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The Behavioral Economics of Behavioral Law & Economics

Todd J. Zywicki

George Mason University Foundation Professor of Law Antonin Scalia Law School, George Mason University, 3301 Fairfax Dr., Arlington, VA 22201 USA; Tzywick2@gmu.edu

ABSTRACT

Behavioral Law & Economics (BLE) has loudly proclaimed its victory over traditional law & economics methodologies. Nowhere has this proclamation been so loud or self-certain as with respect to claims about consumer financial decision-making. Drawing on a set of casual observations styled as empirical proof, BLE scholars have called for a variety of regulatory interventions that are claimed to be necessary to protect consumers. But examining two detailed case studies here, one involving credit card usage by consumers and the other involving claims about consumer behavior in response to cash discounts and credit card surcharges, it is shown that these claims are simply incredible, in the sense that it is literally difficult to believe that unbiased scholars would find those studies to be even slightly persuasive. Possible explanations for this disconnect between the weakness of the underlying science and the widespread social acceptance of the theories by BLE scholars are discussed.

Keywords: Credit cards, surcharging, behavioral law & economics

JEL Codes: D11, D12, D18, D91

1 Introduction

Behavioral law and economics has declared victory in its intellectual battle with traditional law and economics. If you don't believe me, you can just ask them: Professor Russell Korobkin was already asking in 2011 "What Comes After Victory for Behavioral Law and Economics?" (Korobkin, 2011) In the pages of the esteemed *Harvard Law Review* Professor Ryan Bibb and Richard

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Pildes pronounced that in the face of "mounting evidence documenting the failure of individual choice" it was time for behavioral law and economics (BLE) to declare victory as a matter of "applied social science" and get on with the political project of recognizing that the implications are inconsistent with "regulatory instruments that preserve individual choice" (Bubb and Pildes, 2014). Dozens, if not hundreds, of similar examples tolling the supposed conquest of traditional law and economics by BLE could be provided. But BLE's ascent has not been limited to the ivory tower—it has had striking influence and success in the United States and around the world over the past decade (Sunstein, 2013).

But BLE's success in these various fields of public opinion is striking for a second reason as well—because it is unrelated to any corresponding underlying theoretical or empirical support for the propositions for which BLE adherents have declared victory. Indeed, the enthusiasm for BLE theories in the legal academy itself is perhaps best recognized as the type of "bubble" of which behavioral economics itself tends to provide insight—an enthusiasm that bears little or no relationship to the underlying intrinsic value of an asset, or in this case, idea. As will be shown through a series of case studies in this article, much of academia's "settled science" approach to BLE is not grounded in any serious underlying theoretical or empirical support for the theory's claims and hypotheses, but rather an agreed sense among its proponents of the validity of the claims that is unrelated to the underlying evidence that claims to support it. As an academic enterprise BLE has many of the characteristics of a market bubble—A believes that BLE's claims are sound because B believes that BLE's claims are sound, while neither A nor B actually have evaluated the underlying soundness of the underlying evidence that supposedly supports the claims. In fact, the rapid ascent of a BLE consensus despite its weak theoretical and empirical foundations might itself reflect the biases of its adherents, such as confirmation bias, that lead them subconsciously overweight the weak empirical support for BLE and to ignore contrary evidence and theory.[1]

In short, while the extravagant claims of BLE as to the nature and extent of the underlying cognitive biases that supposedly infect consumer decision-making are—to date—unproven and in many cases simply incoherent, BLE scholars arguably suffers from the types of biases and bubble mentality that those theorists attribute to consumers. A second question, therefore, presents itself—why does academic discourse on this issue appear to be so much

[1]For purposes of this article I set aside an alternative, non-exclusive hypothesis that the widespread agreement as to BLE's validity derives from conscious ideological bias, although the fact that BLE typically provides justification for interventionist regulatory policies favored by most legal academics might provide additional subconscious support for motivated reasoning, confirmation, and other biases discussed here. In this sense, the claims of BLE are consistent with the claims of social psychologists such as Jonathan Haidt, who view individual choices about political ideology as essentially reflecting group think and motivated reasoning. (Haidt, 2013).

more prone to the indulgence of biased thinking than the actual consumers whose behavior they purport to be explaining. A full answer to that question awaits future research, but a tentative and partial hypothesis will be suggested here, namely that unlike decision-making in private markets where consumers internalize the costs and benefits of their decisions (and thus have incentives to avoid and correct errors over time) the rewards of the scholarly market bear are often unrelated to the underlying accuracy and truth of the claims being made. Instead, like a classic bubble market, academic claims are "verified" by the agreement of other academics, which is often grounded in the tendency of those researchers to engage in the same biased decision-making. This tendency for academic discourse to gravitate toward bubble thinking is exacerbated by certain characteristics of the modern scholarly marketplace, most notably the extreme ideological homogeneity of universities, particularly in especially relevant disciplines such as law and social psychology, but to a non-trivial extent, economics as well.

Three introductory caveats must be noted at the outset.

First, my focus here is on behavioral *law* and economics, not behavioral *economics*. I take as given for purpose of this discussion the validity of the basic idea of behavioral economics, namely that there are predictable, identifiable biases in individual decision-making. To be sure, this itself is a highly contestable assumption—*Wikipedia* lists dozens, if not hundreds, of supposed biases that have supposedly been identified, of which many are mutually contradictory, many of which have been subjected to only the slightest degree of rigorous analysis and testing.[2] Social psychology studies, many of which provided the foundation for BE claims, has been rocked by the so-called "replication scandal," not to mention outright fraud by some researchers.[3] For example, Economics Nobel Laureate Daniel Kahneman has admitted that in his own research he "placed too much faith in underpowered studies" of which he was not sufficiently skeptical at the time.[4] In addition, at least some supposedly well-verified claims made by BE scholars about the existence of particular biases have come under scrutiny and critique. For example, in a series of studies Charles Plott and Kathy Zeiler have raised major doubts about the existence and robustness of the so-called "endowment effect," a staple of BE theorizing (Plott and Zeiler, 2005).[5] A recent survey by David

[2]Wikipedia, "List of Cognitive Biases."

[3]See, for example, the website "Retraction Watch," which exists to track the mounting replication scandal and withdrawn studies. See "Retraction Watch," https://retractionwatch.com/.

[4]See Schimmack *et al.* (2017). As will be discussed below, it is not clear that Kahneman has fully internalized the lesson from that affair in terms of looking more closely at the methodology underlying certain BE claims.

[5]Despite this, amazingly many legal scholars have simply continued to rely on the supposed endowment effect as justification for legal and regulatory interventions without even acknowledging Plott and Zeiler's critique (Klass and Zeiler, 2013).

Gal and Derek Rucker concludes that the consensus of behavioral economists on the idea of "loss aversion" is also unfounded[6] (Gal and Rucker, 2018b). Gerd Gigerenzer has challenged the whole structure of BE's research program, beginning with the straw-man assumptions of rationality that BE theorists critique (Gigerenzer, 2015). It is too early to tell which of the others of the hundreds of supposed biases may eventually be confirmed or rejected when subjected to similar scrutiny.

Whereas behavioral economics focuses on the positive economics of identifying and confirming the existence of purported biases, behavioral *law* and economics describes the normative agenda of applying these biases to particular real-world contexts to advance legal and regulatory policies that supposedly will improve consumer welfare as a result of BE-informed policy-making. As a result, despite the weak support for many BE claims, I do not tackle that issue directly. Although, as Kahneman implicitly acknowledges in his admission that he put too much faith in underpowered studies, many of the tendencies that I will describe in this paper with respect to practitioners of BLE likely apply to BE scholars as well, as illustrated by several of the examples provided in this article.

Second, my particular focus in this article is in the application of BLE to consumer financial protection. This is for several reasons. First, because applying behavioral economics to supposedly identify problems with consumer decision-making about finances and to "nudge" consumers into supposedly better decision-making has been one of the most active areas of BLE scholarship. Second, I focus on BLE analysis of consumer financial protection because it is one of the few areas of legal scholarship where BLE theories have actually been tested and the debate has been joined. Admittedly, most of this joining of the debate has been by me. But this stands in sharp relief to other areas of BLE theorizing in law, where there has been little rigorous testing of BLE claims. One suspects that if other areas in which BLE has been applied to law, many of the claims made in those areas also would be shown to be as tenuous or invalid as those identified here. Indeed, the fact that BLE's ascendancy has been met with so little scrutiny, notwithstanding the lack of support for its claims, is itself some evidence for the hypothesis provided in this article about the operation the market for scholarly analysis.

