[illegible]

[1] Thanks to all the participants and to all those who helped organize the FTC conference, including Neal Reed, Alexi Charter, and Alethea Fields. Thanks to Pauline Ippolito and Paul Pautler for their input in the development of the conference and for their comments on this paper. Special thanks to Matt McDonald for his excellent research assistance in reviewing the relevant economic literature. The views expressed are mine and do not necessarily reflect the views of the Federal Trade Commission or any individual Commissioner.

This paper was written while I was a member of the FTC's economics staff. Current email: jmulholland63@gmail.com.

[2] The conference website contains presentations and related papers, as well as a transcript and video of the proceedings. It is located at http://www.ftc.gov/be/consumerbehavior/index.shtml.

for Conservatives: Behavioral Economics and the Case for 'Asymmetric Paternalism,'" which sought to apply behavioral economics findings to a number of consumer policy issues. In particular, the authors developed the concept of "asymmetric paternalism" to identify situations where government action is justified because it yields gains to unsophisticated consumers that outweigh the losses imposed on more sophisticated consumers who do not benefit from the intervention. As discussed later in this report, the asymmetric paternalism decision rule has a direct analogue in the benefit-cost calculus used by the FTC and other consumer protection agencies.

The conference began with general outlines of the basic principles incorporated in the neoclassical economic model and the challenges to this model represented by the behavioral economics paradigm. These discussions set the context for the remainder of the conference. which was devoted to three research areas, all with direct ties to consumer protection policy: marketing, mandated disclosures, and consumer choices among phone plans and credit card programs. The final session consisted of an open-ended discussion of the issues raised at the conference.

This report first summarizes each of the sessions and then concludes with a chapter describing some broad themes from the conference as well as directions for future research.

rather to build them into an economic model where the individuals are still presumed to maximize."

Lazear sees behavioral economics as an important complement to conventional economics rather than a competitor or replacement of it. Its reliance on psychological experiments has proved useful in identifying particular behavioral patterns that are more difficult to observe outside the laboratory. He notes that the "best thing about experiments is that it allows us to strip away extraneous elements and to focus on exactly the behavior that you are trying to study."

But the reliance on experimental evidence also lessens its applicability to public policy, because the results cited in the behavioral economics literature often lack external validity. One frequently cited problem is the artificiality of the laboratory setting used for the experiments, which can lead individuals to act in ways that differ from how they respond in actual market situations. This phenomenon has been described in the work of John List and others.[3] Lazear also noted another shortcoming of experimental work – its use of subjects that are not

[3] For example, Levitt and List (2006), and List (2005).

• System 2 – reasoning – slow, serial, controlled, effortful, rule-governed, flexible.

System 1 is an intuitive approach where individuals make fast decisions based on limited information and a variety of short-cut decision rules (heuristics). System 1 leads to learning, but that learning occurs slowly as observations of outcomes accumulate. This contrasts with the more deliberative System 2 thinking which more closely resembles the rational man assumption of conventional economics. The two systems are typically always in play and at times in conflict with each other. In terms of FTC policy, Camerer associates System 1 with the "ignorant, unthinking, and incredulous" focus of early FTC policy and asks whether individuals whose judgments are dominated by such reasoning are ignored because of the current emphasis on the "reasonable consumer," which he associates with System 2 thinking.

Camerer also pointed to a number of empirical issues where additional research can yield significant insights for public policy. One that has so far received insufficient attention in the behavioral economics literature (albeit with some significant exceptions) relates to differences among consumers in their decisionmaking ability. Taking account of such heterogeneity in demand is necessary in order to evaluate the arguments of Alan Schwartz and others that markets often work in such a way that the appearance of sophisticated consumers protect their more naive counterparts.[4]

Other important research topics include investigations into the extent to which consumers collect information most relevant to their particular purchasing situations ("endogeneity of thinking"); the influence of government actions on consumer behavior ("moral hazard," a topic discussed by Klick below); and the ability of consumers to learn from their past mistakes and the length of time it takes them to do so.

Finally, Camerer discussed joint work with Eric Johnson regarding "eyetracking" method that measure a person's pupil dilation and its correlation with arousal and cognitive difficulty. As described in Wang, Spezio, and Camerer (2006):

> Eyetracking software records where players are looking on a computer screen every 4 minutes. The eyetracking apparatus also measures how much subjects' pupils "dilate" (expand in width and area due to arousal). Pupils dilate under stress, cognitive difficulty, arousal and pain. Pupillary responses have also been measured in the lie-detection literature for several decades (that's why poker players often wear sunglasses if they are allowed to). These studies suggest that pupil dilation might be used to infer deceptive behavior because senders find deception stressful or cognitively difficult.

