Long View: Profiting from the irrational

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We can always rely on human irrationality. Whatever happens in the markets and in the world economy, people will continue to do stupid things. The question is whether they will do so predictably enough for the rest of us to take advantage.

Psychological research over the past three decades suggests that we may well be "predictably irrational" – that, indeed, was the title of an unlikely best-seller last year by the Massachusetts Institute of Technology's Dan Ariely. It documented experiments, mostly carried out with MIT's highly intelligent young students as guinea pigs, that showed how they would predictably fall victim to what are known as heuristics – mental short-cuts that help them survive in the hurly-burly of normal life, but can also lead them into irrationality when trying to make decisions in the financial realm.

These psychological insights unleashed similar experiments in the world of investment.

One of the most recent in the genre saw academics at the University of Indiana explore whether there was a "left-digit effect", in stock prices*. People read numbers from left to right. Thus, as consumer marketers long ago discovered, you will shift more product if the price ends in 99. Whether we like it or not, in aggregate people behave as though $1.99 is much more than one cent cheaper than $2.

After analysing 100m trades made on the Nasdaq exchange, they were able to show that exactly the same phenomenon is at work when people buy stocks. On average, "buy" orders outnumbered "sell" orders by 12 per cent over the period of the study.

But at prices ending in 99, "buys" outnumbered "sells" by 66 per cent. It was by far the most popular price point at which to buy.

The least popular price point at which to buy was 01, where there were 0.83 buy orders for every sell.

The second most popular price point at which to buy was 49; and the second most popular at which to sell was 51.

At first, this might imply that we are all stupid. More fairly to the human race, it shows that we have structural difficulties getting over our natural tendency to read numbers from left to right.

However, it does open investment possibilities for those who can find ways to exploit those structural difficulties. It also suggests that rigorously quantitative investing using computers, which has had a bad press after some disastrous results last year, might still have a role. Computers are not prey to heuristics.

Another persistent problem is that we have difficulty processing information presented to us as a list of numbers, whereas we can more readily interpret information shown to us as a chart. Again, this stems from mankind's origins on the savannah; our brains are trained to process information presented to us visually, rather than to read through lists of numbers.

This in turn means that when we see a trend presented to us as a curve on a piece of paper, we find it hard not to extrapolate that it will continue in the same way in the future.

Daniel Kahneman, the psychologist who was awarded the Nobel prize for economics in 2002 for his work identifying systematic irrationalities such as this in decision-making, suggested that this tendency helped create the US housing bubble.

Looking back on time spent in California as real estate prices were beginning to detach from reality, he says: “It takes very little time for people to perceive a trend and to assume that it goes forever.”

It is possible to argue that much the same thing may now be happening in reverse. Many indicators of economic activity, including the growth of gross domestic product in the US, have in the past few months fallen at a speed that is almost without precedent.

Friday’s decline in US GDP, at 3.8 per cent, was the worst since 1982. But the instant response of traders was as though this was good news, because they had feared even worse. Again, a hyper-rational machine might make money from betting against responses such as this.

Having identified that our cognitive faculties could be our own worst enemy when it comes to investing, the problem remains how to deal with it.

Sadly for our own sense of independence, Kahneman suggests that it might be easier for large institutions to overcome these problems, rather than individuals. “It’s almost certainly the case that institutions have better means of overcoming heuristics. The idea in particular is that individuals are more sensitive to news. If you are an individual, your attention will be drawn to stocks that are in the news. Institutions are much more likely to be able to resist this.”

If not entirely predictable, human irrationality is a constant on which we can all rely. And so attempts to exploit it will continue. But, little though we may trust them after their failings of the last year, it might be best to leave it to financial institutions to do it, rather than try to do it ourselves.

**Utpal Bhattacharya, Craig W. Holden, and Stacey E. Jacobsen, ‘Penny Wise, Dollar Foolish: the Left-Digit Effect in Security Trading’. Available at SSRN.*