

# INVESTIGATION INTO THE PROFITABILITY OF RACEHORSES FROM FOUR STUDS

2023 // REPORT BY COALITION FOR THE PROTECTION OF RACEHORSES

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**Conflict of interest** 

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## Introduction

Horse racing has been part of Australian culture for 250 years. In its modern form, horse racing only exists because of gambling. More than \$29 billion is gambled on horse racing in Australia every year (*Australian Racing Fact Book* 20-21). Aside from the gambling, many people see buying a racehorse as an investment that will hopefully yield a profit. But is that actually the case? This study aims to determine the facts around the profitability of owning a racehorse based on a sample of 606 horses across four studs from the 2015 foal cohort. The study questions the integrity of an industry that not only exploits horses for financial gain, but also uses dubious marketing strategies to entice people into investing in a racehorse with the aspirations of making a profit.

# **Objective of this study**

#### To ascertain the profitability of investing in a racehorse in Australia.

If an investor were to invest in shares or property, the most they would lose is the capital. However, investing in a racehorse costs a lot more than the initial capital outlay. Even if you bought one of the very rare, valuable horses, this does not by any means guarantee success. Further, the returns from investing in racehorses are not normally distributed like most other asset classes. This probabilities game is, of course, driving the economics of the racing industry.

This report has been produced in the interests of transparency and fairness. Investors have the right to be informed of the financial risks of racehorse ownership, and to make an informed choice about their financial outlay and risks. The following is a short report, which has been limited to comments on some key statistics about the racehorse sales and subsequent profit/loss.

This report outlines an additional study, based on four studs, and which follows on from our previous (2022) study of the Magic Millions sales in Queensland.

# Method

#### The sample

The study sample comprises all the horses that were born in 2015 and listed on the Australian Stud Book for four studs. The studs were selected as being some of the most well-known and prestigious in Australia, and as such, could be expected to produce the most profitable horses. The horses are therefore of the same age as those studied in our first report, based on the Magic Millions sales of 2017. This also means that at the time of analysing the data, all the horses were seven years old and most of them had retired, or at the least, were at the very end of their time being used in racing when they are unlikely to win any additional prize money.

The Stud Book listed a total of 679 horses for the four studs. This represents 5.3% of the 12,844 foal cohort for 2015. (*Racing Australia Fact Book 2021*, Table 47). Of these, 73 were removed from the sample because they had been exported overseas, without having raced in Australia. The reason for their exclusion is because of the difficulty in ascertaining data from other countries. This left a final sample of 606 horses for analysis (Table 1).

	Table 1	Details of the san	nple				
		%of 2015 foal					
Stud	Cohort	Cohort cohort		Final Sample			
		(12,844)		Jumple			
Gerry Harvey	228	1.8	30	198			
Arrowfield	236	1.8	23	213			
Emirates Park	94	0.7	5	89			
Yarraman Park	121	0.9	15	106			
Total	679	5.3	73	606			

#### Table 1 Details of the sample

#### **Data collection**

As noted above, the list of horses, and their details were sought using industry websites. Details were: sale/purchase price, date of birth, breeding pedigree, number of races, period in racing, prize money earnt and current status. Data were collected from each horse up to March of 2023 for three studs, and up to May 2023 for Yarraman Park. The reason for this was simply due to CPR staffing availability.

#### Ascertaining the profitability of each racehorse

Information about the income and costs to purchase and maintain a racing horse were obtained from industry websites, and advice from people working in the racing industry. In order to ascertain the profitability of each racehorse the following calculation was made:

#### Income

Prize money earnt

Price for horses sold for breeding at the end of racing

#### Less expenses:

- Initial purchase price
- 10% trainers' commission on prize money
- 5% jockeys' commission on prize money
- \$15,000 one-off cost to prepare a horse for racing in his/her first race, including all costs from when he/she is bought from the sales.
- An annual cost to train and maintain a horse in racing (\$45,000 per year).
  This cost was applied pro rata to each horse for each year, from the date of the horse's first race to the date of their last race.