---

[4] A much cited article describing this effect is Schwartz and Wilde (1979). Schwartz (2006) provides an updated analysis taking into account some behavioral economics results. See also the Shapiro passage (1995, p. 495] cited in Gabaix and Laibson (2006), which describes a scenario where competitive equipment manufacturers "have a direct incentive to eliminate even the small inefficiency caused by poor consumer information." (As discussed in the text, Gabaix and Laibson develop models that dispute this prediction).

while an examination of actual market choices often leads to a much reduced assessment of the value of privacy to consumers.

Many defaults affect the entire market and may affect future availability of choices. If we try to choose defaults to save a subset of consumers from falling victim to a decisionmaking foible, we need to seriously consider whether that default might adversely affect other consumers or lead to a reduction in the number of options available in the future.

Jack Calfee (American Enterprise Institute) drew a distinction between regulations that rely mainly upon rules as opposed to those that are enforced on a case-by-case (rule-of-reason) basis. Although the FTC has a number of well know rules, most of the FTC mission is based on a case-by-case enforcement of unfairness and especially deception case law. Calfee views the latter approach as generally superior to broad rule enforcement and raises the concern that behavioral economics may lead to more per se rules that end up being less efficient.

In regard to research needs, Calfee believes research should focus on the actual effects of regulations. One important area to study here is the impact of information benchmarks, such as the EPA mileage rules or the FTC's tar and nicotine ratings for cigarettes. Both interventions, in Calfee's view, led to less useful information for consumers, because the rules discouraged firms from competing on product dimensions outside of the narrowly defined metrics used in the regulations. Moreover, once the alternative information has been more or less prohibited from the market, the government sanctioned metric tends to get "gamed" by the market as firms modify their product to the test and away from more meaningful performance measures.

II. MARKETING

The conventional economics of consumer protection is grounded by a model of information flows in which advertising and other marketing activities play a prominent part. It is based on modification of the standard neoclassical theory, viewing information as a scarce (and thus not free) resource to be analyzed in ways similar to other commodities in the market place. The information economics approach did not supplant the neoclassical model but rather extended it to include an explicit analysis of how information influences the behavior of both buyers and sellers. Consumers make consistent decisions that enhance their welfare, but do so under constraints that lead them to acquire less than full information. Instead of being endowed with perfect information, they are boundedly rational entities that acquire information up to the point where the marginal benefit equals9iondocesourceraseet acquire information inndedly9(l)-1.3um(etr therational e

finding that Karlan interpreted as being inconsistent with the predictions of neoclassical theory. The average effect of a psychological manipulation was large, equivalent to a one-half percentage point change in the monthly interest rate. Karlan concludes that his results demonstrate how a firm may exploit consumer biases and increase demand without lowering prices. The results also showed that some manipulations worked and some did not, emphasizing that psychological effects can be very context sensitive.

Paul Rubin (Emory) took issue with Karlan's conclusion that the credit experiment demonstrated the importance of psychological elements that are ignored by conventional economics. Rather than indicating consumers succumbing to psychological manipulations, Rubin argued that the effects the researchers did measure may be due to certain formats' success in attracting consumer attention. All of the interest rate offers were below the prevailing market rate, so the successful offers were those that best fought through the clutter of competing claims for a consumer's attention. While a finding that certain marketing presentations are better at catching a consumer's attention than others describes a psychological effect, Rubin maintains it is consistent with the neoclassical conceptualization of a rational consumer seeking to allocate scarce time through the use of efficient filtering rules. The "manipulation" is in terms of packaging the offer in a way that gets the consumer to read the advertisement, but not necessarily to purchase something that he otherwise would not.

However the Karlan results are interpreted, consumers' limited attention span and cognitive resources are clearly relevant to the implementation of consumer protection policies based on informational remedies. One manifestation of this comes in the evaluation of mandated disclosures where the required information can have the effect of directing a reader's attention away from other messages in the ad.[6] Karlan's research is quite relevant to this issue by showing how some formats appear to direct a consumer's attention to the interest rate information, while others (e.g., lottery and cell phone offers) have the opposite effect.

