CPI COMPETITION POLICY INTERNATIONAL

Volume 6 | Number 1 | Spring 2010

Behavioral Economics, Consumer Protection, and Antitrust

Michael A. Salinger

Boston University

Published in Competition Policy International (print ISSN 1554-0189, online ISSN 1554-6853) Spring 2010, Vol. 6. No. 1. For more articles and information, visit www.competitionpolicyinternational.com

Behavioral Economics, Consumer Protection, and Antitrust

*Michael A. Salinger**

In both consumer protection and antitrust, the use of standard economic analysis has generally been to limit the scope of government intervention. The interest in behavioral economics (and some of the resistance to it) stems from the belief that it justifies intervention that conventional economic analysis suggests is unwarranted. Proponents see behavioral economics as the antidote to the Chicago School poison. Opponents see it as a mutated bacterium, resistant to the economic medicine that has led to improved policy. In this article, I will provide some background on behavioral economics and assess what insights it provides for consumer protection and antitrust policy.

*Michael Salinger is Professor of Economics and Everett W. Lord Distinguished Faculty Scholar at Boston University's School of Management. He is also Managing Director at LECG. From 2005-2007, he was Director of the Bureau of Economics at the FTC.

I. Introduction

"Behavioral economics" refers to economic analysis based on a richer model of individual behavior than the rational actor model underlying mainstream economic analysis.[1] The field has attracted widespread attention for its possible relevance particularly to consumer protection regulation but also to antitrust.

Intense interest in developments in the academic economics literature can have more to do with ideology than intellectual curiosity. The interest among policy makers in behavioral economics may be a case in point. In both consumer protection and antitrust, the use of standard economic analysis has generally been to limit the scope of government intervention. The interest in behavioral economics (and some of the resistance to it) stems from the belief that it justifies intervention that conventional economic analysis suggests is unwarranted. Proponents see behavioral economics as the antidote to the Chicago School poison. Opponents see it as a mutated bacterium, resistant to the economic medicine that has led to improved policy. In this article, I will provide some background on behavioral economics and assess what insights it provides for consumer protection and antitrust policy.

THE INTEREST IN BEHAVIORAL ECONOMICS (AND SOME OF THE RESISTANCE TO IT) STEMS FROM THE BELIEF THAT IT JUSTIFIES INTERVENTION THAT CONVENTIONAL ECONOMIC ANALYSIS SUGGESTS IS UNWARRANTED.

A discussion of behavioral economics must start with some background on economics as a discipline and the role of the assumption of rational behavior in it. Section II provides this background. Section III then describes the deviations from rational behavior documented in the behavioral literature. Section IV discusses analyses of markets in which some consumers are rational and others are not, focusing on the extent to which the presence of informed, rational consumers protects those that are poorly informed and/or irrational. Section V, which is divided into three sections, discusses public policy implications of the behavioral economics literature. One of the concerns about formulating policy based on behavioral approaches concerns how to articulate and impose limiting principles. The first subsection describes two proposals in the literature. The next two subsections then turn specifically to consumer protection and antitrust policy. Section VI briefly concludes by arguing that the behavioral economics literature is not likely to give current policy makers much insight. Consumer protection policy is arguably far ahead of the literature in recognizing how individuals are sometimes irrational and in considering the tradeoffs in government intervention that takes irrationality into account. With antitrust, the behavioral economics literature may provide insight into the extent to which vigorous antitrust enforcement is sufficient to protect consumers (thus making more direct regulation unnecessary), but it does not provide much guidance on what antitrust interventions are appropriate.

II. Economics and the Role of Rationality

Common perception notwithstanding, economists do not believe that real human beings are rational optimizers. Most economic analysis concerns market phenomena, not individual behavior. Because market phenomena are inherently too complex to understand in every detail, economic analysis necessarily relies on simplifying assumptions that sacrifice realism for tractability. The rationality assumption plays so prominently in the literature because it is tractable (for people sufficiently proficient in mathematics) and yields some quite accurate predictions.[2] How accurate they are is subject to debate. Still, for predicting, say, how a mandate to increase the use of ethanol in gasoline will affect the price of corn, standard economics based on the elasticities of supply and demand is likely to be the best approach available; and richer assumptions about how people really behave are not likely to add much. This principle of making simplifying assumptions is not peculiar to economics. Cartographers do not believe that the land they are mapping is flat.

This justification for the role of rationality in economics is susceptible to three broad objections. The first concerns how well models based on the assumption of rational behavior in fact predict economic phenomena. To the extent that the justification for an unrealistic assumption lies in predictive accuracy, economists should be open to alternative assumptions that yield more accurate predictions.[3]

ECONOMISTS DO NOT MERELY PREDICT AND EXPLAIN ECONOMIC PHENOMENA; THEY ALSO ASSESS WHETHER SOME ECONOMIC OUTCOMES ARE MORE DESIRABLE THAN OTHERS.

The second possible objection is that, unlike natural sciences, economic analysis has a normative as well as a positive dimension. Economists do not merely predict and explain economic phenomena; they also assess whether some economic outcomes are more desirable than others. Arguably, this feature of economics is central to its influence on policy; and it is also the source of controversy. Even if the "predictive power" argument is persuasive with respect to the rationality assumption for positive economic analysis, the normative conclusions about market outcomes do not follow as a matter of pure logic.

A third objection is that the rationality assumption has surprisingly little empirical content in the sense that it is hard to refute. A vivid example that illustrates the point is that pedestrian accidents involving foreigners are a bigger problem in London than in most cities because visitors from countries where cars drive on the right side of the road often look the wrong way when crossing the street. This behavior is an example of what Herbert Simon referred to as "bounded rationality."[4] It reflects a purposeful pursuit of self-interest. (The pedestrians looking to the left are trying to avoid being hit by a car.) But it is based on "heuristics" or "rules of thumb," which are mental short cuts people use to make decisions that they do not have either the time or the mental capacity to think

through completely rationally. Remarkably, though, by introducing a personal preference for looking to the left, it is hard to reject the hypothesis that the pedestrian behavior is the rational pursuit of self-interest.[5]

Without a willingness to reject a "revealed preference" as being irrational, the only way to reject rational behavior is to observe actual inconsistencies. Even this is hard to do with actual behavior, as apparently inconsistent choices made at different times might reflect a change in preferences. However, it is possible to demonstrate inconsistencies in choices in laboratory settings. As will be discussed in the next section, the focus of much of the behavioral literature has been to document inconsistencies.

