Lessons from Behavioral Economics

Interview with Robert Frank

Perhaps the brightest new branch in economics today is behavioral economics. It directly challenges the central economic assumption about the rationality of market participants. But what are its practical implications? Robert Frank has been working in these fields almost as long as anyone. He believes there are policy implications in his work that could save the nation an enormous amount of money.

Q I wanted to discuss the evolution and impact of behavioral economics with you because you have been so involved with the field. In particular, I wanted a sense of whether the implications have been adequately incorporated into other areas of economics. But why did you get interested in behavioral economics in the first place?

A. The first behavioral work I did was about how concerns regarding status and position affect economic behavior. Like almost everything else I do, it was something I stumbled on by accident in the course of everyday experience. I was renovating a townhouse in Washington. I

ROBERT FRANK is Henrietta Johnson Lewis Professor of Management and professor of economics at the Johnson Graduate School of Management, Cornell University. His most recent book is The Economic Naturalist *(Basic Books, 2007).*

Challenge, vol. 51, no. 3, May/June 2008, pp. 80–92.

ISSN 0577–5132 / 2008 $9.50 + 0.00.
DOI: 10.2753/0577–5132510305

was my own contractor, which was a dumb idea. I was hiring workmen to do some interior work. They arrived every morning and, to reach the high spots and the ceiling, they would stack up sheetrock buckets—you know, the five-gallon buckets of sheetrock compound—and then they would put a two-by-ten across the two stacks and climb on top. It was rickety and occasionally would actually tumble down, and they would hurt themselves. So I asked them why they did not use scaffolding, which would be more secure. And they said, "Oh, it's too expensive to buy the scaffolding, and it takes too long to set up and move." I thought, sure, they are doing all this on a shoestring. I understand.

But in fact they came to work every day in fancy vans. They had all the trappings: stereos and bars and carpeting. It was clear that it was important to them to have a level of appointment in their vans that was as first-class as possible. Yet they could not afford the materials for some basic safety equipment. If they all had vans that were a little older and somewhat less well-appointed, they would have been almost as happy and could easily have afforded the equipment and avoided some nasty falls. But if anyone bought an upgraded van, others would feel pressure to follow suit.

Q So does that suggest that people are not rational, in Adam Smith's sense?

A. What they were doing was rational from their individual vantage points, but the outcome was not rational from their collective vantage point. It is a distinction like one emphasized by Darwin, who said that competition shapes traits and behaviors according to their effects on individual reproductive fitness, not according to whether they benefit larger groups. Thus the bull elephant seal weighs five times as much as the female, because larger males were more likely to win the battles with other males for access to females. But for bulls as a group, large size is disadvantageous, because it makes them less able to escape from sharks and other predators.

Q. How did your Cornell colleagues react to this work?

A. At the time, my appointment was in the Economics Department, and most of my colleagues there were much more interested in formal theory. I was fortunate, however, to spend a lot of time with Richard Thaler, one of the early pioneers in behavioral economics, who was then an economist at Cornell's business school.

Q. Now at the University of Chicago?

A. Yes. At the time, Thaler was teaching a course on the work that he does, which is inspired by the work of psychologists Amos Tversky and Daniel Kahneman.

Q. And what was their finding?

A. Their notion was that even when people had all the facts necessary to figure out the right answer, often they did not. They were focusing on what we call cognitive errors.

Q. So isn't that a criticism of the claim that markets have rational participants?

A. Yes, of course. Thaler took those ideas and ran with them in economics. At the time, I was doing something related to that, focusing on the conflict between individual and group behavior. I taught a course for undergraduates called "Departures from Rational Choice." I think it was one of the first undergraduate courses in behavioral economics—at least what we look back and call behavioral economics. That was in 1983. And when I was sitting down to organize the syllabus for the course, I finally decided that the right way to think about the topic was to split it into two parts. I call them "Departures from Rational Choice with Regret" and "Departures from Rational Choice Without Regret."

1983
Cornell
1988

Q. Explain that a little more.

A. Thaler was doing "rational choice with regret." He would find that people just made mistakes, and when he would point it out, they would say, "Oh, yeah, I screwed up; I would like to change my

decision." One experiment he conducted was at a Pizza Hut, which had a deal: Pay $3 at the door, and eat as much pizza as you want for lunch. So he had a research assistant pose as a waiter, who returned $3 to half the patrons at random. He told them that they had been selected for a promotional special, so their lunch that day was on the house. Then he kept track of how much pizza was consumed by the two groups.

Q. And what happened?

A. Rationally, the extra or marginal cost of eating another slice is zero under the all-you-can-eat plan. You have already paid your $3. For those who got their money back, the cost of eating another slice is also zero. The rational choice for both groups is to keep eating until you get no additional utility from the next slice. So the prediction of the rational choice model is that the two groups would eat the same amount of pizza. But as any ordinary human being can guess, the people who got their money back did not eat nearly as much as the people who did not.