Laibson:

David Laibson (Harvard) discussed his joint work on economic models where a portion of the costs of a product or service is paid in the period following purchase (e.g., the purchase of a printer and follow-on "shrouded" purchases of ink).[7] The demand for these products is made up of consumers who are aware of the costs of the follow-on product (sophisticates) and those who are not (naives). Under a variety of assumptions, Laibson generates a zero-profit

---

[6] The disclosure session at the conference amplified this point, especially the Lacko/Pappalardo presentation. See generally, Craswell (2006) and the references cited in footnotes 48 and 51.

[7] Gabaix, *et al.* (2006)

equilibrium in which the price of the base good in the first period is sold at either cost or less than cost, while the follow-on good is priced monopolistically. The sophisticates do well because they are aware of the high priced follow-on good in period one and take precautions by substituting away from it in period two (e.g., by purchasing a generic printer cartridge or by arranging to have large print jobs done at work). But the naives are surprised by the high price in the second period and end up subsidizing the sophisticates d thus suffering injury in the process.

In Laibson's model, shrouding can make education of the naive consumers unprofitable for new entrants and thus the zero-profit, free-entry market equilibrium can result in too many firms, and too high a price for the shrouded attribute. His model shows that informational shrouding can flourish in highly competitive markets, in markets with costless advertising, and when the shrouding generates allocative inefficiencies.

Laibson believes that the problems of cognition and shrouding illustrated in his models are real and that they represent a challenge to the neoclassical model's claims for the ability of competition to protect naive consumers. Yet he is cautious about the ability of public policy to help naive consumers in a way that does not impose net costs on the economy. Beyond public education efforts to make consumers more aware of add-on costs, Laibson is reluctant to advocate more aggressive government interventions due to insufficient information about their effects: "I think the big open question, and I concur with many of the people who have spoken today, is it's one thing to describe and model these problems. It's quite another to know how to fix them, and I certainly don't."[8]

Alan Schwartz (Yale), commenting on Laibson's paper, said that the Laibson models contained important insights and that they point the way toward a number of useful empirical investigations designed to assess the public policy relevance of the shrouded attributes concept. The first factor concerns the proportion of demand accounted for by sophisticated consumers. Although the relationship is probably nonlinear, the greater the share of sophisticates, the more likely it is that firms will compete on the basis of the full multi-period price and will find attempts to shroud the second period attributes unprofitable. Also relevant is the degree to which the sophisticates are able to substitute away from the add-on products. Laibson's models presume some degree of substitutability; otherwise, firms may find it worthwhile to compete for the sophisticates' business by educating them on the extent of downstream costs, which in turn could lead to more competitive second-period pricing.

Echoing the point made by others at the conference, Schwartz emphasized the importance of understanding the extent to which consumers learn from their past mistakes. The Laibson model presumes that this rate of learning is low for the naive, or that demand is sufficiently

---

[8] http://www.ftc.gov/be/consumerbehavior/docs/transcript/transcriptb.pdf at p. 37.

dynamic that other initially naive consumers are constantly entering the market. These assumptions are important and may be empirically testable. Schwartz also asked whether consumer learning may be speeded up if it takes place "across context rather than within a context," i.e., does the naive consumer who gets stung in the purchase of product X turn into a sophisticate when it comes to the subsequent purchase of product Y?

The idea of "learning" in the context of Laibson's models hinges, of course, on whether or not consumers realize down the road that they had made a bad purchase because of the unexpected high add-on costs associated with their initial purchase. The field experiment research reported by Miraverte, Driscoll, and Beales shed some light on this issue by examining the extent to which consumers react to information created by their own usage patterns.

III. FTC DECISIONMAKING

Pauline Ippolito (FTC) gave a brief tutorial on consumer protection law at the FTC. Her intention was to provide the conference with a sense about how the agency thinks about the issues presented in the behavioral economics research, as well as the kinds of constraints it works under. Section 5 of the Federal Trade Commission Act provides the agency's general consumer protection authority with the statement "…unfair or deceptive acts or practices in or affecting commerce are declared unlawful." Over time, cases and policy statements have narrowed and defined the concepts of deception and unfairness.

Deception policy is the more straightforward of the two, but even here, the issues are not trivial. The easy cases involve false claims and fraud, which the Act clearly prohibits. The Act also prohibits deceptive claims more broadly, but this policy has evolved substantially over time. Early in the enforcement history of the Act, the agency adopted a very broad interpretation of its authority and brought enforcement actions against many claims, including, for instance, those judged to have the capacity to mislead the "ignorant, unthinking, and credulous." But such a broad interpretation raised serious concerns that most marketing claims might be actionable, given the abbreviated form needed for marketing media, and this could discourage otherwise truthful claims that play an important role in informing consumers and spurring competition. Over time, the development of cases at the agency reflected these concerns, and by 1983, the Deception Policy Statement more precisely defined deception as a "… representation, omission, or practice that is likely to mislead the consumer acting reasonably in the circumstances, to the consumer's detriment."