Third, my discussion of the various case presented studies here will be summary and will focus on the particular aspects of those case studies that are most relevant and illuminating for purposes of this article. Each of the case

[6] As they summarize their conclusions, "Our main conclusion is that the weight of the evidence does not support a general tendency for losses to be more psychologically impactful than gains (i.e., loss aversion). Rather, our review suggests the need for a more contextualized perspective whereby losses sometimes loom larger than gains, sometimes losses and gains have similar psychological impact, and sometimes gains loom larger than losses" (Gal and Rucker, 2018b, p. 498).

studies discussed herein are issues that I have explored in long, extensive, and detailed analysis elsewhere. To date *none* of those critiques have been rebutted or answered by BLE scholars. I stress this point, however, because in this article I simply do not have adequate space or attention to elaborate the full evidence to support the claims on each of these points. In the limited space of this article, I focus on only two examples: credit card usage and the predicted differential response of consumers to surcharging of credit card transactions as opposed to offering a cash discount. Both of these discussions are adapted from more extensive discussions that I have provided elsewhere of credit card usage (Durkin *et al.*, 2014a; Brown and Plache, 2006) and surcharging consumer use of payment cards (Zywicki *et al.*, 2017). Although the analysis here is limited to those two examples, the analysis could be extended to other areas of consumer finance that I and others have discussed elsewhere, including household savings behavior (Zywicki, 2016), consumer use of overdraft protection (Smith and Zywicki, 2016), and mortgage choice (Zywicki, 2014).

It is important to stress that although only two of those examples will be presented here; those examples are representative of core BLE claims and ideas. Moreover, in both cases BLE scholars have urged government intervention based on their claims: new laws and regulations on credit card terms in one case and the nullification of multiple state laws and a Supreme Court rewrite of the First Amendment in the case of surcharging. As will be seen, in each case, BLE scholars have made broad and shockingly ill-informed claims about consumer behavior, the supposed ability of BE to explain that behavior in the particular ecological context in which it is found, and the confidence of using BLE insights to supposedly "improve" upon consumer decision-making. My goal is not to claim that it is not possible that at some point BLE could actually come to resemble a true science; indeed, the use of psychology to inform hypothesis-testing about consumer financial decision-making has a long history, although one that is ignored by BLE scholars. I do hope, however, to provoke some soul-searching among BLE theorists and the academic profession at large to improve their rigor in scrutinizing the claims of BLE, even when those claims are consistent with the behavioral biases of the reader.

2 Case Studies in Behavioral Law & Economics and Consumer Finance

This Part of the article provides several case studies of various topics of the application of behavioral law & economics to a series of consumer financial protection questions. As will be seen, although I cover several different areas of law and economics, certain patterns of scholarly errors arise across the array of subjects. In the last section of this article, I consider why those errors arise so consistently and whether behavioral economics itself might explain their repeated recurrence within the institutional framework of the scholarly market.

More specifically, I contend that the claims that I discuss here are so large and egregious that were the same evidence and claims to be advanced *against* BLE, they would be immediately recognized and rightfully rejected. In each case, therefore, I ask the reader to reverse the claims that are made and to suppose that mirror claims were being made against BLE. My conclusion is that it is only because these claims and studies are advanced to support BLE that they have been accepted and not subjected to rigorous and searching scrutiny. This points to larger flaws not only in the BLE research program but in the nature of the scholarly marketplace in general when authority figures make claims that confirm with the preexisting biases of individual researchers and which are consistent with the overall ideological collective beliefs of the academy.

2.1 Credit Card Usage

One of the earliest and most famous BLE applications was Professor Oren Bar-Gill's 2004 article "Seduction by Plastic," in which he applies BE concepts to contend that modern credit cards are uniquely designed to exploit consumer biases, and in so doing, have resulted in harm to consumers (Bar-Gill, 2004). As of July 2018, Bar-Gill's article has been cited 194 times in law reviews according to Westlaw's JLR database, an indicator of its influence on the legal academy.[7] He points to such features of credit cards such as introductory "teaser" interest rates, the evolution of no-annual fee cards, the provision of rewards and other free amenities such as cash-back and frequent flyer miles, all of which supposedly result in a variety of harms consumers.[8] Indeed, Bar-Gill suggests that the design of credit cards reflects the outcome of competitive dynamics that force issuers of consumer credit to design products that exploit consumer biases. In one memorable passage, for example, he contends that the replacement by credit cards of earlier forms of consumer credit, such as personal finance companies, is because supposedly "credit card financing is *uniquely* vulnerable" to exploitation of behavioral biases, namely the underestimation hypothesis.[9]

Bar-Gill's methodology in the article established what has now become the standard approach in BLE scholarship, which I have elsewhere deemed the "Just-So Stories" approach to BLE or analysis (Zywicki, 2014). Under the "Just-So Stories" approach, the author does not follow the standard approach of identifying a testable hypothesis and then acquiring data to test it. Instead, the author first identifies some existing market practice or consumer behavior that is asserted to be welfare-reducing for some consumers, usually with little

[7] Google Scholar records 400 citations to the article.

[8] As noted by Josh Wright, several of Bar-Gill's claims are incoherent or simply mathematically incorrect (Wright, 2013, 2007).

[9] Bar-Gill exhibits no evident understanding of the history of personal finance companies or criticisms of personal installment loans, which were criticized in terms similar to credit cards today.

or no supporting evidence. Then the author selects one or more items off the menu of supposed biases that BE scholars have identified. Despite the highly irregular nature of the just-so stories approach to hypothesis testing, such articles are routinely cited as providing empirical support for behavioral economics hypotheses.

In "Seduction by Plastic," Bar-Gill asserts that the design features of credit cards can best be explained as efforts by credit card issuers to exploit two alleged consumer biases—"underestimation bias" and "optimism bias." As a result of these biases, consumers are postulated to make errors systematically in their choice of card features, which leads them to welfare loss to consumers and, apparently, supra-competitive returns to credit card issuers. As noted, Bar-Gill claims that the particular characteristics of modern credit cards—no annual fees, rewards for purchases, introductory low-interest "teaser" interest rates, reliance on "back-end" finance charges, and growing reliance on behavior-based fees (such as late fees, cash advance fees, and over-the-limit fees) all reflect contract design features that prey on these biases. Essentially Bar-Gill argues that credit card issuers "seduce" consumers into overuse of credit cards by offering cards with no upfront fee, and then encourage them to use their cards by offering rewards and teaser interest rates. According to Bar-Gill, consumers fall for this seductive pitch because they mistakenly believe that they can get "free" benefits (such as rewards) and then will pay off their bill at the end of the billing cycle. Yet, according to Bar-Gill, consumers are unrealistically overoptimistic about paying their balance; instead, at the end of the billing cycle they are forced to revolve their balance and pay a finance charge. Then the next month and the following they repeat this same behavior over and over again, leading them to pay increasing finance charges month after month. Bar-Gill asserts that these biases "explain" supposed elements of credit card markets, such as consumers' supposed lack of attention to the interest rates on their cards and a supposed growth of household indebtedness over time. Moreover, Bar-Gill further contends that older forms of consumer credit—such as personal finance company installment loans—were better for consumers because they lacked the supposedly exploitative features of credit cards.

As noted, Bar-Gill makes no effort to empirically test his claims in his article; he simply identifies certain facts and provides explanations for them. Durkin *et al.* (2014b), however, identifies the testable implications of Bar-Gill's theory and test it against available evidence. In all, the authors identified 12 testable hypotheses suggested by Bar-Gill's paper and analysis—and found that all 12 of the hypotheses were rejected by available evidence. To summarize their findings, there is no evidence that the widespread adoption of credit cards has led to an "explosion" of consumer debt, that rewards cards have seduced consumers into higher debt loads, that consumers are systematically optimistic about their probability of paying off their debt at the end of the

billing cycle, or that consumers are insufficiently attentive to interest rates when they choose their cards.

Perhaps most striking was Bar-Gill's confident prediction that because credit cards provide creditors a unique opportunity to exploit consumer biases by providing immediate benefits with costs deferred (and thus systematically underestimated) to the future, "without regulatory help" debit cards, which require immediate payment, "can expect only limited success vis-à-vis the credit card" (Bar-Gill, 2004, p. 1378). As Durkin, *et al.*, note, "This prediction has fared especially poorly" (Durkin *et al.*, 2014a, p. 34). Indeed, *in the very year* Bar-Gill predicted that debit cards would never be able to compete against credit cards, debit cards passed credit cards in payments volume and has continued to widen its lead in the years since, such that in 2015 debit card payments volume was more than twice the volume of credit card payments (Federal Reserve, 2016, Figure 2). Bar-Gill identifies no "regulatory help" that would explain this trend.

In 2012, Bar-Gill revisited the question of consumer biases and credit card usage in his later book entitled *Seduction by Contract* (Bar-Gill, 2012). There he acknowledged, "Debit cards have enjoyed substantial growth in recent years" (Bar-Gill, 2012, p. 103). He even further acknowledges that this growth in debit card usage, "has come, at least in part, at the expense of credit cards" (Bar-Gill, 2012, p. 103). But despite the fact that that this development was squarely the opposite of his initial prediction, somehow the rapid adoption of debit cards is *also* consistent with the BLE theory, in that the growth of debit cards was the result of consumers becoming "more sophisticated and less optimistic about their willpower" (Bar-Gill, 2012, p. 104). Thus, according to Bar-Gill, "Only sophisticated consumers who understand the risks of credit cards will choose debit cards instead" (Bar-Gill, 2012, p. 105). Alas, even this effort to salvage the prediction (and the BLE model) retroactively founders against the available evidence; empirical studies find that consumers who revolve their balances on their credit cards—i.e., those posited to be "unsophisticated" in and over-optimistic in Bar-Gill's model—who are more likely to adopt and use debit cards than transactional users who pay their balances in full each month (Durkin *et al.*, 2014a; Brown and Plache, 2006; Zinman, 2009; Emery *et al.*, 2008).