The combination of the three objections to the role of the rationality assumption in economics is one of the explanations for why the debates about the relative value of "Chicago-school" and behavioral approaches can be ideological. Much of the objection to economics concerns the normative conclusions about market outcomes that economists draw. But the difficulty of testing the assumptions underlying normative conclusions makes it hard to resolve scientifically the dispute among people with different predispositions about the efficiency of market outcomes and the prospects for government intervention to improve upon them.

There is another (and related) difficulty associated with resolving rationally the debate about what model of individual behavior should underlie economic analysis. The debate over the rationality assumption is likely a proxy for a more nuanced issue. If individuals behave rationally, voluntary market exchange makes both parties to a transaction better off. If so, then government intervention is unwarranted in the absence of externalities. While this argument preserves some role for the government,[6] it carves out a substantial fraction of economic activity that the government should leave alone. A proper role for government intervention becomes the relatively rare exception, not the norm.

But a dogmatic belief in the rationality of consumer decisions may not be the main basis for beliefs in limits to government intervention.

But a dogmatic belief in the rationality of consumer decisions may not be the main basis for beliefs in limits to government intervention. Consider policy toward smoking, behavior that is arguably not much different from the behavior of pedestrians from foreign countries in London. In contrast to a preference for looking to the left, however, some people do get pleasure from smoking; it is therefore harder to conclude as a matter of economic science that the decision to enjoy the short-term benefit and accept the long-term risk is irrational. Yet, in the United States and no doubt elsewhere, there is likely a consensus that starting to smoke is irrational and that it would be desirable to prevent anyone else from starting to smoke (and to help all current smokers break

the habit) if doing so were practical. Yet, there is no consensus among either the public or among professional economists—including behavioral economists—that smoking should be banned. Indeed, there may well be a consensus against a ban on tobacco products as being impractical. As with alcohol under Prohibition, a ban on smoking would likely result in a black market for cigarettes. Supply in that market would be provided by criminal organizations. Vigorous enforcement of the laws would result in prison terms for people who would not otherwise engage in criminal activity. Without vigorous enforcement, the laws would be entirely ineffective (which would reduce general respect for the law). The argument against a ban on smoking is more about the limits of government effectiveness than about consumer rationality.

While there may be a consensus that governments can legitimately discourage smoking by taxing it and disseminating information, there is likely substantial unease about how far the government should go in helping people make better decisions. What should government policy be toward decisions to drink alcohol or eat at fast food restaurants, activities that most people are able to enjoy in moderation without suffering substantial long-term harm? Yet, there is evidence that some people end up making choices they ultimately regret with respect to both. Is there a governmental role in preventing alcoholism or overeating and what should that role be? If it does have such a role, how extensive should it be? And if the government has a role in influencing people's smoking and diet decisions, what else might it involve itself in? Government policies to alter individual choices would generally affect commercial interests and therefore become the source of lobbying and political contributions. Much of the controversy surrounding behavioral economics is not about whether individuals are rational but over the competence of government to protect people against their own irrationality.

THE QUESTION THAT NEEDS TO BE ASKED ABOUT THE BEHAVIORAL ECONOMICS LITERATURE IS WHETHER IT CLARIFIES THE LIMITING PRINCIPLES THAT DIVIDE WHERE GOVERNMENT INTERVENTION YIELDS BENEFITS THAT EXCEED THE COSTS.

In evaluating the literature on behavioral economics, the issue of whether it proves that people in fact behave irrationally is a straw man. It is not just that we already know that people behave irrationally. It is that policy has long recognized that people sometimes behave irrationally and that government has some role in modifying individual behavior. The question that needs to be asked about the behavioral economics literature is whether it clarifies the limiting principles that divide where government intervention yields benefits that exceed the costs.

III. Deviations from the Rationality Assumption

If, by behavioral economics, one means any economic analysis in which individuals are not assumed to be both perfectly informed and rational, the field is vast

and a complete review is far beyond the scope of this article. The literature on deviations from rationality is somewhat more limited (although not as new as some might suspect), but imperfect consumer information is at the heart of a great deal of consumer protection policy; and some of the modern behavioral economics literature concerns the effect of imperfect information as opposed to irrational responses to the information people have.

A. IMPERFECTLY INFORMED CONSUMERS

A critic of the existing economics literature of his day once wrote, "One should hardly need to tell academicians that information is a valuable resource: knowledge is power. And yet it occupies a slum dwelling in the town of economics. Mostly it is ignored: the best technology is assumed to be known; the relationship of commodities to consumer preferences is datum." One might suspect that this quote comes from a noted Chicago school critic. In fact, it is the opening sentence to George Stigler's *The Economics of Information*.[7]

> Is it ever more efficient for the government to make decisions for consumers (rather than rely on informed consumer decisions) and, if so, what are the principles underlying those cases?

Once one recognizes that information is itself a scarce good, several questions naturally follow. First, to what extent will individuals devote the right amount of effort to becoming informed? Second, do firms have the right incentives to provide consumers with information that will help them make rational choices?[8] Third, do firms have an incentive to provide false information to consumers? Fourth, what role should the government play in the information consumers receive? Should it regulate private efforts and/or should it be an independent source of information? Fifth, is it ever more efficient for the government to make decisions for consumers (rather than rely on informed consumer decisions) and, if so, what are the principles underlying those cases?

B. DEVIATIONS FROM RATIONALITY

When James Tobin won the Nobel Prize in economics in part for his theory of portfolio choice, he was asked at a news conference to explain his work in layman's terms. After repeated attempts to get him to further simplify his explanation, he said that his Nobel Prize was for explaining the principle that investors should not put all their eggs in one basket. That prompted a cartoon of a spokesman for the Nobel committee announcing a subsequent prize for demonstrating that "An apple a day keeps the doctor away." When stated as simply as possible, academic advances particularly in the social sciences can sound trivial.

Those who have heard of behavioral economics and suspect it must have great value but have not yet read the literature might have a similar reaction to the ways in which the literature has demonstrated deviations from rational behavior.