The agency today assesses deception under this policy by considering the claims consumers receive from an ad, judged in the context of the ad and background information. In that sense, the policy incorporates behavioral problems consumers might have in a particular circumstance. For instance, the agency might find an ad deceptive if the ad frames the claim in a

way that misleads substantial numbers of consumers on a material issue. Similarly, if copy tests show that a significant percentage of consumers misunderstand claims about particular types of risk or intertemporal issues, the agency might require more from the firms making claims on those issues to avoid the deception. These issues are judged from the perspective of targeted consumers, and once a claim is found to be deceptive, injury to consumers is usually assumed to exist.

Consumer testing, typically with controlled copy tests, is a relatively standard part of assessing the claims consumers take away from an ad when the claim is not reasonably obvious

Lacko/Pappalardo:

Jim Lacko and Jan Pappalardo (FTC) reported on their research into mandated disclosures for mortgages. They conducted 36 in-depth interviews with recent mortgage customers, and quantitative consumer testing with over 800 mortgage customers (Lacko and Pappalardo 2007). Their aim was to examine how consumers search for mortgages, how well consumers understand current mortgage cost disclosures and the terms of their own recently obtained loans, and whether better disclosures could improve consumer understanding of mortgage costs, consumer shopping for mortgage loans, and consumers' ability to avoid deceptive lending practices. Despite a long history of mortgage cost disclosure requirements and many legislative and regulatory proposals, little empirical evidence exists to document the effect of the current disclosures on consumer understanding of mortgage costs, consumer mortgage shopping, or consumer mortgage choice.

The potential for improving consumer understanding of mortgage costs through better disclosures was tested using prototype disclosures developed for the study. The prototype disclosures were developed for fixed-rate loans, including those with interest-only and balloon payments, but could be extended to incorporate the key features of adjustable-rate, hybrid, and payment option loans. The study's key findings:

- Current mortgage cost disclosures failed to convey key mortgage costs to many consumers.

- Prototype disclosures developed for the study significantly improved consumer recognition of mortgage costs, demonstrating that better disclosures are feasible.

- Both prime and subprime borrowers failed to understand key loan terms when viewing the current disclosures, and both benefitted from improved disclosures.

- Improved disclosures provided the greatest benefit for more complex loans, where both prime and subprime borrowers had the most difficulty understanding loan terms.

Lacko and Pappalardo drew two inferences from their work that may apply to the behavioral economics literature. First, consumer decisions that appear irrational may in fact be a rational response to a poorly designed disclosure. A second and related point is that designing information policies intended to fine-tune and counteract behavioral biases is a difficult undertaking that needs to be fully researched before being implemented. Otherwise the regulatory cure may be worse that the problem it was intended to fix.

In his comment on Lacko/Pappalaro, Eric Johnson agreed that the design of mandated disclosures can be a very tricky endeavor that requires a good deal of prior research, as well as retrospective studies of their effect. But he would go further and, citing his experience as a

marketing researcher, suggested that the FTC and other government agencies consider doing "partial rollouts" to assess the impact of the disclosures.

Johnson also emphasized the importance of understanding that consumers have a "cost of thinking" which at times may mean that the appropriate government policy is to minimize these costs by either legislating the choice for the consumer or by setting up defaults that allow consumers to avoid making hard choices.

Sydnor:

Justin Sydnor (Case Western) began with a brief overview of his research regarding how consumers make the choice of deductible level for their property insurance (Sydnor 2006). Using a sample of 50,000 home insurance policies from a standard home insurance company, Sydnor sought to explain why a significant proportion of customers elected to pay an additional premium of $95 for a $500 deductible policy (compared to a $1,000 deductible policy) when the expected value of the extra $500 in coverage amounted to less than $20 (based on a 4 percent

just his information set.

Eric Durbin (FTC), commenting on Sydnor's work agreed that consumers' choice of low deductible policies is not necessarily a mistake but rather may be consistent with their true preferences. This led Durbin to question his own advice to friends that extended warranty contracts (a form of insurance not unlike the property insurance types studied by Sydnor) are a bad deal to be avoided. Inviting reactions from the audience and the panel, Durbin asked whether the popularity of extended warranties reveals consumers true preference or whether it is a result of framing.

