October 27, 2005

Economic Scene

Of Hockey Players and Housing Prices

By ROBERT H. FRANK

LEFT to their own devices, hockey players invariably skate without helmets. Yet when they vote in secret ballots, they almost always favor a rule requiring the gear. If this rule is such a good idea, why don't players just wear helmets on their own?

Thomas C. Schelling posed this question in his book "Micromotives and Macrobehavior," published in 1978. I had described Mr. Schelling, a professor emeritus at the University of Maryland, as the greatest living economist not to have received the Nobel Prize - a description rendered obsolete when he won it this month, jointly with Robert J. Aumann of the Hebrew University of Jerusalem.

Although the Nobel committee cited Mr. Schelling's 1960 book, "The Strategy of Conflict," history will judge "Micromotives and Macrobehavior" as the more important work. The earlier book was justly praised for framing the debate about nuclear deterrence in the cold war, while many questions in the later book seemed almost pedestrian. Yet Mr. Schelling's answers transformed the way many economists think about the relationship between competition and social welfare.

Adam Smith's celebrated theory of the invisible hand is the idea that individual pursuit of self-interest promotes the greatest good for all. When reward depends primarily on absolute performance - the standard presumption in economics - individual choice does indeed turn out to be remarkably efficient. But when reward depends primarily on relative performance, as in hockey, the invisible hand breaks down. In such situations, unrestricted choices by rational individuals often yield results that no one favors.
To explain why, Mr. Schelling observed that by skating without a helmet, a player increases his team's odds of winning, perhaps because he can see and hear a little better, or more effectively intimidate opponents. The down side is that he also increases his odds of injury. If he values the higher odds of winning more than he values the extra safety, he will discard his helmet. Yet when others inevitably follow suit, the competitive balance is restored - everyone faces more risk and no one benefits. Hence the attraction of helmet rules.

As in hockey, many of the most important outcomes in life depend on relative position. Because a "good" school is an inescapably relative concept, each family's quest to provide a better education for its children has much in common with the athlete's quest for advantage. Families try to buy houses in the best school districts they can afford, yet when all families spend more, the result is merely to bid up the prices of those houses. Half of all children will still attend bottom-half schools.

Mr. Schelling's example thus suggests a radical new perspective on the various ways societies restrict individual choice. Consider the similarity between helmet rules and workplace safety regulations. Because riskier jobs pay higher wages, workers can gain advantage by accepting them. Just as unrestricted hockey players may feel compelled to discard their helmets, workers who are free to sell their safety may realize that unless they seize the higher wages, they will consign their children to inferior schools. In each case, limiting our options can prevent a mutually disadvantageous race to the bottom.

The logic of Mr. Schelling's example also challenges the cherished theory of revealed preference, which holds that we learn more about what people value by watching what they do than by listening to what they say.

If someone chooses a risky job paying $1,000 instead of a safer one paying $900, the theory concludes that he must value the extra safety at less than $100. Maybe, but only in the sense that a bareheaded hockey player reveals that he values winning above safety. In both cases, we may learn more about what people value by examining the rules they support than by studying their individual choices.

A similar interpretation applies to the Fair Labor Standards Act, which requires employers to pay overtime premiums for all hours worked in excess of 40. Free-market economists often denounce this, noting that many workers would voluntarily work the longer hours that employers would have offered in the absence of premiums. Yet here, too, the incentives
confronting workers are much like those confronting hockey players.

Thus, as Mr. Schelling's fellow Nobel laureate, George A. Akerlof, has written, individuals can often increase the odds of promotion by working longer hours, but when others follow suit, everyone's promotion prospects remain roughly as before. The result is often a rat race in which all must work until 8 o'clock each evening merely to avoid falling behind.

Mr. Schelling is no fan of heavy-handed bureaucratic interventions. Still, as his examples make clear, there can be no presumption that the self-serving choices of rational individuals produce the greatest good for all.

The invisible hand assumes that reward depends only on absolute performance. The fact is that life is graded on the curve.

Robert H. Frank has been teaching introductory economics at Cornell University since 1972. He is the co-author, with Ben S. Bernanke, of "Principles of Microeconomics."