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Freud, finance and folly

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Human intuition is a bad guide to handling risk

PEOPLE make barmy decisions about the future. The evidence is all around, from their investments in the stockmarkets to the way their run their businesses. In fact, people are consistently bad at dealing with uncertainty, underestimating some kinds of risk and overestimating others. Surely there must be a better way than using intuition?

In the 1950s and 60s, a group of researchers at American universities set out to find a more scientific method. They created a discipline called "decision science" which aimed to take the human element out of risk analysis. It would offer a way of making soundly based decisions for a future fraught with uncertainties. This would involve using computer models for forecasting, estimating the probabilities of possible outcomes and determining the best course of action, thus avoiding the various biases that humans brought to decision-making. Such models, the researchers thought, would provide rational answers to questions such as whether to build a factory, how to combat disease and how to manage investments.

Business schools soon adopted their teachings, and even some policymakers were persuaded. Decision science's heyday may have been the Vietnam war when Robert McNamara, then America's defence secretary, used such techniques to forecast the outcome of the conflict (though, as it turned out, without much success). But mostly the approach did not quite catch on. Decision-makers, whether in business or politics, were loth to hand over their power to a computer. They preferred to go with their gut instincts.

Think like a machine

Daniel Kahneman, now a professor at Princeton, noticed as a young research psychologist in the 1960s that the logic of decision science was hard for people to accept. That launched him on a career to show just how irrationally people behave in practice. When Mr Kahneman and his colleagues first started work, the idea of applying psychological insights to economics and business decisions was considered quirky. But in the past decade the fields of behavioural finance and behavioural economics have blossomed, and in 2002 Mr Kahneman shared a Nobel prize in economics for his work.

Today he is in demand by organisations such as McKinsey and PartnerRe, and by Wall

Street traders. But, he says, there are plenty of others that still show little interest in understanding the roots of their poor decisions. The lesson from the analyst's couch is that, far from being random, these mistakes are systematic and predictable:

•**Over-optimism**. Ask most people about the future, and they will see too much blue sky ahead, even if past experience suggests otherwise. Surveys have shown that people's forecasts of future stockmarket movements are far more optimistic than past long-term returns would justify. The same goes for their hopes of ever-rising prices for their homes or doing well in games of chance. In a recent study of Dutch game-show contestants, people's estimates of their odds on winning were around 25% too high. Americans are perhaps the most optimistic: according to one poll, around 40% of them think they will end up among the top 1% of earners.

Such optimism can be useful for managers or football players, and sometimes turns into a self-fulfilling prophecy. But most of the time it results in wasted effort and dashed hopes. Mr Kahneman's work points to three types of over-confidence. First, people tend to exaggerate their own skill and prowess; in polls, far fewer than half the respondents admit to having below-average skills in, say, love-making or driving. Second, they overestimate the amount of control they have over the future, forgetting about luck and chalking up success solely to skill. And third, in competitive pursuits such as betting on shares, they forget that they have to judge their skills against those of the competition.

•**The anchor effect**. First encounters tend to be decisive not only in judging the character of a new acquaintance but also in negotiations over money. Once a figure has been mentioned, it takes a strange hold over the human mind. The asking price quoted in a house sale, for example, tends to become accepted by all parties as the “anchor” around which negotiations take place, according to one study of property brokers. Much the same goes for salary negotiations or mergers and acquisitions. If nobody has much information to go on, a figure can provide comfort—even though it may lead to a terrible mistake.

•**Stubbornness**. No one likes to abandon a cherished belief, and the earlier a decision has been taken, the harder it is to give up. In one classic experiment, two groups of students were shown slides of an object, say a fire hydrant or a pair of spectacles. The slides started out of focus and were gradually made clearer until the students could identify the object. Those who started with a very blurry image tried to decide early and then found it difficult to identify it correctly until quite late in the process, whereas those who started less out of focus kept a more open mind and cottoned on more quickly.

The same sort of thing happens in boardrooms or in politics. Drug companies must decide early to cancel a failing research project to avoid wasting money, but find it difficult to admit they have made a mistake. Bosses who have hired unproductive employees are reluctant to fire them. Mr Kahneman cites the example of Israel's failure to spot growing threats in the lead-up to its 1973 war with its Arab neighbours. Part of the explanation was that the same people who had been watching the change in political climate had to decide on Israel's response. Similar problems have arisen in recent counter-terrorism work in America. In both cases, analysts may have become wedded early to a single explanation that coloured their perception. A fresh eye always helps.

•**Getting too close**. People put a lot of emphasis on things they have seen and experienced themselves, which may not be the best guide to decision-making. For example, many companies took action to guard against the risk of terrorist attack only after September 11th, even though it was present long before then. Or somebody may buy an overvalued share because a relative has made thousands on it, only to get his fingers burned.

In finance, too much emphasis on information close at hand helps to explain the so-called “home bias”, a tendency by most investors to invest only within the country they live in. Even though they know that diversification is good for their portfolio, a large majority of both Americans and Europeans invest far too heavily in the shares of their home countries.

They would be much better off spreading their risks more widely.

• **Winning and losing**. Fear of failure is a strong human characteristic, which may be why people are much more concerned about losses than about gains. Consider the following bet: with the flip of a coin, you could win $1,500 if the coin turns up heads, or lose $1,000 on the tails. Now describe it in another way: with heads, you keep all the money you had before the bet, plus $1,500; with tails, you also keep everything, except $1,000. The two bets are identical, and each one, on average, will make you richer by $250 (although that average will be little consolation to the punter who has just lost $1,000). Even so, people will usually prefer the second bet.

Behavioural economists say that is because the prospect of losses seems far more daunting in isolation, rather than in the context of looking at your entire wealth, even if the average outcome is the same. This sort of myopia in the face of losses explains much of the irrationality people display in the stockmarket.

• **Misplaced priorities**. More information is helpful in making any decision but, says Mr Kahneman, people spend proportionally too much time on small decisions and not enough on big ones. They need to adjust the balance. During the boom years, some companies put as much effort into planning their Christmas party as into considering strategic mergers.

• **Counterproductive regret**. Crying over spilled milk is not just a waste of time; it also often colours people's perceptions of the future. Some stockmarket investors trade far too frequently because they are chasing the returns on shares they wish they had bought earlier.

Mr Kahneman reckons that some types of businesses are much better than others at dealing with risk. Pharmaceutical companies, which are accustomed to many failures and a few big successes in their drug-discovery programmes, are fairly rational about their risk-taking. But banks, he says, have a long way to go. They may take big risks on a few huge loans, but are extremely cautious about their much more numerous loans to small businesses, many of which may be less risky than the big ones.

But at least when businesses try to assess their risks, they have to worry only about making money. Governments, on the other hand, face a whole range of sometimes conflicting political pressures. This makes them even more likely to take irrational decisions.