In the behavioral economics literature, there are three major ways in which individual behavior deviates from rationality: bounded rationality, incomplete self-interest, and incomplete self-control.[9]

1. Bounded Rationality

As described above, bounded rationality means that individuals (or firms) act purposefully, but not necessarily as if they are both fully informed and perfectly rational. In the bounded rationality literature, two deviations from rational behavior play prominently. The first is that individuals exhibit systematic biases when making decisions under uncertainty. The second is that the decisions people make depend on how they are "framed."[10]

IN THE BEHAVIORAL ECONOMICS LITERATURE, THERE ARE THREE MAJOR WAYS IN WHICH INDIVIDUAL BEHAVIOR DEVIATES FROM RATIONALITY: BOUNDED RATIONALITY, INCOMPLETE SELF-INTEREST, AND INCOMPLETE SELF-CONTROL.

Neither of these results is new. Both date back at least to the work of Allais, who developed pairs of choices that demonstrated the inconsistency of choices people make. In what is known as "Allais' Paradox,"[11] people are presented with two sets of choices. The first choice is between a certain outcome of $1 million and a random outcome of an 89 percent chance of $1 million, a 10 percent chance of $5 million, and a 1 percent chance of $0. Most respondents choose the sure option of $1 million.

The second choice is between an 11 percent chance to get $1 million and a 10 percent chance to get $5 million (and $0 the rest of the time). Most people say they prefer the 10% percent chance at $5 million.

The paradox is that the choices are inconsistent with each other. In both cases, the choice the individual makes is irrelevant 89 percent of the time. (In the first case, he gets $1 million whether he takes the safe or the risky outcome. In the second case, he gets $0 regardless of his choice). Thus, the choice only matters the other 11 percent of the time. In both cases, the first choice gives $1 million over the entire 11 percent probability that the choice matters. In the second choice, the 11 percent chance of the choice mattering is divided between a 10 percent chance of $5 million and a 1 percent chance of $0. Neither choice is inherently irrational, but the choice between them cannot rationally depend on what the individual gets the 89 percent of the time that the choice does not matter.[12] Allais' paradox is an example of both themes. The irrational decision concerns risk and it appears that the decision is affected by how it is framed.[13]

The work of Daniel Kahneman & Amos Tversky, for which Kahneman received the Nobel Prize in economics in 2002,[14] was another important antecedent to the modern behavioral economics literature. In a seminal article published in *Science* entitled *Judgment under Uncertainty: Heuristics and Biases*,

they explored ways in which individual decisions under uncertainty deviate systematically from rationality and categorized the deviations as arising from three sources of bias: "representativeness," "availability," and "adjustment and anchoring."[15] "Representativeness" concerns how people assess the relative probabilities of possible explanations for information they are given. They tend to treat all possibilities as being equally likely *ex ante*, and then judge the relative *ex post* probabilities based just on how representative the facts were of the candidate explanations.[16] "Availability" is the phenomenon that people assess the relative likelihood of events based on their ability to think of examples. "Anchoring" refers to the phenomenon that people sometimes solve problems by starting with some reference point and then making an adjustment to it.

Thaler & Sunstein illustrate this anchoring phenomenon with the example of asking people to estimate the size of Milwaukee, Wisconsin, which is the biggest city in Wisconsin. Residents of Chicago on average give a higher estimate than residents of Green Bay (a small city in Wisconsin). Thaler & Sunstein's explanation is that residents of Chicago start with the population of Chicago and adjust downward. Residents of Green Bay start with the population of Green Bay and adjust upward. Both, however, make adjustments that are too small. This phenomenon of anchoring and adjustments suggest how the framing of a question can affect responses, since the question can be asked so as to provide an anchor.[17]

Modern work on bounded rationality has emphasized several behavioral biases. One is "status quo bias," which is a bias toward inaction.[18] An implication of status quo bias is that the choices people make are affected by defaults. For example, voluntary contributions to savings plans depend on the default option. If people were fully rational, their contributions would not depend on whether they have to sign up for the plan in order to participate or opt out if they wish not to participate.[19]

PROVING IRRATIONALITY WITHOUT MAKING VALUE JUDGMENTS ABOUT WHAT CONSTITUTES A RATIONAL PREFERENCE IS DIFFICULT.

Two points about the bounded rationality detected in the literature are worth noting. First, as described in the previous section, proving irrationality without making value judgments about what constitutes a rational preference is difficult. Many of the proofs of irrationality have been proofs of inconsistency. (The other way is to show that people fail to account for objective laws of probability.) These are certainly forms of irrationality, but they may not be the most important ways in which people behave irrationally. Second, the definition of irrationality focuses on systematic biases. For example, people may systematically overestimate the risk of some types of rare events. An exclusive focus on how the average response differs from the correct response necessarily misses cases in which people are right on average but some individuals make large errors in both directions.

Consider whether there is need for government regulation of skydiving. Obviously, skydiving entails some risk, but some people may enjoy it enough to justify taking the risk. Suppose some people substantially overestimate the risk of skydiving while others underestimate it with the average assessment being approximately correct. Is government intervention warranted? Those who substantially overestimate the risk will presumably choose not to jump from an airplane in flight. They might end up foregoing something they would enjoy, but few would suggest that the government should educate people that skydiving may well be safer than some of them realize. Those who underestimate the risk might, however, make a catastrophic decision. Whether or not people misestimate the risk on average is less important than whether some people substantially underestimate it.

If the skydiving example seems far-fetched, similar issues arise with respect to loans with severe default penalties. One of the systematic biases documented in the literature is that people are on average overly optimistic about their own prospects. Poll a class of students at the start of the semester about what grade they expect in the class, and the resulting distribution will entail more high grades than the actual distribution. Ask a group of people with a particular type of loan what they think their probability of default is; the average answer may well be lower than what the lender knows to be the statistical probability of default. Whatever role the government might have in protecting people from taking out loans for which they do not understand the full consequences, the need for such a policy does not require bias. It just requires that some people make large errors.

2. Imperfect Self-Control

The second major deviation from rationality documented in the behavioral economics literature is imperfect self-control. As with bounded rationality, the demonstration of imperfect self-control is from an inconsistency between choices people actually make in the short run and the decisions they say they would make. For example, suppose someone is told that they can either have $100 in one year or $101 in one year plus a day. Most people prefer the latter. Then, suppose after a year, they are told they can have the $100 immediately or $101 the next day. Many people opt for the $100 immediately. The inconsistency is that both choices entail choosing whether their one-day discount rate is greater or less than 1 percent.