Q. So the people who paid ate more.

A. They ate a lot more. They seemed to be trying to get their money's worth.

Q. That is the sunk-cost fallacy.

A. The fact that they had incurred a sunk cost should be irrelevant in a rational decision about how much pizza to eat. And after they left many of them surely regretted how much pizza they had consumed.

Q Now let us turn to rational choice with no regret.

A. There are some interesting subcategories here. Suppose you leave a tip at a restaurant that you will never patronize again. You eat there, you get good service, and you leave the 15 percent tip that is customary and expected. If an economist then explains to you that there is no way that your having left that tip will affect the quality of service you receive in the future, so you could have walked out without leaving a tip and suffered no ill consequence, most people

do not say, "Oh, I didn't think of that—thanks for pointing that out to me. From now on, I'm not going to leave tips in that situation." People do not really think of the tip as an incentive for good service. They think that the waiter did what the waiter was supposed to do. They felt an obligation to pay him. They had no regret.

Q. Right, even though there is no economic benefit.

A. No economic consequence for the diner, but many, if not almost all, people believed that it would not be right not to give the waiter his due. I do not slap myself on the forehead and say, "Why didn't I think of that?" the way people often do when they have made a cognitive error, a miscalculation of their best interests.

Here is another example. I am a parent, and I am thinking about whether to save for retirement. But if I save for retirement, then I am not going to be able to scrape together enough for a down payment on a house in a decent school district, where my children can be safely and well educated. I know I should save for retirement and that I will have to really scrape and scrimp when the time comes if I do not, but it will be even worse if I send my kids to an unsafe school where the test scores are in the twentieth percentile.

Here is the point. Suppose I do not save for retirement, and you do not either. Then we all try to buy houses in better school districts, but all we succeed in doing is bidding up the prices of those houses. In the end, half of all kids still end up in bottom-half schools.

Q. This is an example of a rational choice that is not good for the community.

A. It can be rational personal behavior but irrational at the community level.

Q. Like a tragedy of the commons?

A. It is exactly like those kinds of problems. This is a huge issue in welfare economics, and I do not think that it has attracted the attention that it merits. If you ask where the real waste in the economy is, it is here. We are spending so many hundreds of millions of dollars, maybe trillions of dollars, in ways that are essentially pure waste.

Q. Is it because we let so much be decided by the marketplace?

A. There is a pervasive conflict between individual and collective incentives in spending decisions.

Q What are your biggest areas of concern?

A. Look where the growth of national income has gone in the past thirty years. It has gone mostly to the people at the top of the earnings ladder—a dramatic shift. Beyond this, however, you see that spending patterns are driven by this shift in the income distribution in ways that are really not conducive to economic welfare. Everyone spends more when he earns more. I think it is a mistake to be critical of the rich for spending in what seem silly and lavish ways to those of us who do not have a billion dollars. I was a Peace Corps volunteer in Nepal for two years. In my village I lived in a two-room house with no electricity or plumbing. By local standards it was a perfectly fine house, and that is the way I always experienced it. My house in Ithaca is substantially larger and better equipped. If my village friends from Nepal saw it, they would think that I had taken leave of my senses. They would wonder why anybody would need such a house. The answer, of course, is that what we feel we need depends on local standards. So the people at the top have a lot more money, and of course they are spending more. What seems normal to them is conditioned by the fact that they are all spending more, increasing the size of their houses from 30,000 to 40,000 square feet. But it is pretty clear that going from 30,000 to 40,000 square feet does not increase the family's welfare more than marginally. You are just trying to keep up with the standard for your group. And a lot of money is spent in the process.

Q. Those who remained at 30,000 square feet would feel awfully bad.

A. They would feel worse, just like the contractor with an older van than his coworkers had. But if you could tilt the incentives of that group so that they did not upgrade from 30,000 to 40,000 square feet, I think there is a very good chance that everyone in the group would be happier—just because it is a hassle to take care of such a big house.

Q. How would one arrange that?

A. My proposal is for a steeply progressive consumption tax. What you would pay tax on is not your income but your income minus your savings. That is how much you consume during the year. If you are consuming $10 million annually, the marginal rate on extra consumption could be 200 percent. That's fine. And so you want to put a wing on your mansion, fine, you do that. But instead of paying $2 million, you would pay that amount to the contractor as before, but you would also have to come up with $4 million extra in tax.

They could pay the tax and do what they want to do anyway. Some would put on the new wing, but most people, I think, would not add on as big a wing if they could shelter the money instead in a tax-free savings account. On average, people would not build as big at the top, and that would mean people would not build as big just below the top, and so on. We have had a cascade in which everyone has been building bigger. You have people in the middle who are building bigger, and they do not have any more money than before, so they have been saving less, borrowing more, and commuting longer distances, just striving to keep up.

