



BEHAVIORAL FINANCE

Rationality and Risk Intelligence in Binary Betting

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Working paper

This paper seeks to answer two questions about people who bet on financial-market outcomes: Do they have skill? Do they have risk intelligence?

Our analysis was conducted on a data set of 1.6 million fixed-odds binary, touch and tunnel bets on financial markets. The total value of the wagers was \$600 million, for an average bet size of \$375. The bets were made from 2008 to 2010 over the Internet by bettors from countries across Europe and Asia, over-weighted in the U.K. and Japan. The bookmaker was a large publicly traded European company.

On our first question — do bettors have skill? — we can offer an unqualified “yes.” There are strong and persistent differences among bettors in expected return, and a significant minority of bettors have a positive expectation.

The answer on risk intelligence is mixed. It seems clear that there is more negative than positive risk intelligence — that is, people are more likely to lose money through varying bet size than make money. But there are statistically significant amounts of both. Even among the top bettors we find a lot of negative risk intelligence, but when we average in all bettors above a certain degree of skill, we find evidence of net positive risk intelligence.

Our results suggest that losing bettors are not acting randomly, that they do have information. However, they use that information perversely, to select losing rather than winning propositions. On top of that, the more wrong they are, the more they bet.

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