Notes:

- The buying and selling cost of horses while racing was not considered because it did not affect the profitability of the horse. The purchase price and selling price cancel themselves out.
- No allowance was made for any out of the ordinary vet treatments.
- Horses who were passed in and not sold were given the value of the sire's stud fee for 2014 (the year the mare was mated with the stallion) as that is the minimum cost that would be incurred by the owner of the mare.
- Stud fees were ascertained from racing industry websites. Conservative estimates were made when this was not possible.

#### Annual estimated cost to keep a horse in training for racing (\$45,000)

Nine different racing industry sources were found that advertised as part of their advertisement to sell shares in their horse, the annual cost to maintain the racehorse payable by the owner or owners in installments. These are costs owners are compelled to pay.

The median of the nine results was \$51,720 The mean (average) was \$57,514. Further reducing this amount by 20% to be conservative \$46,011.00 **The number was further rounded down to \$45,000.** 

Through consultation with several (anonymous) racing industry sources, \$45,000 was adopted as a conservative estimate of annual maintenance costs. This does not include any out of the ordinary vet costs, surgery and other procedures, medications and transport. It is worth noting that due to the high risk of injuries as a result of the high frequency and intensity of racing, vet costs would be significant, in some cases costing tens of thousands of dollars.

### Results

#### The sample horses

Of the initial list of 679 horses, 73 were exported from Australia without having raced. The status (as at May 2023) of the 606 horses retained in the sample is shown in Table 2 below.

Almost 80% have exited racing and are unable to generate further profits for their owners by racing. A total of 40.59% of horses in our sample are listed as 'retired'. It is important to note that where we list a horse's status as 'retired', does not necessarily mean the horse is still alive. 'Retired' simply means the racing authority has been informed by the trainer that the horse has been taken out of racing. The horse could indeed by deceased. The authority stops tracing horse once being informed of the 'retirement'.

	Gerry	Harvey	Arrow	wfield	Emiro	ates Park	Yarrar	man Park	TOTAL	
Recorded as exited racing										
Retired	78	39.4%	95	44.6%	35	39.3%	38	35.8%	246	40.59%
Breeder	38	19.2%	23	10.8%	11	12.4%	28	26.4%	100	16.50%
Deceased	12	6.1%	18	8.5%	5	5.6%	7	6.6%	42	6.93%
Exported	12	6.1%	13	6.1%	4	4.5%	7	6.6%	36	5.94%
Pending	1	0.5%	0	0.0%	0	0.0%	0	0.0%	1	0.17%
Not registered										
Unnamed foal	5	2.5%	17	8.0%	7	7.9%	2	1.9%	31	5.12%
Unnamed foal/Deceased	5	2.5%	9	4.2%	2	2.2%	6	5.7%	22	3.63%
SUB TOTAL	151	76.3%	175	82.2%	64	71. <b>9</b> %	88	83%	478	78.88%
Recorded as active	9									
Active	22	11.1%	25	11.7%	17	19.1%	10	9.4%	74	12.21%
Spelling	10	5.1%	9	4.2%	3	3.4%	1	0.9%	23	3.79%
Transferred	15	7.6%	4	1.9%	5	5.6%	7	6.6%	31	5.12%
Sub total	47	23.7%	38	1 <b>7.8</b> %	25	<b>28</b> .1%	18	17.0%	128	21.12%
GRAND TOTAL	198	100%	213	100%	89	100%	106	100%	606	100%

#### Table 2 Status of horses in the sample

Note: Small errors may occur due to rounding. Shading is to aid readability.

Of the 606 horses who made up the study group, 106 horses did not race at all. That is 17.5% (Table 3).

Stud	Total sample	Not raced	% Not raced	
Gerry Harvey	198	30	15.2	
Arrowfield	213	45	21.1	
Emirates Park	89	15	16.9	
Yarraman Park	106	16	15.1	
Total	606	106	17.5%	

Table 3 Horses who did not race

#### Profitability

Of the 606 horses, 94.55% were unprofitable. The breakup of these losses, and the smaller number of horses (5.45%) who made a profit, are detailed in Table 4, and illustrated in graphic form in Figure 1. The pattern of loss is remarkably consistent across the four studs, with the highest loss being 97.2% and the lowest loss being 93.3%.

