The Economist

Superstitious investors

Black-cat market

Irrational investment habits lead to lower returns

Aug 30th 2014 | From the print edition

IN AN effort to show that even good luck can be planned in advance, the Beijing Olympics kicked off at 8.08pm on August 8th 2008, invoking the supposedly auspicious properties of the number eight. In Chinese, the word "eight" sounds similar to "prosperity". Conversely, "four" sounds quite like "death", and so is believed to bring misfortune. (Many Chinese buildings jump straight from the third to the fifth floor, just as some Western ones omit a 13th floor.) Such superstitions are usually regarded as harmless cultural quirks. They turn out to be very costly, however, if they are used as investment principles.

A new paper* looks at how these beliefs affect financial markets by examining limit orders (an offer to trade shares at a given price) in the Taiwanese stock market. The authors measured the strength of traders' superstitions by the regularity with which they chose prices ending in eight, and how strenuously they avoided the number four. Institutional investors and foreigners were generally unbiased in this regard, with no numerical pattern in their prices. Local individuals, however, were more than 50% more likely to place an order ending in an eight than in a four.

Such irrationality costs money: the daily returns of the most superstitious quintile of investors were 0.03% lower than the least superstitious on trades ending in an eight. That equates to an annual shortfall of—by coincidence—8.8% a year, according to *The Economist*'s calculations. Avoiding four was less costly, but still diminished returns by around 2% a year.

The cost of the bias extended beyond trades involving the numbers four and eight. An increase in superstitious beliefs of one standard deviation led to a 0.02% decrease in daily returns (4% over the course of the year, another coincidence). This suggests that superstitious beliefs are associated with other biases which lower profits for traders more broadly. Some of these are also numerical, such as investors' preference for round numbers. The paper also alludes to superstitious traders having a "general cognitive disability in financial decision making", a diplomatic way of saying they are nitwits.

Small investors are known to succumb to overconfidence, spurious extrapolation and a preference for the familiar. These biases make them an easy target for algorithmic traders, or "quants", who exploit such predictable behaviour.

Fortunately for Taiwanese day-traders, the researchers find that digit prejudice abates over time. Perhaps tired of losing money, investors tend to ditch their superstitions as they gain experience.

*"Do Superstitious Traders Lose Money? (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2478124) " by Utpal Bhattacharya, Wei-Yu Kuo, Tse-Chun Lin and Jing Zhao, 2014, SSRN Working Paper.

From the print edition: Finance and economics