory	Odds offered relative to estimated probability of victory, given points start
<b>Special characteristics</b>	Will bet on about 70% of games and generally on favourites	Will bet on about 55-65% of games and generally on shortish-priced favourites	Will bet on only about 20-30% of games, and often on slight underdogs	Will bet on only about 25-35% of games, and generally on narrow favourites	Will bet on about 40-50% of games
<b>Potential Performance</b>					
- <b>Number of Bets</b>	100-110	80-90	30-45	40-55	75-90
- <b>% winning</b>	65-75%	70-75%	55-65%	60%	55-60%
- <b>Ave. Bet %</b>	7½-8½%	3½-4%	3½-4½%	8-9½%	5%
- <b>Ave Price</b>	\$1.50 - \$1.60	\$1.40 - \$1.55	\$2.10 - \$2.90	\$1.90	\$1.90
- <b>Return on Bets</b>	2 - 4%	3½ - 4½%	15 - 30%	2 - 20%	7 - 10%
- <b>Turn<sup>3</sup></b>	7½-9	3-3½	1¼-2	3-5	3½-4½
- <b>Ret On Fund<sup>4</sup></b>	15-30%	10-15%	20-50%	10-90%	25-40%
<b>Recommended Weight</b>	20%	25%	15%	20%	20%

1. See discussion below

2. Though it will bet on true and notional home teams about 80% of the time

3. The number of times that the money in the Fund is expected to be wagered over the course of the season. High turn means greater potential Return on Funds, but at a higher risk of bankruptcy

4. Your mileage may vary

## True and Notional Home Teams

As some of you might recall, one of the things that's attractive about AFL from a statistical modelling point of view is the significance of Home Team status. Last year, for example, about 57% of matches were won by the Home Team, true or notional.

What, you might well ask, do I mean by 'true or notional'.

Here are my definitions of these terms:

- A true Home Team is a team that is playing on a ground that it will play on at least 4 times during the season as an AFL-designated Home Team. If both teams playing in a particular game meet this criterion then the AFL-designated Home Team is the true Home Team
- A notional Home Team is an AFL-designated Home Team that is playing on a ground for which neither competing team qualifies as a true Home Team.

A few examples from the 2009 draw might help illuminate the nuances of these definitions:

### **Round 1: Richmond v Carlton at the MCG**

This is a Richmond true Home Game because they have eight AFL-designated Home games at the G this year (Carlton have four but miss out because Richmond are the AFL-designated Home Team for this game).

### **Round 3: Geelong v Collingwood at the MCG**

This is a Collingwood true Home Game, despite the fact that it is an AFL-designated Home game for the Cats, because Collingwood have nine AFL-designated Home games at the G this year and the Cats have only two.

### **Round 7: Carlton v Fremantle at the Gold Coast Stadium**

This is a Carlton notional Home Game as they are the AFL-designated Home Team and Fremantle have no claims to being treated as a true Home Team at this ground (they play no AFL-designated Home games there during the season).

So, applying these definitions gives us the following true Home Grounds for each team:

Team	True Home Ground(s) and the number of games played on them*
Adelaide	Football Park (11)
Brisbane Lions	Gabba (11)
Carlton	Docklands (6), MCG (4)
Collingwood	MCG (9+1)
Essendon	Docklands (7), MCG (4)
Fremantle	Subiaco (11)
Geelong	Kardinia Park (8)
Hawthorn	MCG (7+1), Aurora Stadium (4)
Kangaroos	Docklands (10)
Melbourne	MCG (10)
Port Adelaide	Football Park (11)
Richmond	MCG (8)
St Kilda	Docklands (10+1)
Sydney	SCG (7), Stadium Australia (4)
West Coast	Subiaco (11)
Western Bulldogs	Docklands (8+3)

*NB In the Home Ground column (A+B) connotes that the team plays A AFL-designated Home Games at the specified ground and B other games at the same ground that the AFL has designated as Away Games but that I will be treating as Home Games.*

*For example, in Round 9 Geelong meets the Western Bulldogs at Docklands. The AFL designates this a Geelong Home Game; I designate it a Western Bulldogs Home Game.*





*Investor Profile: The Chi<sup>2</sup> Fund is, as was the Chi Fund, something for the adventurous Investor. Its notional Fund Profit figures underscore this fact. The Chi<sup>2</sup> Fund also offers some hedging potential, though less so than does the Hope Fund. Of the Chi<sup>2</sup> Fund's 37 bets in 2008, 12 of them were different from the Prudence Fund's, 18 were different from the Hope Fund's, 11 were different from the new Heritage Fund's, and 20 were different from the Line Redux Fund's.*

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**Line Redux Fund:** If you're after action from Round 1 in 2009, this is the Fund for you to invest in.

Last season, the Line Fund lost three of its last five wagers, but still managed to eke out a small profit. The year prior, the Fund made a small loss. All of which suggested to me that some major surgery was called for, so that's what the Line Fund has undergone in the off-season, coming back now as the Line Redux Fund (though I suspect I'll change that to Line Fund Redux at some point since that seems to scan better).