Moving outside experimental settings, the phenomenon of imperfect self-control can explain why people decide to limit the options available to them. For example, some banks used to have Christmas Clubs, which were savings accounts that allowed customers to retrieve the funds only near Christmas. Since they did not yield higher returns than regular savings accounts, it is not clear why anyone with complete self-control would place limits on when they could retrieve the funds.[20] Models of lack of self-control assume that people operate in

two different states—a hot state and a cool state. When in a cool state, they recognize that they will make choices in a hot state that they would regret in a cool state. As a result, they take actions to restrict the choices that might be available to them in the hot state.

3. Incomplete Self-Interest

Lack of self-interest means that individual decision-making often reflects an interest in the well-being of others, perhaps due to some underlying sense of fairness. A well-known example concerns experimental results in the "ultimatum game."[21] Two people, John and Mary, are given $10 to divide between them. The rules of the game are that John gets to propose a split to Mary. Mary can either accept or reject it. If she accepts, each player gets the split proposed by John. If she rejects, they both get $0. In the fully rational solution to the game, John should offer to give Mary $0.01, taking $9.99 for himself. Mary would rationally accept since $0.01 is better than $0.00. When the game is played experimentally, however, the most common outcome is that the player who gets to make the ultimatum offers a more even split of the money. Whether John offers Mary more than $0.01 because of his own sense of fairness or whether he is merely protecting himself from the possibility that Mary would "irrationally" reject the $0.01 (perhaps based on her own sense of fairness), the model of fully rational behavior is at substantial odds with extensive experimental evidence.

4. Reprisal

Reduced to very simple terms, the three deviations from rational behavior documented in the behavioral economics literature come down to this: the average IQ is only 100, people sometimes make short-run decisions they regret,[22] and people sometimes act selflessly and with a sense of fairness.

Reduced to very simple terms, the three deviations from rational behavior documented in the behavioral economics literature come down to this: the average IQ is only 100, people sometimes make short-run decisions they regret, and people sometimes act selflessly and with a sense of fairness.

C. ACADEMIC CONTRIBUTIONS OF BEHAVIORAL ECONOMICS

To be sure, the previous paragraph over-simplifies behavioral economics and its contributions. The quote from James Tobin provides a suitable analogy. Tobin did not discover the principle that people should not "put their eggs in one basket" or, to put the matter less colloquially, that people should diversify their portfolios. His contribution was to develop a tractable mathematical approach to modeling such behavior.

A similar point can be made about the behavioral literature that suggests that some people make short-run decisions with respect to current consumption and savings that they ultimately regret. The literature on "hyperbolic discounting"

concerns a mathematical representation of such behavior. The mathematical representation is itself a contribution as it may lay an important foundation for models that predict economic variables (like savings and interest rates) more accurately and some of that analysis might ultimately have policy implications.

THE AREAS OF ECONOMICS WHERE BEHAVIORAL APPROACHES HAVE HAD THE BIGGEST EFFECT HAVE BEEN FIELDS WITH DOCUMENTED ANOMALIES TO EXPLAIN. THE LEADING EXAMPLE IS FINANCE.

The areas of economics where behavioral approaches have had the biggest effect have been fields with documented anomalies to explain. The leading example is finance. Because it is the field of economics with the most abundant data, it has a relatively large number of anomalies (or, at least, alleged anomalies). While some of these anomalies, such as the equity premium puzzle[23] and the excessive volatility of stock prices,[24] are controversial, enough scholars believe them to be true that they have explored whether behavioral phenomena could explain them. Another field in which behavioral approaches have been influential is macroeconomics. One of the puzzles in macroeconomics is the low rate of saving in the United States. The literature on hyperbolic discounting is an obvious explanation to consider once rational explanations have been exhausted.

In 2005, a high-profile conference in Helsinki was devoted to behavioral approaches to areas of economics besides finance and macroeconomics. The organizers of the conference did not include a paper on industrial economics because, as conference organizer Peter Diamond explained, "There was no behavioral industrial organization covered at the conference because there is not yet an audience there."[25] We will turn to this observation below in the discussion of the implications of the behavioral economics literature for antitrust.

IV. Do Markets Protect Irrational Consumers?

You find yourself in the unfamiliar city Nowheresville for the evening and it is time for dinner. You come across a restaurant called "Joe's Diner." You have no other information about it other than the sign, "Proudly Serving Nowheresville for over 15 years." How confident can you be that you will not regret the decision to eat there? How persuasive is the argument that Joe's only could have survived in the market for over 15 years if its regular customers who live in Nowheresville like the food? And if the argument is persuasive with respect to Joe's, how general is the argument that the market protects uninformed customers because only businesses that provide service that informed customers like can survive?

Analysis of markets with some informed and some uninformed customers falls under the label "behavioral economics." For example, in a financial market with some rational and some irrational investors, do market prices reflect the informa-

tion of informed investors? At one point, it had been argued informally that informed investors would be able to take advantage of any mispricing and that they would ultimately drive uninformed investors from the market. Recent theoretical analysis in finance has shown that this is not necessarily the case.[26]

With respect to non-financial markets, Salop & Stiglitz demonstrated that in a market with some informed and some uninformed buyers, businesses offering bad deals can survive.[27] No informed customers would shop there, but some uninformed customers would; and the prospect of selling to some uninformed buyers could make it possible for a business offering relatively bad deals to survive.

THE INSIGHT FROM THE SHROUDING LITERATURE IS THAT THE COMBINATION OF INFORMED CUSTOMERS AND COMPETITION DO NOT NECESSARILY PROTECT THE UNINFORMED CUSTOMERS.

The more recent behavioral economics literature that falls into this category is the work on "shrouding," or hidden charges.[28] An example of a "shrouded" charge is the price rental car companies charge for refueling cars returned without a full tank. Informed customers can avoid the charge by refueling just before returning the car. But "uninformed"[29] customers end up buying gasoline at far above the market price. The prospect that some customers will pay the high refueling charges gives the rental companies an incentive to offer lower daily rates than they otherwise could. Informed customers get a good deal on the daily rate. But those who pay for refueling might end up paying much more than they expected.