Comments from the audience suggested that framing was indeed important, with a number of individuals giving personal examples where one's preference for an extended warranty was dictated by how the information about the warranty was presented. Alan Schwartz stated that people respond much more to scenario information than to probability information. For example, talking to insurance customers about a deductible may trigger in their mind a scenario about an accident and thus a greater inclination to purchase more complete insurance.

Although all agreed that how the information is presented to consumers influences their choices of insurance packages (and other products and services involving probabilistic reasoning), no consensus formed regarding whether a particular frame could be adopted that would reveal one's "true" preference. As a result, behavioral research investigations such as Sydnor's raises challenging policy questions that require further work to answer.

V. PHONE CARDS

Miravete:

The next two sessions reported on research into how consumers make decisions, and in particular how they respond to new information generated by their own usage patterns. Eugenio Miravete (Texas) led off with a discussion of consumer choice among phone plans. The data came from an experiment conducted in the mid-1980s for new calling plans and differing flat rate or measured tariffs in Kentucky (Miravete and Palacios-Huerta 2004). Miraverte used a panel dataset that allowed him to observe how households reacted to the choice to remain on a flat rate scheme, previously the only one available, or to switch to a new measured tariff scheme. To minimize their phone charges, households had to determine each month whether their expected demand the following month would be above or below a certain threshold. He found that households learn rapidly to undertake optimal decisions, make no systematic mistakes, and react to potential savings of very small magnitude, typically about $5.00 per month. He found no support for models where consumers responses are determined by inertia, inattention, or impulsiveness.

Miravete also described research analyzing the impact of the introduction of a second rival in cellular markets during the 1984-92 period on the types of rate plans offered by the

disclosure implications. The first is that consumers learn the information about fees through the disclosures in the monthly statement and then forget the information later in the relationship – or they fail to take notice of the disclosure information in the beginning. In either case, mandating more prominent fee disclosures may help.

But such an informational remedy may be insufficient if the backsliding effect is due to procrastination or some other issue that is interfering with consumers' ability to make wise financial decisions. In this instance there may be a need for some type of decision aid to help consumers overcome whatever cognitive problem is holding them back from reacting to the fee information. One possibility is the setting up of automatic reminders that makes the consumer aware of the fees that are being generated.

Beales:

Howard Beales (George Washington University) analyzed a unique set of panel data in order to test behavioralist predictions in the market for new credit cards (Beales and Plache 2007) The data comes from a long-running survey of 1,600 consumers commissioned by VISA USA. In addition to basic demographic information, the questionnaire generated information about the terms of each payment card the household owns, including the annual percentage rate ("APR"), the annual fee, any rewards feature, and whether the card is a gold or platinum card. Consumers reported the balance on each card after their last payment, using a series of balance categories. Finally, consumers completed a diary detailing each transaction and the payment method used for that transaction. The analysis presented by Beales utilized data from1994, when the panels began, through 2003.

As described by Beales, rational choice and the behavioralist approach predict different consumer behavior with respect to cards with and without a rewards feature (such as cash back or airline miles). Moreover, they predict different balances over time. Beales sought to test these hypotheses to determine whether the conventional rational choice model or the behavioralist alternative can best explain the observed patterns of revolving behavior. He finds that carrying balances on the card ("revolving behavior"), when the consumer previously had not, is consistent with the predictions of the rational choice model, and, on two key variables,

contradicts the predictions of the behavioralist approach.

Beales emphasized the following predictions of the behavioral model and how they fared in his analysis:

> a) Hyperbolic discounting, the overemphasis on short-term benefits and neglect of long-term costs, implies that consumers with new rewards cards should be particularly likely to revolve. In fact, consumers with new rewards cards are significantly less likely to revolve than consumers who acquire other kinds of cards.
>
> b) Cumulative cost neglect implies that, as consumers neglect or discount the future consequences of their actions, they should become increasingly likely to revolve on a new credit card over time. The opposite effect is observed: the longer consumers have had a new card, the less likely they are to revolve on the card, whether or not it is a rewards card.
>
> c) Together, cumulative cost neglect and hyperbolic discounting imply that consumers should be particularly likely to increase revolving behavior over time on rewards cards. No statistically significant effects are observed. The time trend of revolving behavior is not significantly different for rewards cards and other cards, although the direction is consistent with the behavioral prediction

The Beales presentation generated a good deal of discussion. In his prepared remarks, Ron Borzekowski (Federal Reserve Board) brought up a number of sample selection issues that may confound interpretation of the Beales results. Those in possession of reward cards, as well as revolving credit, are not exogenously determined but rather reflect certain dynamics about credit use that in turn might influence the observed results. Borzekowski cited recent research by Ching and Hayashi (2006) that individuals with rewards cards exhibit a number of distinct characteristics. The Beales analysis controls for some of these factors but, for example, does not control for education, which appears to be a significant predictor of rewards card use.

