Docket No. 11-033-200
UIEC Ex. ___ (JRM-14d)

THINKING, FAST AND SLOW

DANIEL KAHNEMAN

FARRAR, STRAUS AND GIROUX / NEW YORK

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particular type in bargaining over arms reductions), although they actually view that good as a bargaining chip and intend ultimately to give it away in an exchange. Because negotiators are influenced by a norm of reciprocity, a concession that is presented as painful calls for an equally painful (and perhaps equally inauthentic) concession from the other side.

Animals, including people, fight harder to prevent losses than to achieve gains. In the world of territorial animals, this principle explains the success of defenders. A biologist observed that "when a territory holder is challenged by a rival, the owner almost always wins the contest—usually within a matter of seconds." In human affairs, the same simple rule explains much of what happens when institutions attempt to reform themselves, in "reorganizations" and "restructuring" of companies, and in efforts to rationalize a bureaucracy, simplify the tax code, or reduce medical costs. As initially conceived, plans for reform almost always produce many winners and some losers while achieving an overall improvement. If the affected parties have any political influence, however, potential losers will be more active and determined than potential winners; the outcome will be biased in their favor and inevitably more expensive and less effective than initially planned. Reforms commonly include grandfather clauses that protect current stakeholders—for example, when the existing workforce is reduced by attrition rather than by dismissals, or when cuts in salaries and benefits apply only to future workers. Loss aversion is a powerful conservative force that favors minimal changes from the status quo in the lives of both institutions and individuals. This conservatism helps keep us stable in our neighborhood, our marriage, and our job; it is the gravitational force that holds our life together near the reference point.

LOSS AVERSION IN THE LAW

During the year that we spent working together in Vancouver, Richard Thaler, Jack Knetsch, and I were drawn into a study of fairness in economic transactions, partly because we were interested in the topic but also because we had an opportunity as well as an obligation to make up a new questionnaire every week. The Canadian government's Department of Fisheries and Oceans had a program for unemployed professionals in Toronto, who were paid to administer telephone surveys. The large team of interviewers worked every night and new questions were constantly needed to keep the operation going. Through Jack Knetsch, we agreed to generate a questionnaire

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every week, in four color-labeled versions. We could ask about anything; the only constraint was that the questionnaire should include at least one mention of fish, to make it pertinent to the mission of the department. This went on for many months, and we treated ourselves to an orgy of data collection.

We studied public perceptions of what constitutes unfair behavior on the part of merchants, employers, and landlords. Our overarching question was whether the opprobrium attached to unfairness imposes constraints on profit seeking. We found that it does. We also found that the moral rules by which the public evaluates what firms may or may not do draw a crucial distinction between losses and gains. The basic principle is that the existing wage, price, or rent sets a reference point, which has the nature of an entitlement that must not be infringed. It is considered unfair for the firm to impose losses on its customers or workers relative to the reference transaction, unless it must do so to protect its own entitlement. Consider this example:

> A hardware store has been selling snow shovels for $15. The morning after a large snowstorm, the store raises the price to $20.
> Please rate this action as:
> Completely Fair Acceptable Unfair Very Unfair

The hardware store behaves appropriately according to the standard economic model: it responds to increased demand by raising its price. The participants in the survey did not agree: 82% rated the action Unfair or Very Unfair. They evidently viewed the pre-blizzard price as a reference point and the raised price as a loss that the store imposes on its customers, not because it must but simply because it can. A basic rule of fairness, we found, is that the exploitation of market power to impose losses on others is unacceptable. The following example illustrates this rule in another context (the dollar values should be adjusted for about 100% inflation since these data were collected in 1984):

> A small photocopying shop has one employee who has worked there for six months and earns $9 per hour. Business continues to be satisfactory, but a factory in the area has closed and unemployment has increased. Other small shops have now hired reliable workers at $7 an hour to perform jobs similar to those done by the photocopy shop employee. The owner of the shop reduces the employee's wage to $7.