The insight from the shrouding literature is that the combination of informed customers and competition do not necessarily protect the uninformed customers.[30] The shrouded charges are a way of giving informed customers a good deal and uninformed customers a bad deal. Thaler & Sunstein illustrate the point with extended service contracts for electronic equipment, which are generally offered on unattractive terms. Informed customers refuse the offer, uninformed customers do not. The prospect of selling extended service contracts to uninformed customers induces electronics retailers to offer base prices below what they otherwise would. Informed customers get a good deal, so the inability to attract informed customers does not drive the retailers out of business. As Thaler & Sunstein explain, it is hard to make money by explaining to people that they do not need something that they would like to purchase. Similar issues can arise with virtually any form of credit (credit cards, mortgages, auto loans), with attractive base terms but high penalties for late payments, cell phones (with charges for extra minutes being shrouded), hotels (with charges for parking, internet access, and telephone usage being shrouded), video rentals (with late charges being shrouded), and so on.

V. Policy Implications

A. LIMITING PRINCIPLES

As discussed above, the question of whether real people are fully rational is a straw man. Skepticism about the policy implications of behavioral approaches stems less from a faith in human rationality than from a recognition that sources of irrationality are abundant. Ideally, policy implications would be based on a careful weighing of the costs from consumer irrationality and government imperfections. Since such an analysis is typically impractical, behavioral approaches to policy must admit some more practical limiting principle.

This point is not merely theoretical. In the 1970's, the Federal Trade Commission ("FTC") entered into a series of rule makings that at least implicitly embodied a behavioral economics approach. A particularly notorious example was the so-called "kid-vid" proceeding, in which the Commission sought to ban all advertising to children as an unfair trade practice. The Commission was subjected to substantial public and political criticism for these efforts. The Washington Post ran an editorial accusing the FTC of being a "nanny."[31] For many years, Congress failed to pass the FTC authorization. There was serious discussion of eliminating the agency. One manifestation of the self-evaluation that emerged from that period was a major change in how the Agency defined an unfair trade practice.[32]

IDEALLY, POLICY IMPLICATIONS WOULD BE BASED ON A CAREFUL WEIGHING OF THE COSTS FROM CONSUMER IRRATIONALITY AND GOVERNMENT IMPERFECTIONS. SINCE SUCH AN ANALYSIS IS TYPICALLY IMPRACTICAL, BEHAVIORAL APPROACHES TO POLICY MUST ADMIT SOME MORE PRACTICAL LIMITING PRINCIPLE.

One approach to limiting principles put forward by Camerer, Issacharoff, Loewenstein, O'Donoghue, & Rabin (henceforth, Camerer et al.) is what they refer to as "asymmetric paternalism."[33] Paternalism necessarily entails policies that prevent people from taking actions they would like to take, based on the rationale that some people are either sufficiently badly informed or irrational enough to need protection from themselves. A fundamental risk with paternalistic policies is that in trying to prevent people from taking actions they regret, they prevent people from taking actions that do in fact reflect their rational self-interest. The "asymmetry" in the term "asymmetric paternalism" refers to the difference in how policies affect the informed and the uninformed. The ideal asymmetrically paternalistic policy allows rational, informed individuals to make the choice they want and prevents irrational or uninformed individuals from making mistakes.[34]

Based on this ideal, Camerer et al. categorize interventions into four categories reflecting different degrees of intrusiveness. These are defaults, framing and information disclosure, cooling off periods, and restriction of consumer choice.

An example of a default might concern magazine or newspaper subscriptions. When a subscriber buys a one-year subscription with a credit card, the magazine might give the consumer the option of automatically renewing the subscription, requiring the subscriber to go to the effort to cancel the subscription. Since some consumers might prefer automatic renewal to avoid the effort of re-subscribing, banning automatic renewal is arguably overly intrusive. However, one might argue that public policy should force magazines to make non-automatic renewal the default, allowing those who want automatic renewal to opt in. Changing the default in principle does not prevent anyone with an informed (or, for that matter, uninformed) preference from choosing his preferred option.

The second least intrusive intervention according to Camerer et al. is information provision or framing. An example is the requirement in the Truth in Lending Act that credit providers must state loan terms as an annual percentage rate, or "APR." The rationale is that many consumers might misinterpret loan terms (by, for example, thinking that a 1 1/2 percent monthly credit card interest rate is low by failing to distinguish between a monthly and annual rate of interest). The disclosure does not hurt in any significant way those who understand loan terms but might help those who do not.[35]

The third in the Camerer et al. hierarchy of intrusiveness is cooling-off periods, which are mandated delays. An example would be a delay of a few days between when a couple applies for a marriage license and when the state issues it. The common-sense motivation for such rules is to prevent people from rushing into such a long-range commitment in the heat of passion. The underlying foundation in the psychological literature is the distinction between decisions made in "hot" and "cool" states. To the extent that delays are short, they would appear not to impose significant costs.

The fourth and most intrusive level in the Camerer et al. hierarchy is actual (and permanent) limitations on the choices (by making certain transactions illegal). Examples would include bans on products (or employment conditions) considered to be too unsafe.

Related to the Camerer et al. definition of "asymmetric paternalism" is Thaler & Sunstein's advocacy of "libertarian paternalism," a term that many will consider to be an oxymoron. (Thaler is an *eminence grise* of the behavioral economics literature. Sunstein, in addition to being a noted scholar in the area, is currently Director of the Office of Information and Regulatory Affairs ("OIRA") in the Office of Management and Budget.) They discuss the concept extensively in their recent book, *Nudge*.[36] The emphasis of the book is cases where framing seems to have a significant effect on individual behavior. Examples include changing the placement of milk relative to soda in school cafeteria lines and changing the default provisions on contributions to retirement plans by requiring people who do not want to participate to opt out rather than requiring those who do want to participate to opt in.

Despite the similarity of the terms they use, the limitation inherent in "libertarian paternalism" is much different from those in "asymmetric paternalism." The limitation in "libertarian paternalism" entails the form of the intervention. By focusing on framing and defaults, the intervention does not prevent anyone who is determined on a particular course of action from doing so. There is nothing inherent in this conceptualization that limits the situations in which the government might try to intervene. The concept seems innocuous when applied to inducing students to eat healthier food because there is likely a strong consensus (at least among adults not in the business of selling fat- and sugar-laden foods) that healthier diets for students would be desirable. Without strong principles to limit when it is appropriate for the government to try to (gently) engineer individual behavior, however, the term "libertarian paternalism" is unlikely to assuage concerns that it is simply a way of framing "big brother" to make it seem innocuous.