Q. Give us another example.

A. Another vivid example is today's coming-of-age parties—bar mitzvahs, sweet sixteen parties, the quinceañera, even weddings. One man spent $10 million on his daughter's party. It was at the Rainbow Room atop Rockefeller Center. Three hundred of her closest friends were invited. The party favors included a new video iPod, which at the time was $300 or $400. Aerosmith and 50 Cent performed live at the event. The aim was simply to have it feel like a special occasion, but in some circles that is what it takes now to have a special occasion. Even middle-class families have to take their kids' friends to the circus or something so that it will feel like a good birthday party.

Q What about some examples that are not related to the rich? And how do these issues affect public policy?

A. Here is my justification for safety regulations implemented by

government. Thomas Schelling, the economist, observed that hockey helmets are required in leagues where the players can vote on the rules. In such leagues, they almost unanimously vote to require wearing helmets. Yet, when there is no rule, most of the hockey players skate without helmets. Why is that? Why do they vote for a rule requiring themselves to wear one? Schelling says it is a matter of individual versus collective incentives. If you do not wear a helmet, you can see better, hear better, or maybe you are more likely to intimidate your opponent because you are crazy enough to skate without one. Or maybe you are afraid not to appear tough. And so you gain some advantage for your team by taking your helmet off. The other team cannot let that go by. They take their helmets off, too. Both teams incur a higher risk of injury, yet neither side gains a competitive advantage. Players favor rules because it is clearly better for all players to wear helmets than for all to skate without them.

Q. Thaler, of course, develops very practical ideas for inducing people to save more, based on similar ideas.

A. Right. His focus has been on the undersavings resulting from insufficient personal self-control. In other words, I would like to save more, but there are tempting things to buy now, and I just cannot muster the self-discipline to restrain myself. Thaler's basic insight was that it is much easier to say I will save more next year than to save more this year. Just as it is easier for the cigarette smokers to say I will quit tomorrow than to quit today. Thus, he finds, a worker is much more willing to sign a contract today to have some portion of his pay withheld next year and also is much more willing to have a portion of any increase in pay withheld in the future than to actually reduce his take-home pay now. He also found that workers save more when participation in 401(k) plans is made the default option.

Q. Let us talk about other areas of economic policy.

A. Robert Shiller of Yale is one of the torchbearers here. Theory had it that we rarely saw irrational behavior among securities traders. That was because there are so many in the market who quickly exploit such

irrational trading. But it turns out that we do see patterns in financial markets that seem irrational. His work has been very influential.

Q. But has it led to any policy changes of importance?

A. Not yet, but I think it will. Appreciating the destructive power of financial asset bubbles greatly increases the attraction of regulations that limit the amount of leverage available to investors.

Q. Where do you see the biggest impact?

A. I actually believe it is in the area of irrational choice without regret. The conflict between individual and collective rationality holds the biggest potential for welfare improvements by far. Some irrational behavior we can change on our own. But if we do not really want to change it—as with what I am calling irrational without regret—we need help. If we are all bidding up the prices of the houses in good school districts, that is not a problem any individual can solve on his own. If I am not taking enough vacation time because I am in a rat race with others, I cannot solve that problem on my own. We need some way to decide collectively in such cases—the equivalent of hockey players voting for helmet rules. The conflict between individual and collective rationality gives rise to trillions of dollars of welfare losses. And that is where the real gains are to be harvested.

Q. Your basic policy prescription for much of this, then, is a highly progressive consumption tax.

A. That is only one remedy. Basically, what we are looking to do is forge the equivalent of arms control agreements.

Q What are some of these possibilities?

A. Let us return to the problem of people working too hard. By all available evidence, if we all worked 10 percent less and took a 10 percent pay cut, we would all feel better. When the Gallup people come around and ask the question, "All things considered, how satisfied are you with your life these days?" you would get more positive responses.

Q. Is there any practical way to get to that point?

A. It is hard for professionals to cut back on work. Their bosses do

not have to pay overtime, so they are happy to get as many hours out of them as possible. But there are things we could do. We could have more national holidays. You cannot keep an academic from writing a paper on a holiday, but in fact, when there are more national holidays, people do take more vacation. We could mimic what the European countries have done with national vacation policies. They mandate longer vacation periods, and they have federal laws that say, if you do not take your vacation, you lose it.

Q Let me ask you about your new book, *The Economic Naturalist*. It is an intriguing way of introducing students to these issues. One section is called "Psychology Meets Economics." And then you pose questions and give answers. Let me ask you to answer a couple of those questions. Here is one: "Why do real estate agents often show clients two nearly identical houses even though one is both cheaper and in better condition than the other?" Do you remember that one?

