ilar analysis to the news media). For example, George W. Bush wearing a \$3,000 cowboy hat was not a problem, because it matched his image, but John Kerry riding a \$6,000 bicycle was a problem—that luxury item appeared hypocritical for a candidate claiming to side with the downtrodden.

Citing Republican pollster and communications consultant Frank Luntz, Shleifer noted how the estate tax was renamed the "death tax" (although there is no tax on death) in order to successfully sell its repeal. The relabeling linked the tax to the unpleasant associations of the word "death," and the campaign asked questions like, "How can you burden people even *more* at this most difficult time in their lives?" "Messages, not hard attributes, shape competition," Shleifer said; he noted that the fear of terrorism is a bigger issue in probable non-target states like Wyoming, Utah, and Nevada than in New York and New Jersey.

Because successful persuasive messages are consistent with prevailing worldviews, one corollary of Shleifer's analysis is that persuasion is definitely *not* education, which involves adding new information or correcting previous perceptions. "Don't tell people, 'You are stupid, and here is what to think,'" Shleifer said. During presidential debates, he asserted, voters tune out or forget things that are inconsistent with their beliefs. "Educational messages may be doomed," he added. "They do not resonate." In economic and political markets, he said, there is no tendency toward a median taste; divergence, not convergence, is the trend. Therefore, the successful persuader will find a niche and pander to it.

When making choices in the marketplace, "People are not responding to the *actual objects* they are choosing between," says Eric Wanner of the Russell Sage Foundation. "There is no direct rela-

"People care not only about outcomes, but about how outcomes came to be," says associate professor of public policy Iris Bohnet of the Kennedy School of Government. "That doesn't strike anyone but an economist—like me—as a surprise." Game theory, as conceptualized by conventional economics, suggests that players care only about substantive results. With Ramsey professor of political economy Richard Zeckhauser, Bohnet developed a concept of "betrayal aversion," building on the well-established psychological principle of risk aversion—by and large, humans simply don't like to take risks.

It turns out they don't like to trust, either, because trust is a form of risk that makes one vulnerable to betrayal. To buy an item on eBay, one must trust the seller. We also trust attorneys, doctors, and politicians to tell us the truth and to represent our interests. "These are principal-agent relationships," Bohnet says. "An agent does something on your behalf. But principals' and agents' incentives are not always completely aligned, and there's asymmetric information."

Traditionally, academics have linked trust to risk tolerance, since it involves taking a risk. Instead, "We're saying that risk-taking when the agent of uncertainty is *nature* is very different from when the agent is another *person*," Bohnet asserts. A farmer, for example, faces natural risks like weather and soil conditions. But there are also social risks—speculative

bubbles, HIV infection, terrorism—where other people produce the uncertainty.

Bohnet and Zeckhauser have been running two games, now with about a thousand subjects around the world, playing in groups of 30 at a time. They are twoperson games, a variant of the classic Prisoner's Dilemma. In the first game, Player A can choose a "safe" alternative or choose to trust Player B, who can in turn choose an option that rewards both of them more than the safe alternative, or

Games of Trust and Betrayal

a second option that brings even greater winnings for B—but less than the "safe" option would have given A. In other words, the "good" (i.e., trustworthy) B player will take the win-win alternative, while the "selfish" B will maximize his own outcome at A's expense. When the researchers ask subjects playing A, "What percentage of good people would there have to be in the room [of 15 potential B players] before you would be willing to trust this stranger [the B player]?" the answer has consistently been 50 to 80 percent.

The second game has the same rules as the first, except that an urn containing 100 blue

and green marbles takes the role of Player B. The urn is a proxy for an impersonal force, such as nature. If a blue ball is randomly chosen, B selects the "trustworthy" win-win alternative; if a green ball, the "selfish" one. The researchers then asked A players, "What percentage of blue balls would the urn have to contain for you to be willing to take this risk?" A rational money-maximizing person—one who cares only about outcomes—would give the same answer to this question as to the analogous one in the first game. But when playing with "nature," respondents generally peg the figure at 30 to 40 percent, far lower than in the first game. "People are less willing to take risks when confronted with another person than when confronted by nature," Bohnet explains. "Trust is not only about willingness to take risks, but about the willingness to be betrayed."

By comparing the difference between "Minimal Acceptable Probabilities" in the first and second games, the researchers have been able to distinguish risk aversion from betrayal aversion. The "nature" game establishes a baseline level of risk aversion, but the game with a human Player B introduces the additional possibility of betrayal. Thus, the gap between percentages on the two games gives a rough index of betrayal aversion. In the United States, Switzerland, and Brazil, the betrayal aversion differential is 10 to 20 percent. Zeckhauser and Bohnet have also played the games in the Persian Gulf region, with subjects in Kuwait, Oman, and the United Arab Emirates. (They are the first social scientists to run economic experi-

94 MARCH - APRIL 2006