Justin Sydnor and Rob Letzler questioned whether Beales had successfully created an empirical test that distinguishes between the behavioral and rational actor models. They suggested a number of alternative scenarios where the results observed by Beales would be consistent with predictions from a behavioral economics model. Beales agreed that alternative models based on behavioral principles could be developed, but he believed that the one he employed was more consistent with the literature. He also noted that the multitude of possible behavioral theories, each with different predicted effects, makes it difficult to use any one of them as the basis of public policy interventions.

VII. ROUNDTABLE SUMMARY

The conference ended with a roundtable discussion of the public policy issues and consumer policy by Joel Winston (FTC), Matthew Rabin (Berkeley), Pauline Ippolito (FTC), Colin Camerer (Cal Tech), and moderator William Kovacic (FTC).

Joel Winston provided comments from his perspective as a long time consumer protection attorney at the FTC, including his current position as Associate Director of the Division of Privacy and Identity Protection. In regard to deception policy, Winston pointed out that the law is quite broad in its application so that agency officials use a common sense

Laibson and others, he described a U-shaped relationship between decisionmaking ability and age, with the most problems being experienced by the young and the old.

general agreement that more evidence based on market settings is required to justify such actions. In this latter regard, there was a call for greater use of field experiments, which allow for controlled testing of behavioral hypotheses in market situations. Participants also noted the importance of not only using research to identify instances of consumer injury, also to evaluate the effectiveness of potential remedies for them.

By bringing together researchers and regulators of varying backgrounds and perspectives, we hope that the conference led to a better understanding of the empirical, theoretical, and legal issues relevant to consumer protection policy at the FTC and similar agencies. Building on that discussion, this section outlines a number of policy areas where the ideas produced at the conference can be fruitfully applied in the future.

Choice Overload:

The debate over whether consumers are getting "overloaded" with too much information predates the recent behavioral economics literature, going back at least to the 1970s. In his 1983 review paper, Rudd addressed the question: "Does the provision of more information improve consumer decision making or does it instead produce information 'overload,' and thus confusion and poorer decisions?" (p. 465). Rudd's evaluation of the relevant research led him to conclude that the disclosures have had a net positive effect, but he also recommended that policy makers shift their emphasis from the *quantity* of the information supplied to its *quality* – defined as including presentation format, the ease with which it can be processed by consumers, and the likelihood that consumers can be motivated to use it (p. 470).

Discussion at the conference indicated that the issues raised by Rudd are far from resolved. Two strands of thought at the conference regarding the manageability of choices facing consumers were apparent. The first described an increasingly diverse and confusing set of choices facing consumers, especially in the credit area and in some recently deregulated sectors such as telecom and electricity. Tim Brennan cited his research in electricity markets suggesting that the low rate of switching there may indicate a revealed preference among consumers not to choose. In contrast Eugenio Miravete and Alan Schwartz pointed out instances where increases in competition leads to a more coherent set of choices for consumers that better matches their preferences.

These contrasting views do not necessarily conflict, since they are often based on different sectors and markets, as well as different research methods. But nevertheless there are striking differences in their policy inferences that deserve further study. For example, contrast the Miravete finding that the introduction of competition into cellular markets lifted the "fog" on prices by inducing firms to offer simpler and less deceptive tariffs to the Wilson and Waddams (2005) finding for UK electricity markets that "consumers make more efficient decisions in markets with fewer competitors." The UK may be an especially fruitful area of research due to

information available to consumers simplifies their choices or makes them even more difficult and leads to yet more biased decisionmaking. Ghose and Panagiotis (2006) provides a number of useful cites to the emerging literature in this area which suggest that the issue is far from settled.

Cooling-off Rules:

Cooling-off regulations, such as the FTC's door-to-door sales rule and similar ones promulgated in the credit area, are often cited as examples of laws that successfully incorporate behavioral economics insights. In particular, there is the observation that consumers at times make purchases in emotionally or biologically "hot" states that, in a cooler and more rational state, they would not make. Mandating a cooling-off period allows consumers to reframe their choices and to give them an opportunity for rational reconsideration to overcome the influence of impulsive choice.