In contrast to the ramshackle BLE explanation, standard economics provides a straightforward explanation for the growth in debit card usage, both in general and its adoption by credit card revolvers. First, most of the growth in debit card usage had nothing to do with substitution from credit cards by so-called "sophisticated consumers," but instead from consumer and merchant abandonment of checks. For decades checks were by far the most popular non-cash payment device. In 2000, for example, checks were used in over 40 billion transactions, whereas credit cards were used in about 15 billion and debit cards in fewer than 10 billion transactions. By 2015, by contrast, checks

usage had been cut more than in half (to under 20 billion annual transactions) whereas credit card usage had doubled to about 30 billion annual transactions and debit cards had increased more than seven-fold, to 60 billion transactions per year (Federal Reserve, 2016, p. 4, Figure 2). The rise in debit card usage is mirrored by a decline in check usage. Moreover, as noted, credit card usage has not declined in absolute or percentage terms, but has also risen at the expense of checks, as transactional use of credit cards (where the consumer pays off the entire balance every month) has increased faster than revolving use, in large part because of the growth of rewards for purchases.[10] Second, the observation that credit card revolvers are is more likely to switch to debit cards than transactional users can be readily explained by standard neoclassical models of consumer cost minimizing behavior. Transactional users can take advantage of the "float" during the period of the monthly billing cycle plus grace period and can avoid paying finance charges by paying off the bill in full at the end of that period. Revolvers, by contrast, have to pay finance charges on the entire accrued balance during that period, thus they do not have the opportunity to benefit from float (Zinman, 2009). Thus, not only does the empirical evidence reject Bar-Gill's initial hypothesis, it doesn't even explain his retroactive attempt to fit his theory to past data.

For current purposes, however, what is significant about this discussion is not Bar-Gill's initial prediction that debit cards would never be able to compete with credit cards or that even the revised explanation of growing "consumer sophistication" was incorrect even when applied to the data, even retroactively. Instead, of current interest is Bar-Gill's methodology—when confronted with evidence that he acknowledges is inconsistent with his hypothesis (that debit card usage has grown rapidly despite a lack of regulatory intervention) he does *not* interpret this evidence as rejecting the BLE hypothesis. Instead, he attempts to salvage the model by simply *asserting* that consumers had "become more sophisticated and less optimistic about their willpower" in the eight years between the publication of his article and his book. Yet he provides no evidence or explanation for that consumers had become more sophisticated. He provides no evidence that consumers were "unsophisticated" about credit card pricing in 2004 even though credit cards and other forms of revolving credit (such as at department stores) had been around for decades at that point. He also provides no explanation for how consumers supposedly all of a sudden caught on to the tricks of credit card issuers during that eight-year period. He provides no explanation for the actual pattern of uptake of debit card users by credit card revolvers. Instead of reconsidering the validity of the model, however, he simply

[10]The fact that transactional use has increased faster than revolving use is also inconsistent with BLE theory. This increase in the use of credit cards for transactional use, rather than revolving, has been accelerated by the passage of the Durbin Amendment to Dodd-Frank, which largely led to the elimination of rewards on debit cards, leading many consumers to switch from debit to credit for day-to-day transacting.

concludes that the theory is still valid by asserting consumers "became more sophisticated and less optimistic" but provides no evidence to support that interpretation of the facts. This approach hardly deserves to be called a theory.

Notably, this failed prediction about debit card adoption is not a mere quibble, but it actually goes to the heart of the theory laid out in the article.[11] The core claim of Bar-Gill's initial model was that consumers are "uniquely" prone to exploitation of behavioral biases by the structure of credit card pricing because credit cards offer immediate gratification (no annual fee or per-transaction fee combined with rewards that provide incentives to use cards for transactions) but deferred costs (no cost to the consumer unless he revolves his balance or incurs behavior-based fees), whereas debit cards require immediate payment. Bar-Gill claims that this asymmetry in the timing of benefits versus costs enables credit card issuers to prey on consumers' limited self-control and cognitive biases because consumers will underestimate the likelihood that they will revolve their balances at the end of the billing period. This, in turn, leads consumers to *overweight* the short-term elements of the credit card contract (no annual fee, teaser interest rates, and rewards) and to *underweight* the key long-term element of the card contract, the interest rate charged on balances that are revolved. As Bar-Gill frames the hypothesis, "Due to the underestimation bias, consumers are insensitive to interest rates. They are, however, quite sensitive to the annual fee. Thus, competition concentrates on the annual fee dimension. Issuers attract consumers by offering low (or zero) annual fees and then extract significant interest payments from those consumers." As a result, "interest rates and late and over-limit fees are set above marginal cost, since consumers are insufficiently sensitive to variation in these long-term elements of the credit card price" (Bar-Gill, 2004, pp. 1402–1403).[12]

At the time that Bar-Gill made that claim, finance charges on revolving credit card balances amounted to roughly 80 percent of the revenues of credit card issuers (today that figure has declined to about two-thirds due to the growth in interchange fee revenue). (Durkin *et al.*, 2014a, p. 347, Figures 7.1 and 7.2). Thus, the claim that consumers are insufficiently attentive to interest rates as the key long-term element of the contract was the fundamental backbone of his "seduction by plastic" argument—consumers were enticed into using their cards for transactions in the mistaken belief that they would pay off their balances at the end of the billing cycle but when the bill came due they suddenly discovered that they were unable to do so, thereby forcing them to revolve their balances and enabling issuers to "extract significant

[11]Moreover, even though BLE theories claim to identify universally applicable biases in human cognition, BLE also provides no explanation for the relative rates of debit card adoption and use in the United States versus other countries.

[12]It should be evident by now that Bar-Gill offers no evidence for the claim that interest rates and behavior-based fees are set above marginal cost but simply asserts it as a logical consequence of the model and thus assumes it to be the case.

interest payments from those consumers." Again, the claim is simply asserted as a just-so story—while it was true that consumers paid billions of dollars in finance charges to revolve balances on credit cards, Bar-Gill's contention that it was because of the underestimation and optimism biases was merely asserted, not demonstrated.

But even though he did not actually test the hypothesis, it is testable. And as with the model's prediction about debit card uptake, this prediction has also not well in empirical testing.[13] More relevant, however, is that as with his prediction that debit cards would never catch on with American consumers, Bar-Gill himself apparently abandoned this claim in the period between writing his article and his book. In *Seduction by Contract* he writes:

> Salience is fluid, evolving over time. A non-salient price or term can eventually become salient. For example, before the early 1990s, the annual fee was salient to consumers and issuers competed by lowering or waiving the annual fee. At the time, the interest rate—the basic interest rate for purchases—was not salient to consumers. Accordingly, issuers did not compete on interest rates. This changed in the early 1990s: Consumer awareness of the purchase Annual Percentage Rate (APR) increased and interest rates decreased as well (Bar-Gill, 2012, p. 95).

By now, the punchline should be obvious—the claim that long-term interest rates suddenly became "salient" after decades of "non-salience" is simply made up. There is no evidence that long-term interest rates were non-salient "before the early 1990s," there is no theory as to what happened that supposedly made interest rates salient to consumers, or that consumer awareness of the purchase APR actually increased, or any other aspect of his claim. In fact, it has long been understood that consumer borrowing on credit cards is responsive to interest rates and, even more relevant, that those who revolve balances on their credit cards are more aware of their APR than those who do not and that they also are more likely to shop for a credit card by focusing on the APR than those who do not revolve (Zywicki, 2000; Durkin *et al.*, 2014a).[14] That people who borrow are more aware of their interest rate than those who do not is hardly a startling conclusion but one in which it appears that Bar-Gill never considered testing against available empirical evidence.

[13]Durkin, Elliehausen, and Zywicki review the extensive evidence that rebuts the hypothesis (Durkin *et al.*, 2014a).

[14]Bar-Gill goes on to argue that once consumers supposedly starting paying attention to credit card interest rates, issuers instead shifted to competition on other supposedly "non-salient" dimensions, such as behavior-based fees. Yet he still provides no discernible definition of how one can determine whether a given fee is salient or non-salient. For example, he points to fees for credit card cash advances—but aren't those fees likely to be salient to the small number of consumers who actually take out a cash advance on a credit card? One will search in vain for a theory as to how to distinguish a salient from a non-salient term.