In 2007 the Line Fund made 46 bets, winning 23 and losing 23. In 2008, it made 28 bets, winning 15 and losing 13. These statistics serve mainly to contrast what the Line Redux Fund would have done in those same years.

<b>Line Redux (Starts in Round 1)</b>							
<i>Year</i>	<i>Turn</i>	<i>Bets</i>	<i>Win%</i>	<i>Ave Bet</i>	<i>Ave Price</i>	<i>Ret on Bets</i>	<i>Fund Profit</i>
<b>2006</b>	4.40	88	57%	5.0%	\$1.90	8.0%	35.0%
<b>2007</b>	3.65	73	56%	5.0%	\$1.90	6.7%	24.5%
<b>2008</b>	3.70	74	58%	5.0%	\$1.90	10.4%	38.5%

One important change for the Line Redux Fund this year is that it will wager only on Home Teams, notional or real, regardless of whether they are giving or receiving start (recall that last year's Line Fund wagered only on teams that were receiving start).

Taken year-by-year, the results of this Fund's algorithm are solid but not spectacular. Combined across the three years, however, they're statistically significant.

*Investor Profile: successful line wagering has proved to be especially difficult for MAFL. Though I won't be providing any unqualified assurances about this or any of the Funds, the Line Redux Fund is one that I feel uncharacteristically confident about.*

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As is now customary with MAFL, Investors are welcome to invest in as many or as few of the Funds as they wish. I'm always drawn to diversification – though mindful that Warren Buffett calls it diwersification – so I'll be investing in all five of the Funds this year. Please feel free to come up with a portfolio with which you feel most comfortable and to make as many changes as you like to it during the course of the season.

Investing in a number of Funds, apart from spreading risk, also increases coverage, that is, the proportion of games in which an Investor can expect to have a wager. Be aware though that any portfolio that includes the New Heritage Fund and one or more other Funds can be expected to have a number of games during the season on which wagers have been placed on both teams. If someone had invested in all five Funds across season 2008 they'd have found this to be the case in 14 of the 138 games in which they'd bet.

The following table gives expected coverage for any combination of Funds and is based on the new Fund algorithms and what would have transpired had they been in operation for the 2008 season.

## Fund Combinations and Game Coverage

	Funds Invested In					Games wagered on		Number Times Bet on	
	Chi <sup>2</sup>	Prudence	Hope	New Heritage	Line Redux	No.	% (of 185)	of Bets	Both Teams
Single Fund Portfolios	✓					37	20%	37	-
		✓				81	44%	81	-
			✓			30	16%	30	-
				✓		101	55%	101	-
					✓	74	40%	74	-
Two Fund Portfolios	✓	✓				93	50%	118	-
	✓		✓			48	26%	67	-
	✓			✓		112	61%	138	2
	✓				✓	94	51%	111	-
		✓	✓			94	51%	111	-
		✓		✓		104	56%	182	9
			✓		✓	118	64%	155	-
				✓	✓	112	61%	131	3
				✓	✓	88	48%	104	-
Three Fund Portfolios	✓	✓	✓			128	69%	175	4
	✓	✓		✓		103	56%	148	-
	✓	✓			✓	112	61%	219	10
	✓	✓			✓	126	68%	192	-
	✓		✓	✓		119	64%	168	3
	✓		✓		✓	99	54%	141	-
		✓	✓	✓	✓	135	73%	212	6
		✓	✓	✓	✓	113	61%	212	11
			✓		✓	123	66%	185	-
Four Fund Portfolios	✓	✓	✓	✓		130	70%	256	12
	✓	✓	✓		✓	132	71%	205	7
	✓	✓	✓	✓	✓	119	64%	249	11
	✓	✓	✓		✓	130	70%	222	-
	✓	✓	✓	✓	✓	135	73%	293	10
Five Fund Portfolios	✓	✓	✓	✓	✓	138	75%	242	7
		✓	✓	✓	✓	133	72%	286	14
	✓	✓	✓	✓	✓	138	75%	323	14

So, for example, if you'd invested in both the Chi<sup>2</sup> and Prudence Funds in 2008 (see the first line of the second block), you'd have had 118 wagers across 93 games, covering almost exactly 50% of the 185-game season.

Maximum coverage could have been obtained by investing in all five Funds or by investing in all but the Prudence Fund. This would have resulted in wagers in 138 games, or about 75% of those in the entire season.

If, instead, you wanted to keep things simple and invest in no more than two Funds but maximise game coverage, then you'd go for the Prudence/Line Redux combo which gives 155 bets in 118 games (64%).

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As ever, I can't promise you that season 2009 will turn out exactly as shown in any of the performance or other tables shown here, but they should give you a rough guide to help you with your Fund selection and other investment decisions.

'til next time,

Tony

**1 January 2009**