



Igor Kopelnitsky

New Economy

The Pentagon's plan for
futures trading might have
been a good test of the
Internet and the markets.

By STEVEN WEBER
and PHILIP TETLOCK

THE Pentagon's plan to conduct an online market in "policy futures" for events that could include terrorist attacks was recently shouted down by moral outrage. But even if the plan's subject matter seemed repugnant, or its timing a bar or two off the mainstream political rhythm, it would have been an intriguing test of the Internet's power to weigh the opinions of millions of people who are normally shut out of the geopolitical debate.

Scattered among these people may be useful bits of information about the likelihood of potentially significant future events — a coup in Saudi Arabia, for example, or a collapse of the Russian currency. And it could be information not available to government analysts and the people they normally talk to.

There is always a price for violating taboos, and the Pentagon's policy-futures plan crossed a number of boundaries — like the possibility that someone could profit directly from betting on a terrorist attack. But it would also have demonstrated how some of

the formerly radical ideas of the Internet boom, far from dying out with the collapse of the stock market bubble, have become everyday assumptions in today's political and economic life.

The Internet's ability to move information instantaneously and cheaply makes it possible to push decisions down to the level of the individual (or, at least, the individual operator of a computer). This capability has made it possible to imagine making a market out of almost anything.

Beyond the breathless talk of the late 90's about the perfection of markets and frictionless efficiency, there emerged some new developments at the intersection of technology and ethics — where societies draw important conclusions about what is legitimate to trade in markets and what is taboo.

It was not long ago that many people thought financial derivatives were somehow immoral. There was an uproar in the early 90's, for example, about viatical insurance markets, in which people with terminal diseases trade their stream of after-death benefits to investors who pay the dying policyholders upfront.

EBay, exemplar of the modern-day swap meet, does not allow members to put human sperm or eggs up for auction. But pick up any college newspaper and look at the advertisements offering a set price for young healthy donors of sperm or ova. The message is that it is morally acceptable to sell reproductive tissue — but only if the price is set by a middleman, and not determined through direct e-haggling between buyer

and seller. To whom, exactly, is this distinction ethical, let alone fair?

The widely reported offering of a human kidney on eBay in late 1999, although it turned out to be a hoax, certainly tested the limits of social acceptability. Which was precisely the point. It is easy to be repulsed by the auctioning of a human organ. But it is also gut-wrenching to ponder the messy arrangements that currently determine who receives transplants and who does not.

We are not saying that all such decisions will, or should, be determined in markets. The closer one moves toward well-functioning markets, the more clearly the limits are revealed. Consider the critiques of the nation's intelligence agencies after the terrorist attacks of Sept. 11. One purpose of the Pentagon futures market was to see if it could provide intelligence analysts with a new tool for connecting the dots.

No rational policy maker would have made decisions based solely on such a market, because markets do not actually make predictions. Markets simply act as a gauge of people's expectations. Still, because society is a long way from having any truly predictive algorithms about world politics, markets can be important sources — among many others — of data that an intelligence analyst might like to have when reaching a judgment about an extremely complicated future.

A more profound benefit of the Pentagon's proposal might have been its challenging of fundamental notions about the structure and functions of an intelligence agency. Put aside for the moment various concerns about the ways in which the futures market could have been gamed or undermined — the kind of imperfections that markets typically learn to regulate through experience.

What if the Pentagon's futures market had demonstrated that in some significant subset of problems it could beat the predictive capabilities of the very best analysts armed with classified information and insider data?

In fact, the dot-com phenomenon posed exactly this kind of challenge to many traditional ways of thinking about business. Most retailers, for example, now take for granted the formerly radical notion that a store is not a building. Certainly the intelligence community's methods of procuring and peddling information could benefit from a little re-engineering.

The legacy of the Internet boom that may matter most is the deep questioning of many traditional forms and tokens of expertise. Open-source software projects, for instance, do not care if the developer has a Ph. D. in computer science or even a high school

degree. What matters is the quality of the code each developer contributes to the communally designed and updated software.

And who is now the authority on the quality of a particular car or dishwasher? Not necessarily the anointed specialists of Consumer Reports but rather the aggregate opinion of the people who post their personal reviews and reliability assessments on Epinions.com.

So what makes for useful expertise in the kinds of geopolitical issues that the Pentagon's futures market would have covered?

Since 1988, one of us, Professor Tetlock, has studied the ways that political forecasters assign probabilities to possible future events and how they revise those probabilities in response to new evidence. The studies show that "experts" left to their own devices are often overconfident by wide margins. In a few cases they strike gold by attaching high probability to surprising events that "amateurs" dismiss or may not even have on their prospecting maps (like the demise of the Soviet Union or the collapse of white-minority rule in South Africa).

The problem is that these highly successful predictions are buried in a mountain of slag. They are mistaken forecasts that never pan out. And experts tend to compound this problem with their reluctance to admit their mistakes.

The experts are inclined, instead, to reinforce their positions by declaring that they were right on the fundamentals and merely off on the timing. But if you are a policy maker worried about North Korea's nuclear potential, the time frame in which the country's economy is likely to collapse is not a simple rounding error. Amateurs, as it turns out, are actually better at recognizing the limits of what they know.

It is too bad the debate over the Pentagon futures market deteriorated into a game of either demonizing or hyping the value of markets. A casualty was a reasoned discussion about the tradeoffs society will accept in the name of accumulating potentially valuable information. The benefit — a potentially positive legacy of the Internet boom — might have been insights into the relationship between expertise and prediction in the increasingly complex post-Sept. 11 world.

The authors teach at the University of California at Berkeley, where Steven Weber is an associate professor of political science and Philip Tetlock is the Mitchell Professor of Leadership at the Haas School of Business.