Other examples could be multiplied. Moreover, this discussion doesn't touch upon the lack of empirical evidence for BLE's claims about credit cards or the absence of even coherent empirical testing, such as studies that have simply assumed that the distribution of consumer errors with respect to credit cards are single-tailed, without even asking whether those errors are unbiased (See Durkin *et al.*, 2014b, pp. 40–42). Other studies have simply misunderstood the law, resulting in fundamentally flawed studies.[15]

What these examples are intended to show, therefore, is not merely the lack of empirical evidence for BLE, a task which I have done exhaustively elsewhere. Instead, the point of the two examples provided here—of debit cards and long-term interest rates—is to show the "just-so story" nature of BLE theorizing. When the predictions made in 2004 failed spectacularly over the next few years (indeed, were actually inaccurate *when they were written*), Professor Bar-Gill did not take this as a rejection of his initial hypotheses. Instead, he simply retrofitted his theory to explain the supposed change in the data—while providing *no* evidence to support either the initial or revised theory. A theory that can be retrofitted to fit any factual outcome hardly deserves the name of a theory.

2.2 Credit Card Surcharging

Analysis of the consumer welfare effect of permitting surcharging of payment card transactions by merchants illustrates different elements of the incoherence of BLE theories, although it too illustrates some aspects of the just-so story characteristics and confirmation bias of BLE analysis of consumer usage of credit cards in general.

The question of whether merchants should be permitted to surcharge payments card transactions has become especially relevant in recent years because of a Supreme Court case of *Expressions Hair Design v. Schneiderman*.[16] To oversimplify the basic issue in *Expressions* to the relevant question, the case dealt with legal challenges to laws that exist in many states that prohibit merchants from imposing a surcharge for use of a payment card in a transaction. Of particular interest, however, is that although imposition of a *card surcharge* is prohibited, merchants in all or virtually all of those states are permitted to offer a *cash discount*, or more precisely, a discount on any other type of payment mechanism.[17]

[15] See Durkin *et al.* (2014b, pp. 42–52) which discusses flawed studies of supposed "shrouded fees" in credit card pricing that rest on fundamental misunderstandings of the law the effects of which the authors purport to be examining.

[16] 137 S. Ct. 1144 (2017).

[17] Although the merchants insisted on calling it a cash discount, in fact it would apply to any form of payment. Thus, for example, Target offers a 5% discount on all purchases made using its store-branded card, even though the cost to Target of consumer payment by credit card clearly exceeds the cost of using cash.

Merchants sued in several states challenging the laws. Although the plaintiffs admitted that a card surcharge and cash discount are *mathematically* equivalent, the plaintiffs argued that the two are not equivalent in the way in which they are perceived by consumers. In particular, relaying heavily on claims drawn from BLE such as the endowment effect and loss aversion, the plaintiffs argued that consumers would exhibit a greater degree of responsiveness to a surcharge than to a cash discount. As a result, the plaintiffs argued that the label that was used actually mattered—that they should be allowed to use the term "surcharge" instead of "discount" as calling the price difference a "surcharge" would cause more consumers to forego using a card than offering a "discount."

The *Expressions Hair Design* case (and its sister cases in other states) is of particular interest because it represents one of the first efforts to try to induce courts (as opposed to legislatures or regulators) to adopt BLE theories into their analysis (Zywicki *et al.*, 2017). And the effort was remarkably successful—remarkable in the sense that several courts came to unquestioningly accept the assertions of the plaintiffs with respect to BLE theories as valid. The case is also of interest because the plaintiff's efforts to introduce BLE theories before the Supreme Court were joined by an *amicus curiae* brief of "Behavioral Economists" at both the *cert* petition[18] stage and the merits stage of the case, which included among its notable signatories, Daniel Kahnemann.[19] I, along with several others, authored an alternative *amicus* brief that argued (based in large part on a law review article that I co-authored that critiqued the BLE argument) that the BLE theories advanced by the plaintiffs were insufficiently theoretically specified and empirically supported to serve as a policy basis to strike down the state laws in question—which included, among its signatories, Vernon Smith.[20]

Again, the discussion to follow will not revisit all of the theoretical and empirical problems with the BLE theory of surcharging. Instead, I will focus on some of the more glaring puzzles of BLE claims, and in particular, the apparent suspension of typical standards of scientific skepticism and analysis with respect to some of the claims that have been made.

The problems start with the BLE theory itself. The BLE scholars assert that behavioral economics concepts support the claim that consumers will benefit from allowing merchants to impose surcharges. Yet the United Kingdom's Office of Fair Trading ("OFT") has concluded that surcharging—what it refers to as "drip" pricing—is *harmful* to consumers (Office of Fair Trading, 2012).

[18]See Brief of Scholars of Behavioral Economics as Amici Curiae in Support of Petition for Writ of Certiorari, Expressions Hair Design, 137 S. Ct. 1144 (No 15-1391) ("Behavioral Economists Cert. Brief").

[19]Brief of Scholars of Behavioral Economics as Amici Curiae in Support of Petitioners at 2 ("Behavioral Economists Merits Brief"), Expressions Hair Design, 137 S. Ct. 1144 (No. 15-1391).

[20]Brief of Amici Curiae International Center for Law & Economics and Scholars of Law and Economics in Support of Respondents, Expressions Hair Design v. Schneiderman, 137 S. Ct. (No. 15-1391) (hereinafter "ICLE Brief").

Ironically, the OFT's reasoning relies on exactly the same concepts that the American scholars claim supports surcharging—supposed consumer biases such as the endowment effect, loss aversion, commitment bias, and prospect theory. According to the OFT, those biases simply attach to a different stage of the transaction—once a consumer has gone to the effort to go to a store and pick out an item (or more realistically, waded through multiple screens on an online shopping platform) the consumer is unlikely to terminate the sale when he or she reaches the end of the checkout process and is suddenly confronted with a higher price. According to the OFT, this is because once a consumer has selected an item to purchase, he becomes attached to the goods and will later suffer a psychological harm from giving it back. Thus, the OFT concludes that in most cases the consumer would still end going through with the transaction and would just pay the higher price, although they felt "cheated and annoyed" by doing so (OFT, 2012, p. 9).

Well, which is it? Are the American scholars correct that the imposition of a surcharge on payment cards will lead consumers to use a different payment device? Or is the OFT correct that consumers will nevertheless go through with the sale and that permitting surcharges and other "drip pricing" fees will simply lead consumers to pay more than they expected and undermine price transparency in the market? In fact, after comparing drip pricing to a number of different questionable pricing practices used by merchants, the OFT concluded that drip pricing resulted in, by far, the largest welfare loss for consumers of any pricing strategy that was studied (OFT, p. 8) and that drip pricing resulted in "substantially" more errors by consumers in finding the lowest price of any of the pricing strategies that were examined (OFT, 2012, p. 87 Table. 5.19, p. 56 Table 5.1).

The issue here is not the empirical support for either the theories of the US scholars or the UK's Office of Fair Trading.[21] What matters is that even assuming that consumers actually suffer from those supposed biases (framing, loss aversion, etc.), BLE theory is so vague and elastic that exactly the same biases applied in exactly the same context—the imposition of a surcharge on payment by a credit card—can be relied on to justify squarely contradictory conclusions about how consumers supposedly will behave under the influence of particular biases in a particular decision-making context. On the other hand, as this example well illustrates, behavioral economics concepts can be conscripted to provide "just-so stories" in support of just about any proffered theory, as well as its opposite (Zywicki, 2014).

Given the lack of empirical support for their claims, much less its theoretical indeterminacy, how did the American BLE scholars reach the conclusion

[21] Although it should be acknowledged that at least the OFT had some evidence to support its claims, unlike the hand-waving and unsupported assertions of American BLE theorists in their initial brief. It should also be recognized that the OFT's findings, to the extent that they are valid, are also consistent with a neoclassical model of consumer choice.

that permitting surcharging would induce consumers to switch to a different payment device instead of the OFT's opposition conclusion? The argument fundamentally traced back to off-hand musing by economist Richard Thaler in a journal article in 1980. The entirety of Thaler's analysis in that article is reproduced here:

> Other kinds of evidence in support of the endowment effect hypothesis are less direct but perhaps more convincing. I refer to instances in which businesses have used the endowment effect to further their interests.
>
> Credit cards provide a particularly clear example. Until recently, credit card companies banned their affiliated stores from charging higher prices to credit card users. A bill to outlaw such agreements was presented to Congress. When it appeared likely that some kind of bill would pass, the credit card lobby turned its attention to form rather than substance. Specifically, it preferred that any difference between cash and credit card customers take the form of a cash discount rather than a credit card surcharge. This preference makes sense if consumers would view the cash discount as an opportunity cost of using the credit card but the surcharge as an out-of-pocket cost (Thaler, 1980, p. 45).

As noted in the *amicus* brief I filed in connection with other scholars, the academic literature that claims that it has been shown that surcharging is more effective than discounting is "mostly a *matryoshka* doll of nested citations ultimately leading back to" Thaler's article (ICLE Brief 2017). Yet, as should be clear, Thaler presents no empirical research and his claim is little more than speculation and supposition. Yet every subsequent article on the subject of surcharging cites Thaler's article, claiming that it demonstrated differential consumer responses to surcharging versus discounting.

