

Table 1 - Characteristics of Weekends versus Weekday Night Bettors

		Weekday Nights		Weekends		Weekday/Weekend Ratio	
		All	Day with Max/Min Daily Average	All	Day with Max/Min Daily Average	All	Max/Min
Wheeling Downs							
	Average attendance	869	780 (Wed. Eve.)	2146	2703 (Sat. Eve.)	0.40	0.36
	Average bet per person per race	\$6.28	\$6.85 (Thur. Eve.)	\$5.71	\$5.01 (Fri. Eve.)	1.10	1.37
	Exotic Superfecta bets [Percent of all bets]	17.3%	n/a	13.2%	n/a	1.31	n/a
Tri-State Greyhound Park							
	Average attendance	731	663 (Mon. Eve.)	1566	1970 (Sat. Eve.)	0.47	0.34
	Average bet per person per race	\$3.88	\$4.42 (Mon. Eve.)	\$3.29	\$3.03 (Sat. Eve.)	1.18	1.46

Notes: Weekday nights are Monday evening, Wednesday evening, and Thursday evening. Weekends are Friday evenings, Saturday afternoon (or matinee), and Saturday evening. The Max/Min columns show the night or day with the highest or lowest *average* values, not the single nights with the highest or lowest values. For example, at Wheeling Downs, the highest single night bet per person per race was \$10.65, and the lowest \$3.42, the highest single night attendance was 6000, while the lowest was 533. For Tri-State the highest single night bet per person per race was \$5.88, and the lowest \$2.64, the highest single night attendance was 2691 and the lowest was 439. Data on exotic betting provided by Alex Tucker, Comptroller for Wheeling Downs. It was not available by individual night or for the other track. Average bet per person per race was found by dividing the total handle by attendance then dividing by the number of races.

Table 2 - Favorite vs. Longshot Betting: Weekends versus Weekday Nights

	Weekday Nights				Weekends			
	All	Mon. Eve.	Wed. Eve.	Thurs. Eve.	All	Fri. Eve.	Sat. Aft.	Sat. Eve.
Betting on Favorite (Percent of Win Bets)								
Average	28.9%	28.7%	29.2%	29.2%	26.6%	27.0%	26.8%	26.3%
Maximum	73.3%	54.7%	72.9%	73.3%	63.0%	59.6%	63.0%	57.5%
Minimum	16.2%	16.2%	16.6%	16.6%	15.4%	16.3%	15.6%	15.4%
Betting on Longshot (Percent of Win Bets)								
Average	3.8%	4.1%	3.7%	3.9%	5.1%	4.8%	5.1%	5.4%
Maximum	9.0%	8.8%	8.9%	9.0%	10.4%	9.3%	9.4%	10.4%
Minimum	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%
Relative F/L Betting								
F/L Betting Ratio	7.5	7.0	8.0	7.5	5.2	5.6	5.3	4.9
Herfindahl Index of Bet Concentration	18.4%	18.2%	18.5%	18.5%	16.8%	17.0%	16.9%	16.6%
Sample Size	1035	345	345	345	1149	345	423	381

Notes: Data shown are for both tracks combined. Sample size is the number of races over which the averages shown were computed. The F/L betting ratio is the average percent of win bets on the favorite divided by the average percent of win bets on the longshot. The Herfindahl index of bets is the sum of the squared percentages bet on all 8 dogs in each race. A minimum value of zero for the longshot means there was at least one race during the sample period in which no bets were placed on one of the dog entrants.

Table 3 - Objective versus Subjective Win Probabilities

Favorite	Objective Probability of Win [π]	Subjective Probability of Win [ρ] (test statistic for $\rho=\pi$)			Rate of Return from Bet	
		All Days	Weekdays	Weekends	Weekdays	Weekends
1	25.07%	27.44% ** (2.813)	28.85% ** (4.481)	26.57% (1.782)	-34.12%	-14.99%
2	17.84%	18.25% (0.551)	18.79% (1.278)	17.86% (0.037)	-14.73%	-24.52%
3	14.80%	14.08% (-1.029)	14.11% (-0.994)	14.05% (-1.078)	-13.81%	-7.01%
4	11.28%	11.35% (0.121)	11.14% (-0.225)	11.47% (0.320)	-4.48%	-31.80%
5	9.05%	9.25% (0.351)	8.80% (-0.444)	9.59% (0.960)	-13.81%	-16.78%
6	8.76%	7.57% ** (-2.116)	6.99% ** (-3.162)	7.95% (-1.453)	2.44%	-13.51%
7	6.25%	6.03% (-0.460)	5.33% * (-1.968)	6.51% (0.539)	-7.90%	-11.33%
8	5.78%	4.59% ** (-2.417)	3.81% ** (-4.008)	5.07% (-1.436)	16.87%	0.19%