A. Yes. Itamar Simonson and Amos Tversky did a paper showing that such a tactic could be effective. You know, there is the old axiom about the independence of irrelevant alternatives in rational choice theory. It says that if you add an item to a choice set that is dominated by an existing member of the choice set, it should not have any effect on the decisions that people make. There is a joke I use in the book that captures it. A guy comes into a deli and says, "What've you got?" When the counterman answers, "We got chicken and roast beef," the customer says, "I'll have roast beef." Then the counterman says, "Oh, I forgot, we also have tuna." And the customer says, "Well, in that case, I'll have chicken." Well, that violates the axiom of the independence of irrelevant alternatives. If you like roast beef better than chicken and they add tuna to the set, and you like tuna least of all, then you ought to still choose roast beef.

Q. Experimentally, that actually happens?

A. The experiment they actually did was to give students a choice between two apartments, one that was close to campus and expensive

(apartment A) and the other one that was far from campus and cheap (apartment B). If you tinker with the distance and the rent, you can get any group of students to split fifty-fifty between A and B. What you want is a cheap apartment close to campus, but that is not one of the options.

Q. The point, then?

A. People have a hard time with choices like that. You want both of the good attributes, you can only get one, and it is painful to choose one over the other. So the experimenters gave them another choice: an apartment that is not quite as near as the expensive one but is also just a little more expensive to rent (apartment C). Many students who formerly chose the distant but cheaper apartment (B) now choose the near but expensive apartment (A) because it dominates apartment C (that is, because A is both closer to campus *and* less expensive than C). When people compare A and C, the two nearer apartments, the one that is a little nearer but less expensive (A) is a clear winner. Then when they compared A to the distant apartment (B), there was a halo effect. Now apartment A is generally more attractive than it was before. So the proportion of subjects who choose the expensive, conveniently located apartment jumps substantially.

Q. To be clear, this is what actually happens in experiments. It is not rational.

A. No. Thus, the strategy for the real estate agent whose client is struggling to choose between a Victorian and a Greek revival is to show him another Victorian that is a little more expensive and in worse condition. The client will choose the better Victorian in a heartbeat over the Greek Revival.

Q. Let me ask you one more question from your book. Why does Cornell University have a reputation for a high suicide rate among students when its actual rate is well below the national average for university students?

A. Again, that comes from Simonson and Tversky. Let us say that I am trying to estimate how often an event occurs. I will try to answer the question by thinking of examples of the event. If I can think of a lot of them readily, I will conclude that it must be an event that occurs

frequently. We usually think that if something happens more often, it will be easier to think of more examples of it. The problem is that many other factors influence how easy it is to think of examples of events besides their frequency. One is salience—that is, if it is emotionally vivid, it remains in memory longer. At Cornell, it happens that in many suicides someone jumps off a bridge into one of the deep gorges that surround the campus.

Q. So it makes a lot of news.

A. It is a big event. They have to block off the streets, and the recovery crews take about three hours to drop into the gorge and retrieve the body. It is an event that sticks in the memory. Typically, suicides elsewhere do not take place like that. They typically happen with somebody consuming an overdose of a drug and dying quietly. Maybe it is not even reported as a suicide. Thus, people think suicides are more common at Cornell than elsewhere.

Q You say you have written a book of, in effect, questions and answers based in the real world because students do not take what they should from their macro and micro courses.

A. Nobody learns anything in those courses. That is the shocking empirical finding. You give students tests of basic economic knowledge six months after they have taken standard introductory courses, and you cannot tell the difference between students who took the courses and those who did not. In other occupations, it would be grounds for malpractice lawsuits.

Q. Why? Is it too formulized? Too dependent on simple memorization?

A. First, it is because we throw too much at them, a tendency to teach too much. You need to ask how much they can absorb, not how much you can show them. But more significant is the form in which we impart the information. We tend to teach it in algebraic and graphical form. That is not the easiest form for the brain to grasp. A really strong school in learning theory, called the narrative school of learning, has emerged in the past several decades. It argues that the

brain takes in new information more readily in some forms than in others. We humans essentially evolved as storytellers. It was not our inclination to grab a twig and start sketching equations and graphs in the sand when we had something to tell someone. Rather, we told a story. If we can somehow encase the main ideas we are trying to communicate in interesting stories, then the students will recall these ideas in context hundreds of times in the coming years, and they will improve their ability to think intelligently about them. The concept is to package the ideas we are trying to communicate in the form of interesting questions that they can answer with these ideas.

Q. I think it is a great idea. When people learn the algebra and are really good at it and do remember it, they still may not understand how the theory applies to the world. It is almost certainly true of many graduate students.

A. Yes, I agree. There are economists who have no clue.

Q. Last question. You say that behavioral economics is catching on in some places.

A. It is burgeoning. Every leading department now has to have a behavioral economist. This vibrant new field has had a really positive effect on economics as a discipline.