Tversky and Kahneman, for example, adopted Thaler's analysis as if it had been demonstrated as opposed to merely idle speculation, writing, "Thaler (1980) drew attention to the effect of labeling a difference between two prices as a surcharge or a discount. *It is easier to forgo a discount than to accept a surcharge because the same price difference is valued as a gain in the former case and as a loss in the latter.* Indeed, the credit card lobby is said to insist that any price difference between cash and card purchases should be labeled a cash discount rather than a credit surcharge" (Tversky and Kahneman, 1986, p. S261).

By 1991, Thaler's speculation had been upgraded to the status of an explanation, apparently merely through repetition and the passage of time, as no new empirical or theoretical support had been provided in the meantime. Writing in the *Journal of Economic Perspectives*, Kahneman and Thaler, together with Jack Knetsch, asserted, "Imposing a surcharge (which is likely

to be judged a loss) is considered more unfair than eliminating a discount (a reduction of a gain). This distinction explains why firms that charge cash customers one price and credit card customers a higher price always refer to the cash price as a discount rather than to the credit card price as a surcharge (Thaler, 1980)." No evidence was provided for the claim; the sole citation was to Thaler's 1980 article.

Writing in the *Harvard Law Review* in 1999, law professors rely on the claims in Tversky and Kahneman's 1986 article—which, of course, cited only Thaler's earlier musings as support—as authority to support their own similar musings:

> Much attention has been given to the notion of offering cash discounts rather than credit card premiums. "Indeed, the credit card lobby is said to insist that any price difference between cash and card purchases should be labeled a cash discount rather than a credit surcharge." [citing Tversky and Kahneman, 1986, p. S261] The credit card industry does so because a "cash discount" takes advantage of framing effects. As we discussed in our companion article, the frame within which information is presented can significantly alter one's perception of that information, especially when one can perceive the information as a gain or a loss. By avoiding the perception that paying by credit card results in a loss, gas retailers also avoid a decrease in demand from credit card consumers (Hanson and Kysar, 1999, p. 1441).

By the time law professor Adam Levitin advocated for permitting surcharging on credit cards, Thaler's supposition had been upgraded to an *explanation*, "In the credit card context this means, as Richard Thaler has explained, 'consumers would view the cash discount as an opportunity cost of using the credit card, but the surcharge as an out-of-pocket cost.' Surcharges are perceived as a loss, but discounts are perceived as a gain" (Levitin, 2008, p. 1351). As a result, after 28 years, still no evidence had been provided for Thaler's supposition (including by Thaler himself), yet the claim had become established as an "explanation," apparently through mere repetition.

To reiterate, the point for current purposes is not whether Thaler's claim is correct (as noted, the UK's OFT has claimed otherwise). The point is that Thaler's claim is simply a made-up, just-so story that has been treated by subsequent BE and BLE scholars as if had provided empirical verification of the theory. And until recently, *it was the only basis* for the claims—for example, in each of the Kahneman articles, no other support is cited other than Thaler's 1980 hand-waving speculation.[22] Thus, as we noted in our brief, the supposed authority for the claim was nothing more than a *matryoshka* doll

[22]Later Cass Sunstein would cite nothing at all to support the assertion, as if to suggest it was little more than obvious, conventional wisdom (See Sunstein, 2003).

of citations stacked on top of Thaler's musing. Yet, this supposedly provided justification for courts to re-write the Constitution in order to strike down decades-old consumer protection laws.

Thus, in the Behavioral Economists Cert. Brief to the Supreme Court *amici* rest on Thaler's claims:

> Thus, the negative feeling of loss triggered by having to pay a surcharge is more pronounced than any positive feeling that might be generated through gaining a discount.
>
> The forgoing psychological effects have a material impact on consumer behavior when the law prohibits framing a price difference as a credit-card "surcharge" rather than as a cash "discount." When consumers are offered a small discount for paying in cash, they are often willing to ignore it for the sake of convenience, treating the discount as a lost opportunity cost. When consumers are asked to pay a premium on top of the perceived base price, however, they perceive it as an out-of-pocket cost. Richard Thaler, *Toward a Positive Theory of Consumer Choice*, 1 J. Econ. Behav. & Org. 39, 45 (1980). As a result, "people will more readily forgo a discount than pay a surcharge. The two may be economically equivalent, but they are not emotionally equivalent." [quoting Daniel Kahneman, *Thinking, Fast and Slow* (Kahneman, 2013, p. 364)]. Thus, surcharging provides merchants with a much stronger tool for incentivizing the use of less-expensive payment methods.

By this point of the discussion, it probably goes without saying that the quote in the brief from Kahneman's "Thinking, Fast and Slow" that "people will more readily forgo a discount than pay a surcharge" is mere assertion and lacks any citation or any other support other than a citation to Thaler's 1980 article.

In addition to their reliance on Thaler's speculation, in their *amicus* brief in support of *certiorari* the Behavioral Economists cite to two "studies" that they contend provide empirical support for their claim (Behavioral Economists Cert. Brief, p. 12):[23]

> This is not merely theoretical. A Dutch study showed that consumers have a very negative reaction to surcharges (74 percent of respondents deemed them "bad" or "very bad"), but not an especially positive reaction to cash discounts (only 22 percent viewed them as "good" or "very good"). Vis and Toth (2000). Consistently, an internal study conducted by IKEA confirmed what the Dutch

[23] In support of their later brief at the merits stage they produced for the first time an additional survey, which will be discussed below. In the lower courts, and in all previous academic research, the entirety of their claims was based on the repeated citations to Thaler's article plus the two studies cited in this paragraph.

> study suggests: surcharging leads to decreased use of credit cards. Scott Schuh *et al.* (2011). "This may be why banks and credit card networks are opposed to surcharges" (See id.)

But again it is worth examining each of these "studies" as to whether they actually support the proffered claim or whether they merely reflect, at best, confirmation bias or some other bias in over weighting and selectively appraising studies that support their preexisting views.

Consider first the Dutch study by Vis and Toth. The authors of the BLE briefs and scholarship correctly note that Dutch consumers did express a highly negative view of surcharges compared to discounts. What the authors of the brief inexplicably do *not* tell the court, however, is that the study didn't just ask consumers how they "feel" about surcharges, Vis and Toth also asked consumers and merchants whether they actually *changed their behavior* in response to surcharges or discounts. According to *the very same study*, both merchants and consumers reported that surcharges were *less effective* at altering consumers' actual behavior than discounts (Vis and Toth, 2000, pp. 8–10). Specifically, Vis and Toth found that merchants that surcharged estimated that 27 percent of consumers who were informed of surcharge refrained from using a payment card, while merchants that used discounts reported that 43 percent of those who were offered a cash discount refrained from using a payment card (Vis and Toth, 2000, pp. 8–9). Similarly, consumers in the survey reported that when it came time to make a purchase, they refrained from using a payment card in 38 percent of the transactions in which they were asked to pay a surcharge, but chose to use cash over credit in 50 percent of the transactions in which they were offered a cash discount (Vis and Toth, 2000, pp. 9–10).

None of the plaintiffs, the Behavioral Economists, or any of the academic articles that relied on Vis and Toth's report of consumer "feelings" ever revealed to any court that the same study included more relevant evidence squarely on point that squarely rejected the BLE hypothesis that surcharges would be more effective than discounts at changing consumer behavior. Why they did not do so is a mystery, in that they simply never acknowledged the core findings of the study, even to distinguish or critique it. Perhaps many of them never actually read the study and simply relied on prior selective citations and representations of the study's findings, much as seems to have been the case with the *matryoshka* pyramid of citations to Thaler's 1980 article. Perhaps the Behavioral Economists didn't think the evidence of merchants' and consumers' actual behavior was relevant, although I can conceive of no reason why the findings on consumers' subjective feelings would be more relevant than their actual behavior as reported by merchants or consumers. Or perhaps some less innocent reason explains the oversight. Or, perhaps the Behavioral Economists simply accepted that one piece of evidence as confirming their

prior expectations about what the empirical evidence would reveal and simply overlooked contrary findings, as would be predicted by confirmation bias.

As an aside, although the findings of Vis & Toth's study (as well as the UK OFT experiments) contradict the BLE theory of surcharging (at least as articulated by American practitioners), those findings do confirm the alternative hypothesis that I have put forward with co-authors that is rooted in neoclassical economics: That merchants prefer surcharging instead of discounting as a form of price discrimination that enables them to extract wealth from consumers who have an inelastic demand for using payment cards for certain purchases (See Lee *et al.* (2013, p. 27)).[24] This alternative hypothesis is also consistent with a number of observed features of surcharging in places where it is currently permitted. For example, surcharging is not uniform across industries—instead it is much more prevalent in markets where there are few alternatives to using payment cards, such as airline tickets, hotels, Internet transactions, and fine dining restaurants. Moreover, where surcharging is permitted, the average size of the surcharge *universally* is higher than the average cost to the merchant of accepting cards, sometimes several times higher. Finally, where merchants are permitted to surcharge, they invariably do so in a non-transparent fashion and reveal the surcharge as late as possible in the purchasing process, just as predicted by the "drip pricing" model.

