‘Natural Law’ column number four, by Michael Price (uncorrected proof)
To be published in *Global Custodian*, winter 2010

## The rights and wrongs of risk

When ‘risk’ is discussed in the context of financial services, it’s often seen as a bad thing, particularly by those who regard the 2007-09 crisis as a failure of risk management. Over human evolutionary history, however, risky behavior has on balance paid off, which is why human nature is so risk-seeking in the first place. The question, then, is this: if evolution ‘wants’ us to take risks, why does our risky behavior so often lead to disaster?

To answer this question, consider how people are designed to take successful risks. Risky behavior evolves if those who take risks tend to acquire more resources than those who don’t, and the more these resources benefit risk-takers’ survival and reproduction, the greater risks they’ll take. This explains why in humans and most other species, males take more risks than females. A man doesn’t have to worry about such inconveniences as pregnancy and lactation, so he can reproduce at a much faster rate than a woman can, and his reproductive success is limited mainly by the extent of his mating opportunities. A man with ten mates can easily out-reproduce a woman with ten mates, so men have a greater incentive to compete fiercely with members of their own sex for mates (and for the things that attract mates, like status and resources).

For men in general, the downside of this arrangement is that they’re not only the biggest winners in the reproductive lottery, they’re also the biggest losers; for every rock star with a harem, there are several guys who can’t even get a date. Life in general is a higher-stakes game for men than for women, which gives men more of an incentive to take the risks needed to win big. So men, to a greater extent than women, are designed as risk-taking machines, and jobs which value and reward successful risk-taking—like investment banking—tend to attract more men than women.

One final point about successful risk-taking: it’s not just about getting lucky. The best risk-takers are those who have some advantage—like a special talent, or a piece of information—that allows them to succeed where others fail. In this sense, the riskiness of their behavior is partly illusory, because their advantage makes it less of a gamble for them than it would be for others.

But enough about productive risk-taking. Why does risk-taking so often go wrong? There are three main reasons.

First, to be favored by evolution, a behavior must be adaptive not *unfailingly*, but merely *on average*. Imagine, for example, that a male is choosing between situations in which he has (1) a 100% chance of mating once, or (2) a 50% chance of mating ten times, and a 50% chance of not mating at all. He should choose the second situation, because although he'll fail half the time, his average payoff will be five times higher than it would be in the first situation. So evolution can favour risk-taking with a high failure rate, as long as it's adaptive on average.

Second, our risk-taking psychology can be led astray in modern environments. If this weren't true, Las Vegas would be just another small town in the Nevada desert. Our minds evolved in environments in which resource availability followed learnable patterns (such as game animal migration routes). In resource-rich environments—and casinos exaggerate their resource-richness, by trumpeting patrons' successes but not their losses—we enjoy taking the risks that would have allowed our evolutionary ancestors to discern these patterns. These patterns don't actually exist in casinos, but when we succeed in gambling, our minds are fooled into thinking that they do, and we continue to seek them.

Finally, when risk-taking goes wrong, it often happens at the systemic or group level, rather than at the individual level. Our risk-taking psychology evolved to prevent us from behaving maladaptively as individuals, rather than to protect us at any higher social level. Some behaviors that helped cause the credit crisis—such as betting that housing prices would rise indefinitely—were not perceived by individuals as being risky, because they conformed to what most everyone else was doing. Because they appealed to human herd instincts, these actions felt safe to individuals, even though they were dangerous to society.

Banking, like many human endeavours, will always be ruled by successful risk-takers. But our risk-taking psychologies are fallible, particularly in modern societies, and knowledge of these limitations will improve our odds of success.