Notes: ** indicates statistical significance at the 1% level, * at the 5% level. The number of observations is 2558. This differs slightly for each group because of ties in the ranking of dogs. Rates of return are realized rates of return and are subject to some random differences between the realized win percentages between weekdays and weekends. These rates of return are *not* corrected for the track take and breakage which is approximately 17.18%. The objective win probabilities were not significantly different between weekdays and weekends. Data for all days combined includes some days not separately included in weekend and weekday subgroups (the Monday afternoon memorial day race at Tri-State, Wednesday afternoon races at Wheeling Downs, and Sunday races at both tracks). Numbers in parenthesis are the test statistics for the equality of the subjective and objective probabilities. This test statistic is equal to the difference between the objective probability and the subjective probability divided by the standard error of the objective probability.

Table 4 - Objective versus Subjective Probabilities: Place and Show Bets

Favorite	Place Betting Market			Show Betting Market		
	Objective Probability	Subjective Probability	Rate of Return	Objective Probability	Subjective Probability	Rate of Return
1	43.23%	43.27% (0.039)	-6.66%	57.60%	53.93%** (-3.806)	-1.21%
2	34.90%	35.69% (0.848)	-9.02%	49.28%	48.24% (-1.053)	-6.27%
3	30.00%	29.61% (-0.432)	-5.12%	43.07%	42.25% (-0.853)	-6.47%
4	24.62%	24.76% (0.173)	-7.22%	36.96%	38.48% (1.610)	-12.88%
5	20.62%	20.55% (-0.092)	-6.17%	33.20%	34.91% (1.853)	-13.90%
6	18.50%	18.29% (-0.265)	-5.33%	31.10%	31.23% (0.138)	-9.04%
7	15.46%	14.60% (-1.204)	-0.03%	25.61%	26.62% (1.156)	-12.68%
8	12.67%	13.22% (0.789)	-11.18%	23.17%	24.34% (1.320)	-13.81%

Notes: ** indicates statistical significance at the 1% level, * at the 5% level. The number of observations for the objective probabilities is 2558. This differs slightly for each group because of ties in the ranking of dogs. Rates of return are realized rates of return, *not* corrected for the track take. In some cases, a dog placed or showed but did not have a payout amount as no bets were made on the dog. To compute rates of return, the payouts were imputed for these cases as an average payout for other dogs with the same odds ranking. Numbers in parenthesis are the test statistics for the equality of the subjective and objective probabilities. This test statistic is equal to the difference between the objective probability and the subjective probability divided by the standard error of the objective probability.

Table 5 - Objective versus Subjective Probability Regressions: All Bets

	Betting Market Regressions Dependent Variable is Subjective Probability (standard errors shown in parenthesis)				
	Win	Place	Show	Quinella	Perfecta
Constant	-0.018** (0.006)	-0.003 (0.005)	0.049** (0.013)	0.008** (0.001)	0.003** (0.001)
Objective Probability	1.143** (0.041)	1.013** (0.020)	0.869** (0.032)	0.770** (0.019)	0.788** (0.035)
R ²	0.9924	0.9977	0.9919	0.9849	0.9062
Betting Combinations	8	8	8	28	56
Observations per Betting Combination	2558	2558	2558	2459	893
T-ratio for slope = 1	3.503**	0.645	-4.082**	-12.262**	-6.136**
Estimated Rotation Point	12.59%	25.10%	37.51%	3.55%	1.45%
Predicted Rotation Point (Null Prior)	12.50%	25.00%	37.50%	3.57%	1.79%