The price discrimination hypothesis also provides an alternative explanation for Vis and Toth's finding that consumers dislike surcharges more than they like cash discounts. Recall that the OFT's study, as with Vis and Toth's, found that despite the imposition of a surcharge, most consumers nevertheless still used the card and simply paid the higher price. But the OFT study also found that as a result, consumers "felt cheated and annoyed." Their annoyance more likely reflects the actual experience of Dutch consumers with merchant surcharges, which as noted are invariably concealed from the consumer until the last moment and which also invariably exceed the cost to the merchant of accepting cards. Moreover, if the purpose of the merchant surcharges was to change consumer behavior then the existence of the surcharge would be announced prominently. Instead, where surcharges have been permitted by law, they are imposed in surreptitious and non-transparent fashion.[25]

[24]Subsequent to our discussion in Lee *et al.* (2013), Bourguignon *et al.* (2014) developed a similar wealth-extraction model of surcharging. For a discussion, see Zywicki *et al.* (2017, pp. 812–819).

[25]In fact, Vis and Toth found that surcharging is so poorly disclosed by Dutch merchants that in some instances consumers claim that they were not even aware that a surcharge had been imposed until they received their credit card statement weeks later (Vis and Toth, 2000). Zywicki *et al.* (2017), observe this distinction in the incentives of merchants whether to prominently disclose the price adjustment provides an ancillary benefit to consumers and competition of discounting versus surcharging—merchants that discount will have a built-in incentive to promote that (as it results in lower prices to cash-paying customers) whereas those who surcharge will have an incentive to conceal the surcharge until the last moment.

Thus, the hostility expressed by consumers to surcharging more likely reflects their actual experience of being exploited by opportunistic surcharges, rather than some speculative behavioral economics explanation for the phenomenon. Indeed, it is logical that it is precisely in those industries where the consumers cannot avoid the surcharge, such as airlines and hotels, where surcharges are likely to be most prevalent and most excessive, and as a result where consumers are likely to both be most annoyed by the surcharge and least likely to be able to switch to an alternative payment device such as cash. It is simply a logical error to assume that just because consumers dislike surcharging more than they like discounting that surcharging actually will be more effective in changing their payment choice; indeed, it is at least as like to suggest the opposite. Thus, contrary to the assertions of BLE theorists, annoyance at surcharges may be precisely because surcharging is *not* likely to divert consumers to alternative payment devices in the industries and in the fashion in which they are actually used. Real-world context matters.

The Brief's reliance on the IKEA "study" is also revealing—but more revealing as to the possible biases that drive acceptance of BLE hypotheses and not the underlying truth of whether surcharging or discounting is more effective.[26] According to IKEA, in 2004 it experimented with imposing a surcharge of a fixed 0.7£on credit card payments in its United Kingdom stores, which resulted in a thirty-seven percent migration of credit card transactions to debit.[27] In a separate experiment in 2010, in the United States, IKEA provided customers who used PIN debit a three percent price discount on their *next* trip to IKEA – thus providing *no* discount on the *current* purchase.[28] Unsurprisingly, this offer proved less effective than the United Kingdom surcharge experiment, resulting in only nine percent of consumers opting for PIN debit instead of credit or signature debit. As the authors of the Boston Fed study (the only apparent summary of the findings) concluded, "The surcharge and discount results are not exactly comparable because of the different countries and time periods, but they generally support the notion that consumers respond more to surcharges than to discounts" (Schuh *et al.*, 2011, p. 27).

As my co-authors and I wrote:

> In fact, the results are not *remotely* comparable. Not only are they separated by six years (including in the interim, among other things, several elections and a massive worldwide financial crisis),

[26]The IKEA "study" is discussed in Zywicki *et al.* (2017) at pp. 35–36.

[27]Id. at 27.

[28]Id. This critique also leaves aside other important differences between the two countries, such as the fact that PIN debit traditionally has been less popular in the United States than in Europe, thus many American consumers may be unable or unwilling to switch to PIN debit than they might be to some other payment device.

> as well as an ocean, they follow from entirely different sorts of conduct. While the surcharge was imposed immediately and at a fixed price, the discount was paid after an indefinite time (if at all), following an additional transaction, and in an amount dependent on the size of the subsequent transaction. There is simply no way to tell from the evidence available whether *comparable* surcharges and discounts would have elicited the same or even similar responses; here, the threatened surcharge and offered discount almost certainly had wildly divergent (and, in the case of the discount, entirely indeterminate) expected values to consumers. All we can tell is the direction of the effects – but . . . no one needed these IKEA experiments to know that demand curves slope downward. We have simply *no way* of knowing whether the relative *magnitude* of the effects was in any way different because of a so-called irrational "framing bias" (Zywicki *et al.*, 2017, p. 803).

Consider the point a different way—what if an equally-flawed IKEA "study" had come out the other way, finding that discounting was more effective than surcharging at altering behavior? Should anyone have confidence that BLE scholars would have taken the finding of such as study as being equally valid evidence that "generally rebuts" the BLE hypothesis? Or would the findings have been dismissed—properly, I hasten to add—as the manifestation of a highly flawed comparison of little value to the larger question? Perhaps those findings simply would have been ignored, as with the core findings of the Vis & Toth study that contradict the BLE hypothesis? Given the absurd nature of the "IKEA study," the conclusion of the Boston Fed research team as well as the Behavioral Economists who relied on it, is much easier to attribute to the biases of the economists who found the comparison to be persuasive, instead of a serious analysis of the study's validity.

Between the *cert* and merits phase of the Supreme Court case in *Expressions* researchers associated with the Kennedy School of Government conducted an online survey, which proposed to test the reactions of consumers to surcharges versus discounts, which was then discussed in the brief of the Behavioral Economists.[29] They found that in response to the canned hypothetical scenario that they created, 11% of consumers still paid with a credit card while 18% of consumers offered a cash discount still paid with a credit card, which they took as evidence that surcharging would divert more consumers to using cash than would discounts.

Perhaps. But it might instead be evidence of chronic inability of behavioral economists to translate their theories into real-world applications. Does anyone think that in the real world that 89% of consumers offered a surcharge actually switch to cash? Or that 82% of consumers offered a cash discount switch to

[29] See Brief of Behavioral Economists on Merits, pp. 9–10.

cash? There is certainly no evidence in any country in the world that has permitted surcharging, that consumers switch with any rate approaching those. Indeed, prior real-world studies found that the number of consumers who *sometimes* switch in response to a surcharge or discount range from as low as seven percent (in the IKEA experiment), to 25% in the Dutch surcharging report, to as high as 50% for cash discounts in the Dutch study. To believe that 82-89% of consumers are going to switch payment choice *regardless of how it is communicated*, is simply absurd, to put the matter bluntly. And one would think that such unrealistic results would provide grounds for caution about interpreting the results. And, in fact, the survey itself bore no resemblance to reality—the questions posited that the hypothetical consumer carried $220 in their wallet and would purchase $130 in groceries, when in reality the average American carries one-tenth of that amount ($22) in his or her wallet. Only 8% of Americans regularly carry $200 or more in their wallets—yet we are supposed to believe that over 80% of Americans would respond to *either* a discount or surcharge. Again, this experiment arguably says more about the experimenters than the experiment. As we note in our prior critique, a more realistic experiment would ask consumers what they would do if they had $22 in their wallet—not $220—and showed up at the checkout with $130 in groceries. Do we seriously think that in that case 89%-plus of consumers would leave the store, go to an ATM, and then return with hundreds of dollars of cash? Or would consumers simply pay the higher price and be annoyed by being surprised by a higher price at the last moment? Finally, the Kennedy School study ignores the fact that surcharging practice is endogenously-determined by merchants and that merchants do not universally surcharge; instead, merchants surcharge in markets where consumers have no alternative but to use a card, as illustrated by the uniform practice of merchant surcharging at above-cost prices.

As with credit card usage, therefore, the BLE consensus on surcharging raises serious doubts about the scientific process by which this consensus has arisen. In particular, BLE scholars seemingly have placed undue weight on claims that confirm their preexisting biases—amazingly, in some cases not only over weighting evidence, but in the case of the *matryoshka* citations to Thaler's 1980 article that allegedly "explains" credit card surcharging, no evidence at all but mere speculation. As shown by the clash of their claims with those of the UK's OFT—which applies *exactly* the same concepts to generate squarely inconsistent conclusions—group think has led them to treat speculation as evidence and given them an undue optimism in the determinacy of their model as it applies to the real world. They have failed to consider an alternative hypothesis, which is especially striking in that the alternative hypothesis is seemingly more consistent with existing data than their own. More fundamentally, the entire enterprise has been largely a data-free zone, with no effort to examine how surcharging and discounting actually operate in

the real world.[30] Finally, some elements of the debate are simply inexplicable—why, for example, do they point to Vis and Toth's finding that consumers dislike surcharging without ever discussing the central findings of that study that finds that both merchants and consumers report that surcharging is less effective than discounting at changing consumer behavior?