In the whole sample of 606, three horses made more than \$1M profit. Five (0.8%) had won more than \$1M in prize money, and were profitable, but when other costs were added in, only two of these horses were profitable to the extent of more than \$1M. One other horse earned a profit of over \$1M, but this was the result of her being sold as a "broodmare".

#### Horses exported - never raced in Australia

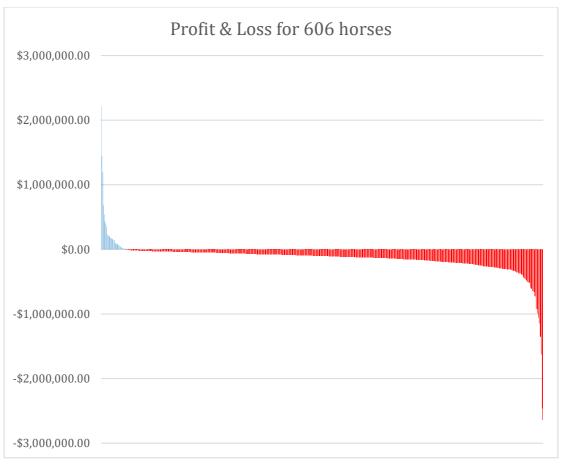
Of the 679 horses in the initial sample, 73 (10.8%) were exported, without having raced in Australia.

Despite the very poor outcomes for racehorses after racing in Australia, anecdotal evidence of the treatment of animals in other countries where racehorses are exported to is even worse. The Australian racing authority does not have any control over horse welfare once they are exported overseas. Therefore, all exporting of racehorses should be banned.

	•									
	Gerry	Harvey	Arro	wfield	Emira	tes Park	Yarran	nan Park	TOTAL	TOTAL
Loss										
\$500000<	4	2.0%	15	7.0%	1	1.1%	2	1.9%	22	3.63%
\$300000-\$499999	9	4.5%	13	6.1%	0	0.0%	8	7.5%	30	4.95%
\$100000-\$299999	90	45.5%	80	37.6%	33	37.1%	53	50.0%	256	42.24%
\$75000-\$99999	32	16.2%	13	6.1%	19	21.4%	12	11.3%	76	1 <b>2.54</b> %
\$50000-\$74999	19	9.6%	34	16.0%	6	6.7%	5	4.7%	64	10.56%
\$25000-\$49999	26	13.1%	38	17.8%	14	15.7%	13	12.3%	91	1 <b>5.02%</b>
0-\$24999	7	3.5%	7	3.3%	10	11.2%	10	9.4%	34	<b>5.6</b> 1%
Sub Total	187	<b>94.4</b> %	200	<b>93.9%</b>	83	<b>93.3</b> %	103	97.2%	573	<b>94.55</b> %
Profit										
0-\$24999	2	1.0%	2	0.9%	0	0.0%	0	0.0%	4	0.66%
\$25000-\$49999	1	0.5%	1	0.5%	1	1.1%	0	0.0%	3	0.50%
\$50000-\$74999	1	0.5%	0	0.0%	2	2.2%	0	0.0%	3	0.50%
\$75000-\$99999	1	0.5%	3	1.4%	0	0.0%	0	0.0%	4	0.66%
\$100000-\$299999	5	2.5%	3	1.4%	1	1.1%	2	1.9%	11	1. <b>8</b> 1%
\$300000-\$499999	0	0.0%	3	1.4%	0	0.0%	0	0.0%	3	0.50%
\$500000<	1	0.5%	1	0.5%	2	2.2%	1	0.9%	5	0.82%
Sub Total	11	5.6%	13	6.1%	6	6.7%	3	2.8%	33	5.45%
TOTAL	198	100%	213	100%	89	100%	106	100%	606	100%

#### Table 4 Profitability of racehorses

Note: Small errors may occur due to rounding. Shading is to aid readability.





### Comparison of profitability with highest and lowest sales prices

Table 5 shows that of the top 13 sales, only one horse made a profit, with the rest making considerable losses. The total prize money earnt by these 13 horses was \$3,537,550 of which \$2,540,825 (71.8%) is attributed to a single horse (Estijaab), who made a profit of nearly \$400,000. Ten horses out of 606 sold for \$1M or more, and of these, only one (Estijaab) made a profit.