DESPITE THE SIMILARITY OF THE TERMS THEY USE, THE LIMITATION INHERENT IN "LIBERTARIAN PATERNALISM" IS MUCH DIFFERENT FROM THOSE IN "ASYMMETRIC PATERNALISM."

B. INSIGHTS INTO CONSUMER PROTECTION POLICY

Consumer protection policy existed before the renewed interest in behavioral economics. A question to ask about the literature is what insight it provides into that policy.[37]

Some of the existing policy fits into Camerer et al.'s fourth category of intervention. An example is FDA approval of drugs and the requirement that people obtain a prescription for some drugs. The presumed rationale for FDA regulation is that drug safety and efficacy are difficult for individuals to evaluate and there is relative homogeneity of preferences to avoid drugs that are unsafe and/or ineffective. In broad terms, FDA regulation is consistent with the new literature. In this regard, the literature might provide a useful framework for understanding why regulation is what it is, but it does not necessarily yield insights into how to improve it.

One might suspect that the new literature might yield more guidance for enforcement of the more amorphous consumer protection mission of the FTC, which is allowed to bring actions against "unfair or deceptive acts or practices." Again, though, the literature might do more to explain why FTC enforcement has developed the way it has than to provide insights into how it might improve policy. Consumer protection enforcement at the FTC has always (or at least for decades) been premised on the notion that consumers sometimes behave irrationally. If they did not, the Commission would not need to devote scarce enforcement resources to actions against sellers of products that promise weight loss without either diet modification or exercise (but with payment). In its regulation of advertising, it has long been aware of what advertisers also understand—that framing affects the choices people make. The challenge for the FTC

is to identify when the framing companies do cross the line of being either deceptive or unfair. It is not clear that the behavioral economics literature has advanced to the point where it can help the FTC identify the boundary more accurately.

Formal economics plays less of a role in consumer protection enforcement at the FTC than in antitrust enforcement. Of the several reasons why this is the case,[38] one is that the formal behavioral economics underlying the consumer protection mission is relatively underdeveloped. While it might seem obvious that further development of the behavioral economics literature should help improve policy, there are risks as well. In a discussion of the implications of behavioral economics to consumer protection regulation, Jolls argues that price ceilings such as bans on usury or price gouging reflect social norms against letting markets work.[39] Her argument may well be persuasive as a matter of positive law and economics. That is, it might explain why such laws have been passed. Most economists would view this behavioral view of the law as an argument for conventional economics as a tool for avoiding harmful economic policy. Jolls argues for an alternative use of behavioral economics in law and economics. She sees a role for legal standards to "debias" consumer decisions. In other words, she sees legal standards as protecting consumers from their own bad decisions.[40]

FORMAL ECONOMICS PLAYS LESS OF A ROLE IN CONSUMER PROTECTION ENFORCEMENT AT THE FTC THAN IN ANTITRUST ENFORCEMENT.

The recent financial crisis provides an interesting case to evaluate whether the behavioral economics literature yields insights into how to improve policies. The FTC shares responsibility with the Federal Reserve Board for enforcing Section 5 of the FTC Act with respect to financial products. In that capacity, it has attacked predatory lending practices as well as deceptive practices with respect to a wide variety of financial products from home and car loans to credit cards and payday loans. With respect to home loans, it is widely accepted that one of the factors that precipitated the financial crisis was that home loans were given to people who had high probabilities of default, particularly if housing prices fell. This raises the question of whether the crisis could have been avoided with stronger consumer protection policies that would have prevented people from taking out loans that they ultimately regretted.

The issue is not whether it would have been better if those loans had not been granted. Rather, it is whether the way to prevent such loans in the future is through consumer protection regulation and whether the failure to impose the appropriate regulations to prevent the crisis stemmed from a failure to recognize that individuals are not always rational profit-maximizers. In evaluating those issues, one needs to consider the behavior of the lenders as well as the borrowers. It should come as a surprise to no one that individuals are willing to take out loans that they have a poor chance of repaying. Whether such behavior is ration-

al or irrational, this is why banks have loan officers and why borrowers have to fill out financial disclosure forms in order to get a loan.

Why lenders issued the loans is a bigger puzzle than why borrowers were willing to take out loans for houses they could only afford if housing prices continued to rise. Some pieces of the puzzle are understood. Mortgage brokers were willing to arrange for bad loans because they received origination fees and did not bear the default risk. Why investors were willing to buy the securitized loans is more of a puzzle. At least part of the answer is that they relied on the major ratings agencies. Why the ratings agencies miscalculated the risk so badly is also subject to debate. They might have faced perverse incentives to understate risk. They might have made honest errors in the difficult science of predicting the probability of rare events. The deviations from rationality documented in behavioral economics literature do not make the short list of likely explanations for what went wrong at the ratings agencies.

THIS RAISES THE QUESTION OF WHETHER THE CRISIS COULD HAVE BEEN AVOIDED WITH STRONGER CONSUMER PROTECTION POLICIES THAT WOULD HAVE PREVENTED PEOPLE FROM TAKING OUT LOANS THAT THEY ULTIMATELY REGRETTED.

Indeed, looking at the crisis as a whole, a common explanation is that a failure in regulation and corporate governance created situations in which individuals could make large "heads-I-win-tails-you-lose" bets. The fact that, confronted with such incentives, people in financial institutions took those bets is exactly what a model based on the rational pursuit of self-interest would predict.

C. IMPLICATIONS FOR ANTITRUST

As noted above, a recent conference on behavioral approaches to areas of economics besides finance and macroeconomics (the two fields where the applications are relatively well established) did not include any discussion of industrial economics because there has been virtually no interest within modern industrial economics in applying behavioral approaches. In light of that observation, the interest in behavioral approaches to antitrust economics might seem puzzling.

In broadest terms, one of the benefits claimed for antitrust enforcement is that it obviates the need for more direct and onerous regulation. If competition is sufficient to ensure that firms act in consumers' interests, direct government involvement is unnecessary. The literature on shrouding highlights ways in which competition may not be sufficient to protect all customers. Arguably, therefore, the shrouding literature provides insights into the boundary between the reliance on antitrust and regulation.