3 The Behavioral Economics of Behavioral Law & Economics

The foregoing discussion has not comprehensively reviewed all the empirical and theoretical problems with BLE as it has been applied to the use and regulation of consumer finance. Instead, I have tried to merely provide a snapshot of the chasm between the theoretical and empirical foundations of BLE on one hand and the remarkable degree of consensus opinion with respect to the validity of BLE hypotheses of consumer behavior with respect to consumer credit products. The inquiry has thus focused on some of the more striking claims of BLE and the apparent suspension of the standard expectations with respect to proof or even coherent model specification. Before turning to possible explanations, it might be useful to revisit some of the problems that I have identified with respect to BLE inquiry:

1. The "just-so story" methodology of BLE in which the author identifies some supposed behavior by consumers and then grabs some supposed biases from the shelf of available options that purportedly explain the supposed behavior;

2. The tendency to respond to evidence that contradicts BLE predictions by simply amending the model to retrofit the evidence (such as the idea that debit cards will never catch on in the United States or that consumers are not attentive to credit card interest rates) rather than to consider alternative explanations;

3. As a corollary, then creation of non-falsifiable hypotheses, in which even evidence that contradicts the model's predictions are seen as confirming the model's predictions, such as with the supposed improved sophistication of credit card users or the idea that consumers "dislike" credit card surcharging because of the endowment effect or some other posited bias, as opposed to the manner in which surcharging is actually practiced;

4. Citation cascades, such that with repetition one off-hand speculation or just-so story comes to be said to have "demonstrated," "explained," or

[30] Because of the narrower scope of this article I do not discuss other evidence that also find that consumers are more responsive to discounts than surcharges. That evidence is discussed in Zywicki *et al.* (2017, pp. 808–811).

"shown" some practice to be explained by BE concepts, as if it had been empirically validated;

5. The acceptance of extravagantly problematic studies and findings as confirming BLE hypotheses, with the corollary that had those studies rejected BLE hypotheses, those same theorists would have recognized the obvious flaws in the studies, such as the reliance on the IKEA "study" of surcharging or the findings of the BLE survey that 80%-plus of consumers would switch from using credit cards to cash regardless of how the price differential was presented; and,

6. Ignoring or overlooking contrary evidence, even when this is hard to understand how that could be the case, such as with the selective citation to Vis and Toth's study on payment card surcharging and discounting in Holland.

It is important to emphasize that the point here is not to stress the lack of empirical evidence for any of the examples given, all evidence which rejects BLE hypotheses in favor of alternative hypotheses grounded in traditional economic theory. Instead, the focus here is on the glaring elementary methodological problems associated with BLE and the widespread consensus that has simply overlooked these issues. Let me further emphasize a second point—it is possible that some day some or all of the BLE hypotheses discussed might actually turn out to be confirmed by evidence. To date though, none of them; in fact, available evidence rejects them. Moreover, this also assumes that BLE theorists eventually can establish determinate predictions about how certain biases will play out in particular contexts—as noted, in the context of surcharging, the UK's OFT and American BLE scholars have posited diametrically opposite hypotheses about how consumers will respond to surcharging. Instead of showing that consumer behavior is explained by irrationalities or biases, the evidence to date primarily shows a degree of academic consensus unrelated to the validity of the underlying scientific theories that underlie it.

How has this disconnect between academic consensus and the absence or real-world verification occurred? I don't have a definitive answer, but this section provides some speculative thoughts. Ironically, however, although behavioral economics appears to predict little about how consumers actually behave in practice, it might actually provide some insight as to why behavioral *economists* have been so receptive to the speculations of behavioral law & economics as to consumer behavior.

Acceptance of BLE theories by the academy bears many of the characteristics of a "bubble" market. A bubble market is one in which the valuation attached to an item—in this case a set of ideas—bears no relationship to the underlying value of the item. This suggests that bubbles can be related to availability cascades, as Wikipedia says in its "List of Cognitive Biases," an

availability cascade is "a self-reinforcing process in which a collective belief gains more and more plausibility through its increasing repetition in public discourse." Thus, for example, the assertion that consumer usage of credit cards is "explained" by BLE is taken as true, even though there is no sound empirical support for the proposition. This is reinforced by the tendency of BLE scholars to cite only to studies that agree with their own views and to ignore contrary evidence, even going so far as to ignore contrary evidence within the same study that they cite positively, as in the case of the selective citation to Vis and Toth's study of surcharging behavior in the Netherlands.

BLE scholars appear to exhibit significant confirmation bias. For example, is difficult to understand why scholars would place weight on the farcical IKEA "study" of credit card surcharging and discounting other than the fact that it confirms what they already believed to be so. Given the non-rigorous nature of the "study," it seems unlikely that the study contradicted the preexisting expectations of the BLE economists that they would have still cited that study to the Supreme Court as evidence against the BLE hypothesis.

A second question is why the profession has permitted state of affairs has been able to emerge. Academia fancies itself a self-correcting market, in which truth is approached as bad or poorly-supported ideas are rejected or refined over time through the clash of debate and conflict. It is far from clear that the academic market for ideas today is consistent with this idealized model. With respect to BLE, however, this supposed self-correcting market appears to have broken down. Utterly implausible and poorly-supported theories are taken as consensus world views, with little or no recognition of the flaws, weaknesses, or problems with the models, many of which are exceedingly elementary. Off-hand speculation is taken as empirical proof sufficient to read into the First Amendment to the Constitution. How can it be that scholars repeatedly cite Vis and Toth's findings that consumers highly dislike surcharging, while *never* mentioning that the very same article finds that surcharging is less effective at inducing changes in consumer payment choices than discounting? Why would BLE theorists find it acceptable to simply posit that interest rates on credit cards "became salient" all of a sudden in the 1990s, without ever asking what that means or how that came about? Why do these models consistently fail to specify any alternative hypothesis or to ask whether the data are actually better explained by an alternative model?

The juxtaposition is striking—while consumers exhibit very little evidence that biases adversely affect their decisions and tend to correct those errors that they do make, BLE scholars exhibit extraordinary levels of erroneous and seemingly biased decision-making and an inability to reconsider those theories in light of adverse empirical findings. One potential explanation might lie in differences in the nature of the two markets. With respect to consumer behavior, individuals internalize all of the costs and benefits of making correct and incorrect decisions about consumer credit products. This reality provides

individuals with strong incentives to make efficient decisions with respect to their personal finances and to learn from their errors. In general, empirical evidence supports the hypothesis that consumers act rationally with respect to their finances, at least as understood within the particular contexts in which those decisions occur and that they learn from their mistakes.

Academia, by contrast, seems to have very weak incentives toward promoting accuracy and error-correction. Instead, academia arguably values novelty and cleverness, rather than accuracy. Authority weighs heavily in the equation of academia as well—thus, an off-hand musing by future Nobel Laureate Richard Thaler about the effects of credit card surcharging is soon transformed into an empirical truth, even in the absence of any evidence to support the claim. Indeed, according to Wikipedia, behavioral economists have identified something called "authority bias" that suggests that the opinion of an authority figure is weighted more heavily, unrelated to its content.

The manifest and growing ideological homogeneity of the academy, especially in law schools, also contributes to the growth of the BLE bubble by dampening error-correction mechanisms.[31] BLE offers claims that resonate with the preexisting interventionist ideological biases of most law professors. To put the matter more colloquially, the claims of BLE just "sound right" to progressive law professors and psychologists, a textbook example of confirmation bias at work. With respect to the economics and regulation of consumer credit, the ideas of BLE are attractive from a strategic perspective as well, in that they provide fodder to push-back against the intellectual dominance of neoclassical law and economics in law schools, which tends to support free choice and market approaches to consumer credit regulation rather than substantive intervention. Interventionist-oriented government officials such as the Obama Administration in the United States also have an incentive to promote BLE's claims to justify their policy preferences.

Gal and Rucker's (2018a and 2018b) discussion of the rush to judgment by BE scholars with respect to the idea of "loss aversion" suggests a conceptually related but somewhat different explanation, which is also rooted in the sociological dynamics of the economics profession. Whereas I emphasize the role of behavioral economics as a somewhat counter-cultural movement in the world of law & economics, Gal and Rucker suggest that within the economics profession, it is the rapid acceptance of BE generally and loss aversion specifically that has created a consensus that loss aversion is real, raising the bar for those who question that orthodoxy. They point to the strained efforts of scholars to resolve anomalous findings without questioning the fundamental premise of loss aversion (Gal and Rucker, 2018b, pp. 510–511). They argue that once a particular paradigm is widely accepted—in this case,

[31] Lindgren (2016) and Langbert *et al.* (2016) document the heavy left-leaning orthodoxy of law school faculties in the United States.

the established "truth" that loss aversion is real and significant—it becomes increasingly difficult to publish research that questions that fundamental premise. In their telling, the lock that loss aversion holds over the profession stifles innovative research that would question that basic presumption. Instead, scholars turn to increasingly ad hoc and convoluted rationalizations to resolve anomalies.