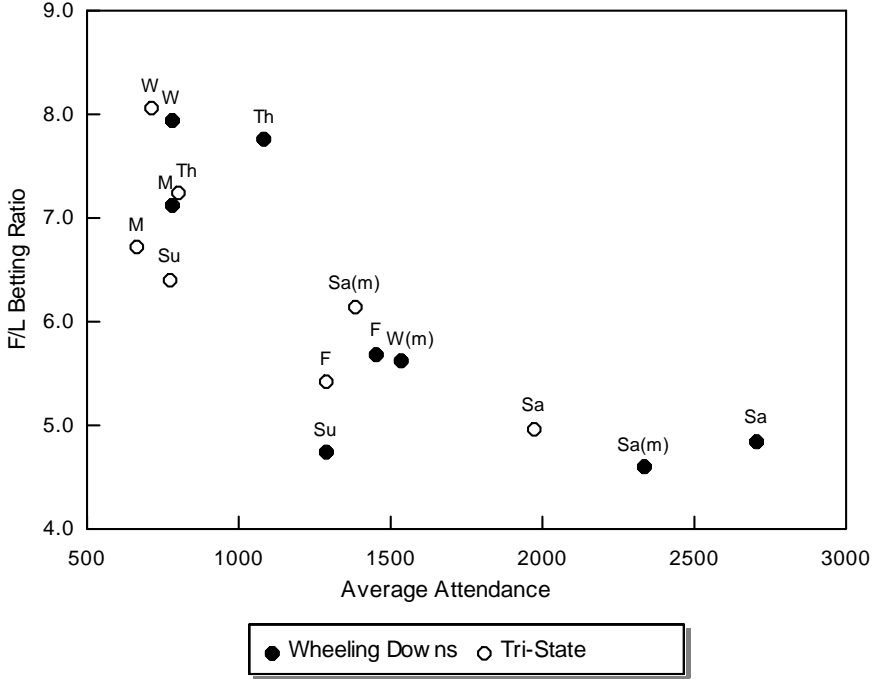
Notes: ** indicates statistical significance at the 1% level, * at the 5% level. The regressions are performed on the pooled all-days, both track values. The test of market efficiency is not just that the slope equals one, but also that the intercept term equals zero. The F-statistics for this joint test strongly rejected this hypothesis for all markets except the place market. The predicted rotation point is the average probability across all betting combinations (i.e., 1 of 8 dogs win, 2 of 8 place, 3 of 8 show, 1 of 28 quinellas win, and 1 of 56 perfectas win). The rotation point estimated by the model is equal to the constant divided by one minus the slope coefficient. This is the probability at which any bet above has the opposite bias as any bet below.

Table 6 - Weekday versus Weekend Betting Regressions: 7 and 8 Dog Races

	Win Betting Market Regressions Dependent Variable is Weekend Betting Probability (standard errors shown in parenthesis)	
	Races with 8 Dogs	Races with 7 Dogs
Constant	-0.018** (0.001)	-0.030** (0.004)
Weekday Betting Probability	0.855** (0.004)	0.790** (0.026)
R ²	0.99986	0.99463
Betting Combinations	8	7
Observations per Betting Combination (weekday / weekend)	1035 / 1149	53 / 74
T-ratio for slope = 1	-34.769**	-8.095**
Estimated Rotation Point	12.494%	14.291%
Predicted Rotation Point (Null Prior)	12.500%	14.286%

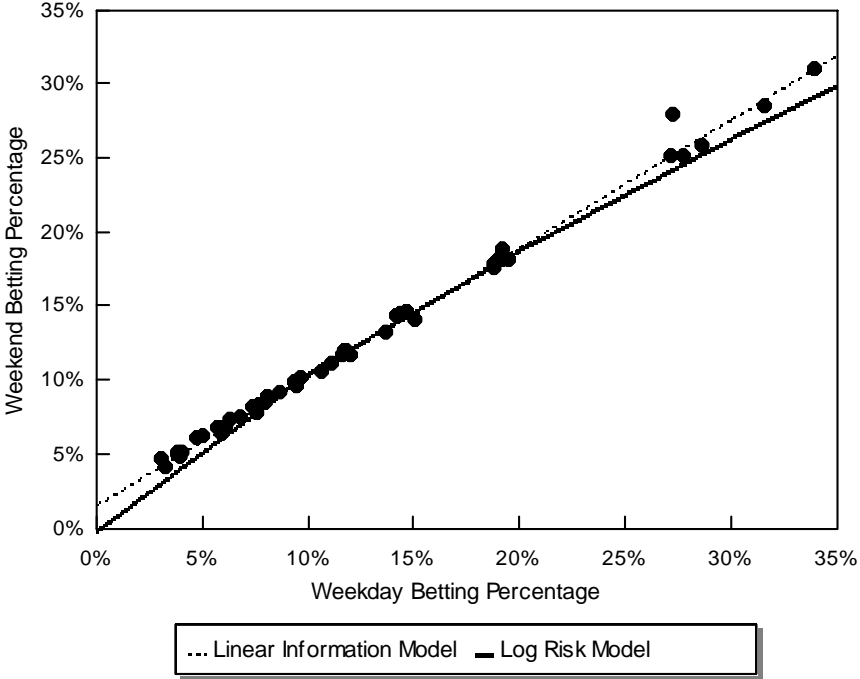
Notes: ** indicates statistical significance at the 1% level, * at the 5% level. The regressions are performed on the pooled all-grades, both track values. The predicted rotation point is the average probability of win which is 1/8 for 8 dog races and 1/7 for 7 dog races. The rotation point estimated by the model is equal to the constant divided by one minus the slope coefficient. This is the probability at which any bet above has the opposite bias as any bet below.