What implications the behavioral economics literature has for how antitrust laws should be enforced is less clear. Superficially at least, shrouding relates to

bundling and tying. However, the behavior that allows firms to exploit uninformed customers is typically unbundling. For example, a relatively recent trend in the airline industry is the unbundling of the checking of bags. Interestingly, Southwest Airlines has run a major advertising campaign touting that on Southwest, "Bags fly free," meaning that Southwest ties the right to check bags to a passenger seat. If the tying were anticompetitive rather than a form of competition, it is unlikely that Southwest would be advertising the point.

One of the general reasons to be skeptical that the behavioral economics literature has important implications for antitrust is that it has focused on how individual behavior is irrational. Ironically, there is a much older behavioral economics literature, dating back to Herbert Simon's work on bounded rationality and the 1962 publication of Cyert & March's *A Behavioral Theory of the Firm*. While that literature remains influential in various business school disciplines (such as organizational behavior), industrial economists have largely ignored it for decades.[41]

A long-standing issue in the literature on firm behavior is whether mergers reflect managerial objectives rather than those of shareholders.[42] In turn, the issue is part of a broader issue about the quality of corporate governance.[43] While recent events have perhaps provided more reason to doubt the effectiveness of corporate governance, the implications for merger review are not clear.[44] Under the assumption that management is constrained to operate in shareholders' interests, the objective of merger review is to assess the relative likelihood of competitive and anticompetitive explanations for the increase in value anticipated from a merger. The possibility that a merger might destroy value arguably reduces the likelihood that it is intended to create monopoly power, but it also limits the concern about a merger challenge standing in the way of preventing efficiencies.

A LONG-STANDING ISSUE IN THE LITERATURE ON FIRM BEHAVIOR IS WHETHER MERGERS REFLECT MANAGERIAL OBJECTIVES RATHER THAN THOSE OF SHAREHOLDERS.

VI. Conclusions

My objective in this article has been to provide some background for policy makers who are wondering what behavioral economics is and what implications they should draw from it.

My guess is that most policy makers who were hoping for great insights will be disappointed.

The behavioral literature does not address the trade-off that consumer protection policy makers routinely confront. For economic policy in general and consumer protection policy in particular, the assumption of perfectly rational behavior is a straw man. Once one digs through the jargon used to describe them, the deviations from rationality that have been documented are not very surprising.

Real people are not geniuses. Real people sometimes act impulsively. Policy makers already know this. But real people are not idiots, they have mechanisms for dealing with their own impulsiveness, and government intervention is necessarily costly and imperfect. Consumer protection policy makers were struggling with how to balance bounded rationality and imperfect government intervention long before behavioral economics became a hot topic. At this point, the literature is catching up to the policy issues rather than providing insights that can lead it.

BUT REAL PEOPLE ARE NOT IDIOTS, THEY HAVE MECHANISMS FOR DEALING WITH THEIR OWN IMPULSIVENESS, AND GOVERNMENT INTERVENTION IS NECESSARILY COSTLY AND IMPERFECT.

With respect to antitrust, the focus of the new behavioral literature on individuals, not firms, severely limits the insights it can provide. As described in the previous section, there are perhaps a few implications that touch on antitrust, but they are not central to the major antitrust debates of the day.

---

1 The field of behavioral economics is quite vast and a complete survey of the literature is far beyond the scope of this article. For those seeking a more extensive review, *see* C. Camerer, S. Issacharoff, G. Loewenstein, T. O'Donoghue, & M. Rabin, *Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism,"* 151 U. PA. L. REV. 1211 (2003); P. Diamond & H Vartiainen (eds.) BEHAVIORAL ECONOMICS AND ITS APPLICATIONS (2007); and R. Thaler & C. Sunstein, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS (2008). In the Diamond & Vartiainen volume, the chapter by Bernheim & Rangel provides a clear and succinct summary of ways in which individual behavior has been documented to deviate from rationality and the issues in how to incorporate such behavioral factors into economic models. *See* B.D. Bernheim & A. Rangel, *Behavioral Public Economics: Welfare and Policy Analysis with Nonstandard Decision-Makers*, BEHAVIORAL ECONOMICS AND ITS APPLICATIONS (P. Diamond & H Vartiainen eds.) (2007).

2 The classic statement of this position is M. FRIEDMAN, ESSAYS IN POSITIVE ECONOMICS (1953).

3 Predictive accuracy was one of the justifications Cyert & March gave for their behavioral theory of a firm. *See* R.M. CYERT & J.G. MARCH, A BEHAVIORAL THEORY OF THE FIRM (1963).

4 *See*, H. SIMON, MODELS OF MAN (1957) and H. SIMON, MODELS OF BOUNDED RATIONALITY, VOLS. 1 AND 2 (1982).

5 The observation that the behavior is technically consistent with revealed preference and a strong taste for looking to the left is due to Bernheim & Rangel. *See* B.D. Bernheim & A. Rangel, *supra* note 1. Thaler & Sunstein also discuss the London pedestrian example. *See* R. THALER & C. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS 90 (2008).

6 Governments are still needed to provide public goods like defense and they can have a role in correcting externalities that arise when a transaction between two parties affects others that are not party to the transaction. The efficiency of market outcomes does not necessarily imply a distribution of income that society would consider ideal or even satisfactory, so there might be a role for government in redistributing income.

7 G.J. Stigler, *The Economics of Information*, 69, J. POL. ECON. 213 (1961).

8 G.R. Butters, *Equilibrium Distribution of Sales and Advertising Prices* 44 REV. ECON. STUD. 465 (1977).

9 P. Diamond & H. Vartiainen, *Introduction*, P. Diamond & H. Vartiainen (eds.) *supra* note 1 at 2.

10 For a more complete elaboration of deviations from rationality, *see* Thaler & Sunstein, *supra* note 1 and Bernheim & Rangel, *supra* note 5.

11 M. Allais, *Le comportement de l'homme rationnel devant le risque: critique des postulats et axiomes de l'école Américaine*, 21 Econometrica 503 (1953).

12 Although the probabilities do not match up exactly, suppose that the choice is made at the start of the Major League Baseball season in United States and Canada. Think of the 10 percent occurrence as the New York Yankees winning the World Series, the 1 percent chance being the Cincinnati Reds winning the World Series, and the 89 percent chance being any team besides the Yankees or Reds winning the World Series. In the first choice, the individual either takes $1 million for sure or, alternatively, $5 million if the Yankees win, $0 if the Reds win, and $1 million otherwise. The choice is between getting $1 million if either the Yankees or Reds win the World Series as opposed to $5 million if just the Yankees win. For both choices, the individual's decision only matters if the Reds or Yankees win. The amount one gets if someone other than the Yankees or Reds wins does not rationally affect this choice.