In games of chance, the highly profitable horses are examples of 'outliers' that racing owners, breeders and trainers are seeking – a horse that is outside the normal range of most others. Black Caviar, Winx and Makybe Diva are well known examples of such outlier horses. Purchasing a racehorse then, is an exercise in chance, and while some gambles pay off with a profitable outcome, the majority (94.55%) are losing their bets. Part of the drive behind high levels of breeding in the racing industry, can be attributed to this search for an outlier, and the hope, that as the number of foals bred increases, so too is the likelihood of finding a prize-winning champion.

In summary, over \$12M (an average of \$926,538 per horse) was spent on purchasing the 13 top priced horses, to win \$3,537,550. With the outlier horse removed, the total prize money earnt was \$996,725, which averages at only \$83,060 for each of the other 12 horses – not really enough to cover the average cost just for the purchase price for one of the cheaper horses from the top 13 lots.

Although a high price for a racehorse is promoted as an indicator of superior breeding and subsequent racing ability, the real problem for owners is that there is very little time in which to recover the large capital cost. Horses typically begin racing at two or three years of age and exit from racing at five or six, thus having a racing span of two to four years. Given the high maintenance costs that must also be recovered, it is only in rare cases that a profitable outcome is possible. Table 5 also shows that none of the highest priced horses are still racing, thus opportunities to recoup the losses have disappeared. Table 5 below shows the three highest sales prices for three studs. Note that for Emirates, four horses are listed because two were sold for the same price.

			Purchase	Prize	Estimated	
Lot	Stud	Horse	price	money	Profit/loss	Status
183	Arrowfield	Melik	\$2,500,000	\$33,910	-\$2,639,083	Retired
11	Yarraman	Meticulous	\$2,400,000	\$2,980	-\$2,459,786	Retired
172	Arrowfield	Estijaab	\$1,700,000	\$2,540,825	\$399,085	Exported
215	Arrowfield	Diplomatico	\$1,700,000	\$215,450	-\$1,628,498	Deceased
38	Yarraman	Purton	\$600,000	\$63,690	-\$651,610	Retired
5	Yarraman	I'm So Sweet	\$575,000	\$90,305	-\$486,739	Breeder
50	Emirates	Legislation	\$525,000	\$161,975	-\$591,356	Retired
31	Gerry Harvey	Longclaw	\$500,000	\$158,365	-\$512,008	Retired
177	Gerry Harvey	Ferrucio	\$500,000	\$O	-\$515,000	Retired
43	Gerry Harvey	Lumens	\$440,000	\$11,940	-\$507,863	Retired
22	Emirates	Reunion	\$205,000	\$1,800	-\$262,505	Retired
16	Emirates	Sunsuzie	\$200,000	\$31,260	-\$272,716	Breeder
86	Emirates	Peppi La Few	\$200,000	\$225,050	-\$199,604	Retired
-			\$12,045,000	\$3,537,550	-\$10,327,683	

Table 5 Top sales/purchase prices from each of the four studs (in order of sale/purchase price)

Note: four horses from Emirates are included because two had the same Sales price

Table 6 shows that none of the 15 lowest sales price horses made a profit, including the six who are still Active or Spelling. As can be seen, the losses are in the main, lower than for the higher priced horses. For all four studs, there is a negative correlation between the initial purchase price of a horse and the likelihood of making a profit. In other words, the higher the initial purchase price, the greater the loss is likely to be. This pattern is most clearly evident in the losses incurred from the higher priced horses. It is also the case that there is a positive association between

prize winnings and profit, but, other than in exceptional cases, it is not sufficient to allow for recovery of the purchase outlay, as well as the initial and ongoing costs required to look after the horse.

Table 6 below shows the lowest sales prices for the four studs. Note that for Gerry Harvey and Yarraman three horses each are listed. Five horses from Arrowfield, and four from Emirates are included because more than one horse sold for the same amount.