Figure 1 - Relationship between Attendance and Betting



Notes: Day of week is shown above data: Monday (M), Wednesday (W), Thursday (Th), Friday (F), Saturday (Sa), and Sunday (Su). When a day has both matinee (afternoon) and evening races, the matinee is denoted with (m) after the day abbreviation. The F/L betting ratio is the average percent of all win bets placed on the favorite divided by the average percent of all win bets placed on the longshot for that particular day.

Figure 2 - Weekday versus Weekend Betting: All Dogs by Grade



Notes: Individual observations are the percentages bet on the favorite, second favorite, etc., to the longshot, by the grade of the race. The observation in the upper right hand corner, for example, is the average betting on the first favorite in grade AA races on weekdays plotted against the same value for weekends. Lines show fitted regressions from the linear information model and the double-log risk model.

Figure 3a - Time of Day Effects on Favorite Betting

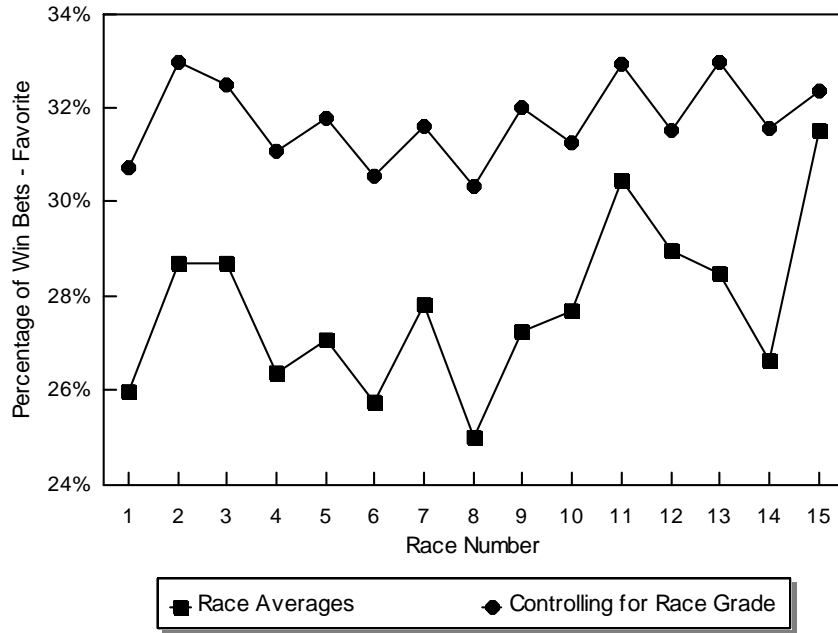


Figure 3b - Time of Day Effects on Longshot Betting