On another point, however, their analysis fundamentally coheres with the argument presented here, namely that the embrace of behavioral economics theories by elite scholars has contributed to the premature consensus of the field. They refer to the "Hierarchy of Science hypothesis" for the proposition that "as fields of inquiry move from the study of the low-level and general (e.g., physical chemistry" to the high-level and specific (e.g., human decision-making), the ability of scholars to reach theoretical consensus diminishes." (Gal and Rucker, 2018a, p. 537). Moreover, "when inscrutable evidence is difficult to obtain, social proof, such as the opinions of other scholars, particularly prominent ones, serve as a substitute basis for beliefs" (Id.).

They argue that this dynamic is reinforced when this social consensus dovetails with widespread intuitions. Thus, they note that "the idea that a negative change in life circumstances is acutely felt" holds "intuitive appeal" to many scholars (Gal and Rucker, 2018b, p. 511). In a similar vein, the idea that consumers misuse consumer credit, that most families use credit to live beyond their means, or that banks routinely manipulate consumers is highly intuitive to many scholars, especially those of a pro-interventionist ideological predisposition. And while this is undoubtedly true in some instances, available data demonstrate that this is untrue overall, nor is it a problem that has worsened over time. Indeed, we deem this the "other guy" effect in our book *Consumer Credit and the American Economy*, noting the widespread popular belief that when asked about their own financial habits most people report that they are responsible and live within their means. When asked about the financial habits of "others," by contrast, there is a widespread impression of irresponsibility and overspending. (Durkin *et al.*, 2014a). Available data suggests that people's self-perception in this case turns out to be more accurate than their perceptions of others. Nevertheless, as the examples provided above suggest, scholars share this widespread intuition about the wisdom and behavior of ordinary consumers, which likely contributes to their susceptibility to accept very weak evidence that is consistent with their existing intuitions.

A final possible explanation bears mentioning, which is related to the academic approach to how consumer finance is studied today. The economic study of consumer finance is typically dated to Edwin Seligman's 1927 two volume treatise, *The Economics of Installment Selling: A Study in Consumers' Credit* (Seligman, 1927). Starting with Seligman, the model of consumer credit usage and regulation developed steadily, finally reaching a coherent synthesis in

the works of Shay and Juster in the 1960s. During that era, multiple scholars analyzed and refined the models of the demand and supply of consumer financial products, studying both the nature of consumer decision-making as well as industry supply and practices.[32] Economists who studied consumer credit during this period, therefore, had a deep grounding of the institutional and decision-making context of consumer finance and its regulation.

Beginning in the 1970s, however, academic study of consumer finance largely trailed off. The reasons for this development are not clear. One suspects that to at least some extent it was because economists believed that the intellectual war had been won—decades of research on the demand and supply of credit and the folly of substantive regulations of consumer credit products (such as usury ceilings) had finally put to rest long-standing prejudices against market ordering of consumer credit markets, as synthesized in the 1972 report of the National Commission on Consumer Finance and supporting studies (National Commission on Consumer Finance, 1972). To the extent that regulation was thought useful, the passage of the Truth in Lending Act augured an era of disclosure-based regulation rather than substantive regulation of terms and conditions of contracts. Whatever the reason, consumer finance as a coherent field of study retreated from the academy for several decades beginning in the 1970s.

Into this disciplinary void stepped BLE. While BLE analysis of consumer finance predates the 2008 financial crisis—but only by a few years—there is little doubt that the financial crisis provided a new stage for BLE theories of consumer finance. But the modern study of consumer finance is dramatically different from the traditional approach of scholars such as Seligman, Chapman, Juster, Shay, and Robert Johnson, all of whom were deeply versed in the literature and institutions of consumer credit. The new wave of scholars, by contrast, do not really view consumer finance as a field of study; instead, it seems that they view consumer finance as a field of applied behavioral economics. Thus, rather than starting with the foundation of understanding the demand and supply of consumer credit markets, they start with their basket of behavioral biases, which they then direct toward consumer finance problems. Rather than seeking to understand how consumer finance markets work, they instead seek to discover whether consumer finance provides evidence for BLE theories.[33] Moreover, they often lack any understanding of the historical and institutional context of consumer finance. Thus, they appear to be seeking evidence to support a preexisting theory of consumer behavior and market

[32] This history is discussed extensively in Durkin *et al.* (2014b), and sources cited therein.

[33] In this sense, the methodology of treating consumer finance as an applied field of behavioral economics is similar to Gigerenzer's observation elsewhere in this issue that BE suffers from a "Bias Bias" that has turned the field into a search for artificially-constructed behavioral anomalies instead of seeking to actually understand and describe how consumers actually make decisions (Gigerenzer, 2018).

ordering, rather than starting with an underlying model of consumer choice and market institutions and seeking to understand those markets.

The Kennedy School survey of surcharging illustrates the point. Recall that the issue in the case as presented by the plaintiffs was whether removing the states' legal prohibition against merchants labeling a price increase a "surcharge" would elicit a great response by consumers than would labeling the mathematically-equivalent price adjustment a "discount." To actually make that determination would have required presenting realistic conditions, including providing consumers with a more realistic endowment of money on hand (such as the average of $22 that most Americans carry on their person), a more realistic purchase context that reflects the fact that in countries where surcharging is permitted it is found primarily in industries where cash usage is cumbersome or impossible, and with positive transaction costs of consumers obtaining cash (such as traveling to an ATM and perhaps paying an out-of-network fee to obtain cash). The study also would have presented consumers with a realistic picture of the up-front capital investment that would have recognized the time spent traveling to the store and selecting the items to purchase only to be confronted with the surcharge at checkout so that then they could decide whether to pay the surcharge, abandon the transaction, or travel to an ATM to obtain additional cash sufficient to avoid the surcharge. Still further, the survey would have had a more realistic disclosure process for the surcharge that reflects real-world conditions (again based on actual experience in countries where surcharging is permitted), such as by the incentives of merchants to conceal the existence of the surcharge until very late in the purchase process.

In fact, the UK's OFT experiments on drip pricing attempted to do something like this—to create a choice process that more accurately reflects the real world. The Kennedy School study does not. Instead of being designed to illuminate what merchants and consumers would actually do in the real world, however, the purpose of the Kennedy School study seems to be to generate a laboratory finding that under certain unrealistic hypothetical conditions consumers will respond more robustly to labeling a price difference a surcharge. When the OFT did try to construct a more realistic scenario, it found that most consumers do *not* switch to cash or abandon the purchase but unhappily pay the surcharge. But this academic parlor game has little relevance to the real-world, and certainly seems less persuasive than the OFT's study, which the Behavioral Economists completely ignore.

In fact, so slippery is BLE theorizing that it is not obvious why credit card surcharging is not characterized as a "shrouded" or "non-salient" fee in the parlance of BLE theorists. I have been able to find no determinate definition or prediction of what is or is not a shrouded or non-salient fee. In discussing credit cards Professor Bar-Gill simply reclassifies certain fees as salient or non-salient by *ipse dixit*, but it is not clear why or how one makes the determination. To

the extent that the concept of "salience" has any meaningful content, credit card surcharges that are not disclosed as part of the price but simply added on at the end of a transaction and often poorly disclosed would seem to fit the definition of a non-salient term. The Kennedy School study, of course, elides this problem by artificially focusing the consumers' attention on the specific payment choice decision, when in the real world a consumer's decision will likely be focused on the grocery purchase and the time invested in shopping, not the payment decision at the end of the transaction. Tacking on a new fee at the end of the purchase transaction would seem to be the very exemplar of a "shrouded" or "non-salient" fee, to the extent that those concepts have any determinate meaning at all.

Allow me to reiterate—it might be that eventually BLE theory might have something useful to contribute to many of these questions of consumer credit usage and regulation. To date, however, the literature is plagued by group think, problematic analysis, and information cascades where mere repetition of certain theories is taken to be equivalent to proof.

My tone in this article has been extremely blunt. But it must not be forgotten—BLE claims to have implications for the real world. BLE has been invoked to support government regulation in the United States and abroad and BLE recently was invoked to ask the Supreme Court to re-write decades of constitutional law regarding commercial speech. Surely more BLE-grounded lawsuits are to come in the future. Striking down state anti-surcharge laws based on BLE theorizing can open consumers to massive problems of opportunism by merchants, just as permitting surcharging has done throughout the rest of the world. Barring credit card issuers from providing rewards or introductory interest rates can dramatically reduce the usefulness of credit cards. Banning low introductory interest rates on credit cards can dampen competition and impose higher costs on consumers. Armchair BLE theorizing is not merely an academic parlor game, but has real effects for consumers, and policies based on bad theories can be disastrously harmful to consumers.

4 Conclusion

Writing about BLE a few years ago, I said the following, "All of this adds up to a 'science' that is still in its embryonic phase and simply not ready for experimentation on human subjects" (Zywicki, 2014, p. 214). Those words are as true today as they were written then. To date BLE theories simply haven't been grounded sufficiently in reality to impose on unwilling consumer subjects with any belief that doing so will result in more good than harm. Perhaps most important, it is crucial for BLE theorists to start policing their own, rather than engaging in the kind of group think that has enabled these theories to propagate without sufficient foundation.

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