Lot	Stud	Horse Purchase Prize price money		Estimated profit/loss	Status	
303	Gerry Harvey	Swagger (NZ)	\$2,750	\$119,512	-\$80,506	Active
74	Yarraman	Taken On Chance	\$2,250	\$144,725	-\$115,382	Active
53	Arrowfield	My Benalla	\$2,000	\$49,080	-\$80,139	Spelling
167	Arrowfield	Raw Instinct	\$2,000	\$28,790	-\$142,515	Active
199	Arrowfield	Pontefract	\$2,000	\$3,300	-\$23,075	Deceased
26	Gerry Harvey	Zouki (AUS)	\$1,500	\$38,515	-\$87,038	Spelling
159	Gerry Harvey	Fenton House	\$1,500	\$0	-\$15,000	Breeder
80	Emirates	Lily of China	\$1,500	\$52,445	-\$80,550	Retired
83	Emirates	Irish Skies	\$1,500	\$1,915	-\$84,453	Active
132	Arrowfield	Criminal Intent	\$1,000	\$400	-\$15,782	Retired
143	Arrowfield	Kerloo	\$1,000	\$0	-\$60,278	Retired
57	Emirates	Pipe Dream Lass	\$1,000	\$35,020	-\$92,306	Retired
21	Yarraman	Lord Byron	\$700	\$23,935	-\$121,986	Transferred
100	Yarraman	Define Tyranny	\$600	\$25,855	-\$112,104	Retired
56	Emirates	Mizoon	\$500	\$0	-\$15,500	Breeder
TOTAL			\$21,800	\$523,492	-\$1,126,614	

#### Table 6 Lowest three sales/purchase prices from each of the four studs (in order of sale/purchase price)

# Note: Five horses from Arrowfield, and four from Emirates are included to accommodate the same sales prices

#### Life after racing and who pays

The question that also needs to be asked is what happens to the horses once they finish racing and what are the costs involved. Keeping any horse, let alone a racehorse, can cost upwards of \$5,000 per annum.

Racehorses, in particular, are likely to have sustained injuries as a result of racing and this is the most likely reason why they have been retired. The care required can be extremely costly - a cost most owners are not willing to pay.

A horse's lifespan can be thirty plus years. If owners were made to look after their horses their entire lives, this would add at least \$100,000 to their expenses. While some will argue that it is common for mares to go into the breeding cycle, every year for the last ten years the number of breeding mares has been in steady decline from 27,063 in 2010-11 to 19,008 in 2019-20 (Australian Racing Fact Book Table 21). This means that for every mare that goes into breeding, at least one is exiting breeding. With an estimated 3,000 mares going into breeding each year, at least 3,000 are exiting breeding with very little hope of being re-homed. The racing industry keeps no records of mares exiting breeding.

If the racing industry is to maintain its social license, every owner must be obliged to ensure the proper care that is required for their horses their entire lives regardless of the cost.

# Conclusion

Despite the racing industry's advertisements of buying a racehorse to make money, the results from this study suggest the opposite to be the case. The racing industry promotes itself as one of status, wealth and achievement, and that investing in a racehorse is extremely lucrative. This study of four studs found, however, that only 5% of horses were profitable. These results are remarkably consistent with our previous study of 979 horses sold at the 2017 Magic Millions sales in Queensland, in which 8% of horses were shown to be profitable, and 92% made a loss. A very small percentage (1%) of horses, give weight to the hope, that high profits are possible, but this study shows that only horses who can be classed as outliers, outside the normal range of racehorses, can generate these hoped for profits. This study suggests, that purchasing a racehorse to make a profit at any level, is for the owner, a financially perilous gamble. It appears that 95% of owners lose their bet, with many suffering substantial, and unrecoverable losses.

### **Disclaimer**

To ensure the integrity of this data, all costs and expenses have been very conservatively valued. The true cost of risks associated with racehorse ownership is likely to be much higher than in this report.

# **Conflict of Interest**

This report has been produced by the Coalition for the Protection of Racehorses. We hereby declare that we, as an organisation, are fundamentally opposed to the way horses are treated in the racing industry and are actively campaigning on the horses' behalf. This report serves to educate potential investors on the very real risk of financial losses that can be incurred when investing in a racehorse.