Notwithstanding the apparent widespread acceptance of cooling-off rules, they do not appear to have been subjected to the kind of asymmetric paternalism or unfairness analysis discussed at the conference. For example, the FTC rule appears to have been created without the

---

[11] Examples include Shanklin and King (1977), McChesney (1984) and the FTC's review of its rule, located at http://www.ftc.gov/opa/1995/10/cooling2.shtm.

[12] Information presented at a recent FTC conference on rebates indicates that a number of firms are streamlining the redemption process, with some eliminating rebates entirely. This suggests consumer dissatisfaction with rebate promotions and thus learning from past failures to follow through on redemption intentions. See the FTC Rebate Debate Conference at http://www.ftc.gov/bcp/workshops/rebatedebate/index.shtml. See also Edwards (2007) for a review of the consumer protection issues raised by rebates.

This result is consistent with theories in the marketing and behavioral economics literature

[13] FTC Releases Guidance to Media on False Weight-Loss Claims (2003), located at http://www.ftc.gov/opa/2003/12/weightlossrpt.shtm. Note, however, that there were disputes at the conference on the per se falsity of some claims.

Reaching these consumers is quite difficult and is an area where behavioral economics research could help. Interestingly, there does not appear to be much of a focus on the types of individuals most susceptible to fraudulent claims in behavioral economics research, which seems to deal with more with "normal" people who go off the tracks in certain predictable ways. An FTC report (Anderson 2004) on fraud activity provides a general profile of those most likely to be victimized by fraud, which can serve as a starting point for identifying the types of subjects that are most relevant to psychological research.

REFERENCES:

Anderson, K. (2004), "Consumer Fraud in the U.S.: An FTC Survey," Federal Trade Commission Staff Report, http://www.ftc.gov/reports/consumerfraud/040805confraudrpt.pdf

Anderson, K.(2007) forthcoming, "Consumer Fraud in the U.S.: The 2005 FTC Survey, Federal Trade Commission Staff Report,

Ariely, D. and W. Klaus (2002), "Procrastination, Deadlines, and Performance: Self-Control by Precommitment," *Psychological Science*, 13:3, 219-224.

Beales, H. and L. Plache (2007), "Rationality, Revolving, and Rewards: An Analysis of Revolving Behavior on New Credit Cards," http://www.ftc.gov/be/consumerbehavior/docs/papers/Beales_Plache_Paper.pdf

Bertrand, M., D. Karlan, S. Mullainathan, E. Shafir, and J. Zinman (2005), "What's Psychology Worth? A Field Experiment in the Consumer Credit Market," *National Bureau of Economics Research,* Working Paper No. W11892, http://www.nber.org/papers/w11892

Brennan, T. (2007), "Consumer Preference Not to Choose: Methodological and Policy Implications." *Energy Policy,* 35:3, 1616-27, http://www.rff.org/Documents/RFF-DP-05-51.pdf

Camerer, C., S. Issacharoff, G. Loewenstein, T. O'Donoghue, and M. Rabin (2003), "Regulation for Conservatives: Behavioral Economics and the Case for 'Asymmetric Paternalism,' " *University of Pennsylvania Law Review,* 151:1211, http://www.hss.caltech.edu/~camerer/paternPLR.pdf.

Ching, A. and F. Hayashi (2006), "Payment card rewards programs and consumer payment choice," *Payments System Research, Federal Reserve Bank of Kansas City,* Working Paper PSR WP 06-02, http://www.kansascityfed.org/PUBLICAT/PSR/RWP/Ching_Hayashi_Paper.pdf

Edwards, M. (2007), "The Law, Marketing and Behavioral Economics of Consumer Rebates," *Stanford Journal of Law, Business & Finance,* 12, (forthcoming 2007)

Gabaix, X., S. Agarwal, J. Driscoll, and D. Laibson (2006), "Two steps forward, one step back: the dynamics of learning and backsliding in the consumer credit market," Paper presented at *Consumer Behavior and Bounded Rationality Conference, Institute for Fiscal Studies*, London, UK, http://else.econ.ucl.ac.uk/conferences/consumer-behaviour/gabaix1.pdf.

Ghose, A. and I. Panagiotis (2006), "Designing Ranking Systems for Consumer Reviews: The Economic Impact of Customer Sentiment in Electronic Markets," http://pages.stern.nyu.edu/~aghose/wits2006.pdf.