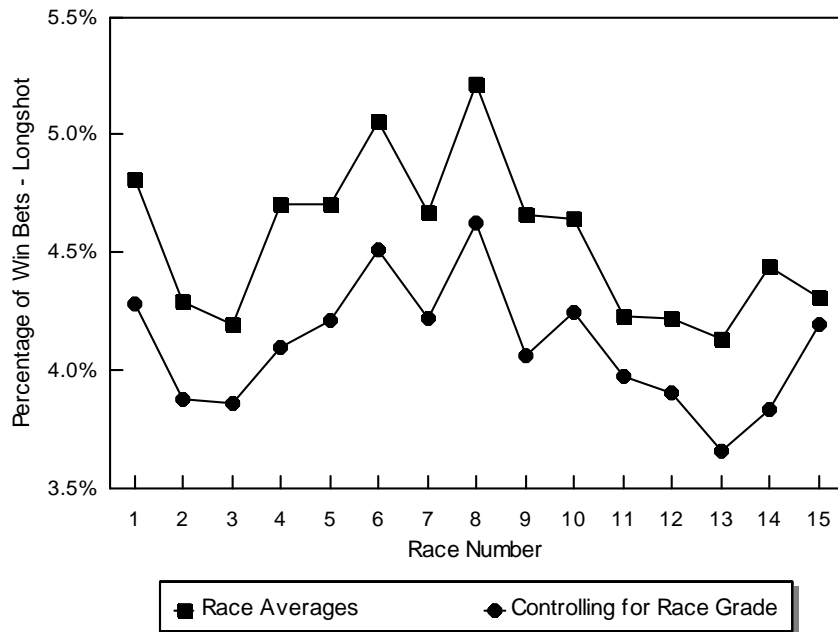


Figure 4 - Track and Grade Differences in the Probability of a Favorite Win

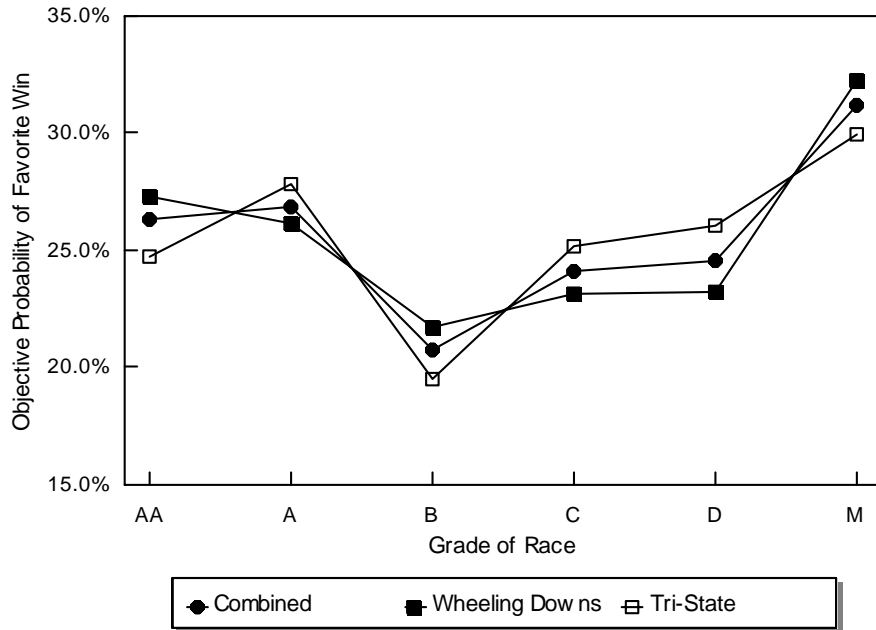


Figure 5a - Subjective versus Objective Probabilities of Favorite by Grade

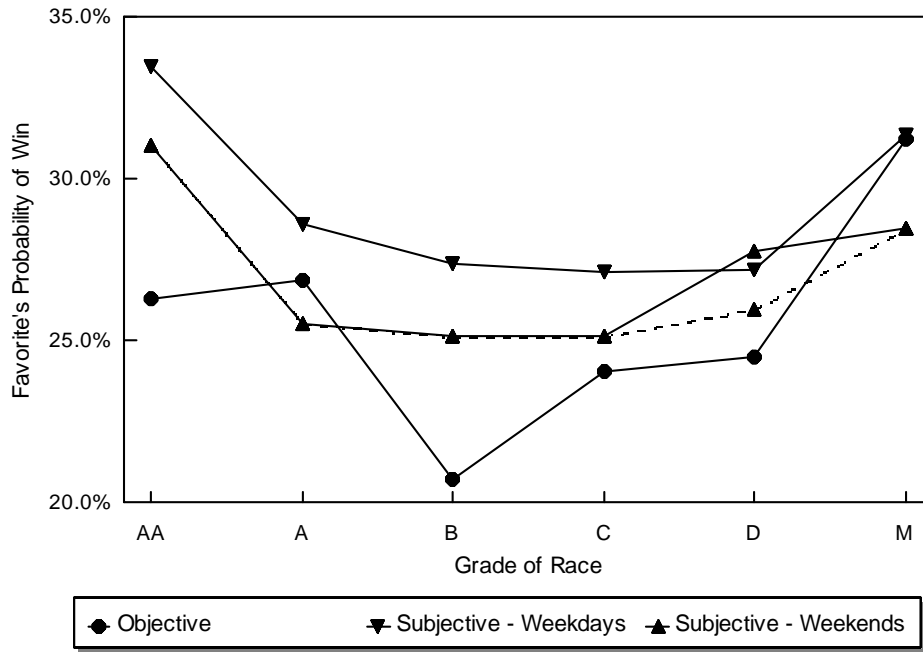


Figure 5b - Subjective versus Objective Probabilities of Longshot by Grade

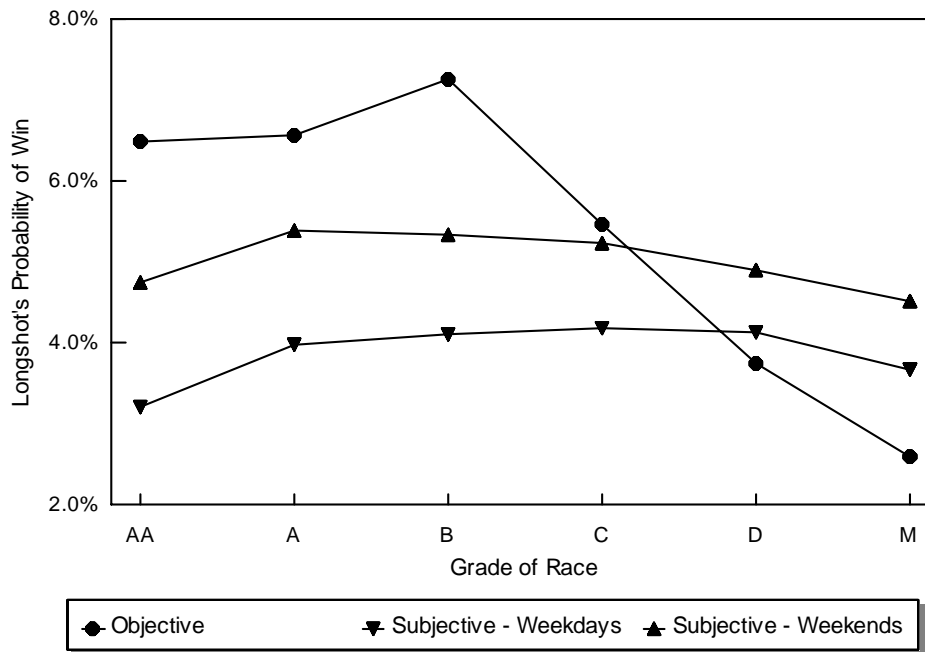


Figure 6a - Risk vs. Information Models in Quinella Rates of Return

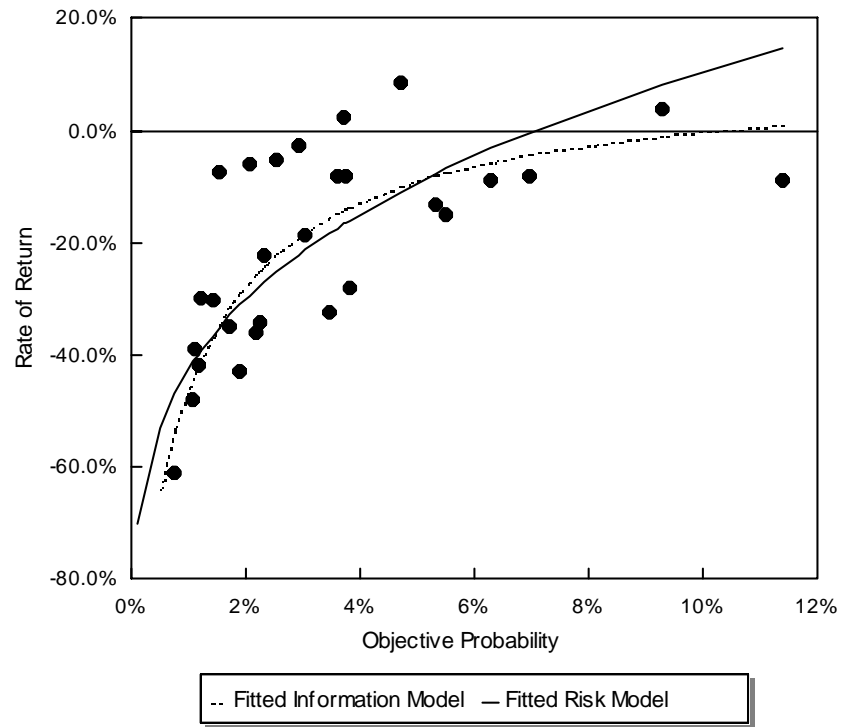


Figure 6b - Risk vs. Information Models in Quinella Probabilities