13 When behavioral economists say that "framing" affects decisions, they mean that people make different choices when the same information is presented in different ways.

14 Tversky died in 1996. Nobel Prizes are not awarded posthumously.

15 D. Kahneman & H. Tversky, *Judgment under Uncertainty: Heuristics and Biases*, 185 (New Series) Science 1124 (1974).

16 For example, they gave respondents a description of a person with characteristics that matched the stereotype of a librarian and asked for the relative probabilities that the person was farmer, physician, salesman, airline pilot, or librarian. Research has shown that on average, respondents give too little weight to the fact that some professions are far more common than others.

17 Thaler & Sunstein, *supra* note 1, at 23.

18 *Id* at 97.

19 Status quo bias can be understood as a way in which framing matters.

20 D. Laibson, *Golden Eggs and Hyperbolic Discounting*, 112 Q. J. Econ. 861 (1997).

21 W. Güth, R. Schmittberger, & B. Schwarze, *An Experimental Analysis of Ultimatum Bargaining*, 3 J. Econ. Behav. & Org. 367 (1982).

22 The insight that humans sometimes give in to short-run temptation with disproportionately severe long-term consequences dates back at least to the story of the Garden of Eden. Restricting attention to people considered to be economists, consider the following quote: "The man who acts according to the rules of perfect prudence, of strict justice, and of proper benevolence, may be said to be perfectly virtuous. But the most perfect knowledge of these rules will not alone enable him to act in this manner: his own passions are very apt to mislead him; sometimes to drive him and sometimes to seduce him to violate all the rules which he himself, in all his sober and cool hours, approves of." *See* A. Smith, The Theory of Moral Sentiments (1976). (The reference is to a Clarendon Press edition. The book was originally published in 1759.)

23 The equity premium puzzle is that the average return to equities so far exceeded the return to bonds that it was hard to reconcile investors' willingness to hold bonds with plausible degrees of risk aver-

sion. See R. Mehra & E.C. Prescott, *The Equity Premium Puzzle*, 15 J. Monetary Econ. 145 (1985). (With the S&P 500 now roughly 20 percent below its value a decade ago, the puzzle may not be as pronounced as it once was.)

24 See, for example, R.J. Schiller, *Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends*, 71 Am. Econ. Rev. 421 (1981) and S.F. LeRoy & R.D. Porter, *The Present Value Relations: Tests Based on Implied Variance Bounds*, 49 Econometrica 551 (1981).

25 See comments of P. Diamond in P. Diamond & H.Vartiainen (eds.), *supra* note 1, at 303.

26 J.B. DeLong, A. Schleifer, L. Summers, & R.J. Waldmann, *Noise Trader Risk in Financial Markets*, 98 J. of Pol. Econ. 703 (1990).

27 S. Salop & J. Stiglitz, *Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersion*, 44 Rev. Econ. Stud. 493 (1977).

28 X. Gabaix & D. Laibson, *Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets*, 121 Q. J. Econ. 505 (2006).

29 The customers who end up paying the late fuel charges may not literally be uninformed. The group would include those with strong preferences not to refuel and little concern for the cost and those who, due to the unfolding of travel-day events, end up not having the time to refuel.

30 Sometimes they do. As is discussed below, Southwest Airlines advertises its competitors' shrouded charges.

31 *The FTC as National Nanny*, The Wash. Post, March 1, 1978.

32 J.H. Beales, III, *The Federal Trade Commission's Use of Unfairness Authority: Its Rise, Fall, and Resurrection*, 22 J. Pub. Pol. and Mktg 192, (2003).

33 Camerer et al., *supra* note 1.

34 Camerer et al. define a successful asymmetrically paternalistic policy as one for which:

$$(p^*B) - (1 - p)\,C - I + \Delta\pi > 0,$$

where p is the fraction of boundedly rational individuals, $(1 - p)$ is the fraction of fully rational individuals, B is the benefit of the policy to the boundedly rational individuals, C is the cost to the fully rational consumers, I is the implementation costs, and π is the economic profits of companies supplying the market in question.

35 Cameron et al. consider disclosure requirements more intrusive than defaults because they might be more costly.

36 Thaler & Sunstein, *supra* note 1.

37 In 2007, the Bureau of Economics at the FTC held a conference on the application of behavioral economics to consumer protection regulation, *available at* http://www.ftc.gov/be/consumerbehavior/index.shtml. For a summary of the conference, see Joseph P. Mulholland, Summary Report on the FTC Behavioral Economics Conference, *available at* http://www.ftc.gov/be/consumerbehavior/docs/070914mulhollandrpt.pdf.

38 An important part of the explanation is that many of the FTC consumer protection actions entail fraudulent activities by "judgment-proof" parties. Liability is not a close call requiring a careful weigh-

ing of costs and benefits, and penalties are driven more by the financial resources of defendants than by a measure of economic damages.

39 Christine Jolls, *Behavioral Law and Economics*, Diamond and Varitainen (eds), *supra* note 1 at 115.

40 As noted above, the need for consumer protection may lie more in some consumers making some very bad decisions than in ways in which consumer decisions are wrong (but only slightly so) on average.

41 It is interesting to consider why there has been little interest in behavioral economics approaches in industrial economics. A possible explanation is that one of the factors that drives interest in behavioral approaches is anomalies that seem hard to explain with a model of rational behavior. With the decline in interest in cross-market empirical analysis in industrial economics, industrial economists have not done the sort of work that might be expected to yield anomalies. Anomalies may exist, however. For example, continued investment in the airline industry despite a history of massive losses should arguably be considered a major anomaly in the industrial economics literature.

42 R. Roll, *The Hubris Hypothesis of Corporate Takeovers*, 59 J. Bus. 197 (1986).

43 *See*, for example, A. Berle & G. Means, The Modern Corporation and Private Property (1932) and W.J. Baumol, Business Behavior, Value, and Growth (1959).

44 I do not mean to suggest that there are no implications. I am not aware of any analysis of them, however, and they are not transparent without analysis.