Ippolito, P. (1986), "Consumer Protection Economics: A Selective Survey," *Federal Trade Commission,* http://www.ftc.gov/be/consumerbehavior/docs/reports/Ippolito86confintro.pdf.

Ippolito, P. (2004), "What Can We Learn from Food Advertising Policy over the Last 25 Years?" *George Mason Law Review*, 12:4, http://www.law.gmu.edu/gmulawreview/issues/12-4/documents/ProIppolito.pdf.

Kahneman, D. (2003), "Maps of Bounded Rationality: Psychology for Behavioral Economics," *American Economic Review*, 93:5, 1449-1475.

Klick, J. and G. Mitchell (2006). "Government Regulation of Irrationality: Moral and Cognitive Hazards," *Minnesota Law Review*, 90:6, 1620-1663, http://www.law.umn.edu/uploads/images/3289/Mitchell__Klick_Final.pdf.

Lacko, J. and J. Pappalardo (2004), "The Effect of Mortgage Broker Compensation Disclosures on Consumers and Competition: A Controlled Experiment," *Federal Trade Commission, Bureau of Economics Staff Report,* http://www.ftc.gov/os/2004/01/030123mortgagefullrpt.pdf.

Lacko, J. and J. Pappalardo (2007), "Improving Consumer Mortgage Disclosures: An Empirical Assessment of Current and Prototype Disclosure Forms," *Federal Trade Commission, Bureau of Economics Staff Report,* http://www.ftc.gov/os/2007/06/P025505MortgageDisclosureReport.pdf.

Lazear, E. (2000), "Economic Imperialism," *Quarterly Journal of Economics,* 115:1, 99-146. http://faculty-gsb.stanford.edu/lazear/Personal/PDFs/economic%20imperialism.pdf.

Lazear, E., U. Malmendier, and R. Weber (2006), "Sorting in Experiments with Application to Social Preferences." *National Bureau of Economics Research,* Working Paper No. 12041,

http://faculty-gsb.stanford.edu/lazear/Personal/PDFs/sorting%20in%20experiments.pdf
(revised version: http://www.nber.org/papers/w12041).

Studies Review, 2:3, 465-473.

Schwartz, A. and L. Wilde (1979), "Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis," *University of Pennsylvania Law Review*, 127, 630-682.

Schwartz, A. (2005), "How Much Irrationality Does the Market Permit?" *American Law & Economics Association,* Working Paper 29, http://law.bepress.com/cgi/viewcontent.cgi?article=1158&context=alea

Shanklin, W. and H. King (1977), "Evaluating the FTC Cooling-Off Rule," *Journal of Consumer Affairs,* 11:2, 101–106.

Shapiro, C. (1995), "Aftermarkets and Consumer Welfare: Making Sense of Kodak," *Antitrust Law Journal*, 63, 483-511.

Silk, T. (2006), "Getting Started Is Half the Battle: The Influence of Deadlines and Effort on Consumer Self-Regulation to Redeem Rewards," Working Paper, University of British Columbia.

Sydnor, J. (2006), "Abundant Aversion to Moderate Risk: Evidence from Homeowners Insurance," http://wsomfaculty.case.edu/sydnor/deductibles.pdf.

Wang, T., M. Spezio, and C. Camerer (2006), "Pinocchio's Pupil: Using Eyetracking and Pupil Dilation To Understand Truth-telling and Deception in Games," http://www.aeaweb.org/annual_mtg_papers/2007/0105_1015_0301.pdf

Wilson, C., and C. Price (2005), "Irrationality in Consumers' Switching Decisions: When More Firms May Mean Less Benefit," http://econwpa.wustl.edu/eps/io/papers/0509/0509010.pdf

Wilson, C., and C. Price (2006), "Do Consumers Switch to the Best Supplier?" http://else.econ.ucl.ac.uk/conferences/consumer-behaviour/wilson.pdf.

Wilson, C. and C. Waddams (2005), "Irrationality in Consumers' Switching Decisions: When More Firms May Mean Less Benefit ESRC," *Centre for Competition Policy*, http://129.3.20.41/eps/io/papers/0509/0509010.pdf.

Zauberman, G. and J. G. Lynch, Jr. (2005), "Resource Slack and Propensity to Discount Delayed Investments of Time Versus Money," *Journal of Experimental Psychology: General*, 134:1, 23–37.

FTC Conference on Behavioral Economics and Consumer Policy:
http://www.ftc.gov/be/consumerbehavior/index.shtml