"We Can Do This the Easy Way or the Hard Way": Negative Emotions, Self-Regulation, and the Law

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I. INTRODUCTION: THE EASY WAY AND THE HARD WAY

If you ever have the misfortune to be interrogated, and the experience resembles its depiction in movies, it is likely that your interrogator will inform you that "we can do this the easy way or the hard way." The interrogator is telling you, with an economy of words, that you are going to spill the beans; the only question is whether you will also get tortured—which is the hard way. In this Essay, we argue that much consumption follows a similar pattern, except that the torturer is oneself.

Because humans are inherently myopic, we train ourselves, or are trained (via parenting, schooling, etc.), to experience immediate negative emotions such as guilt and fear when we succumb to various types of temptations. These immediate negative emotions serve the function of bringing the negative consequences of current indulgence into the present, thereby counteracting what would otherwise be a natural tendency to discount them.

Such threats are often a successful source of self-regulation—indeed, they may be the main thing that keeps us from overeating, overspending, taking excessive risks, or behaving selfishly. When they fail to serve their purpose, however, these negative emotions impose costs with no corresponding benefits—much like spilling the beans after being tortured. In such instances, people, in effect, pay twice for their indulgences: they incur the material negative consequences that result, and they also experience negative emotions as a result of their lapse. The lapsing dieter, for example, not only must deal with the health and appearance consequences of overeating, but also experiences guilt and shame while eating.

The use of negative emotions is a crude method of self-control, and in particular it is difficult to apply such emotions to only illegitimate activities. As a result, people can develop a kind of neurotic atti-

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tude in which even legitimate activities become associated with negative emotions such as guilt and fear. This is especially true when self-control involves limiting not whether but how much one engages in an activity. Thus, for example, eating is necessary for survival, so dieting involves a restriction in quantity rather than a decision about whether or not to eat. It is, however, a very difficult mental task to feel guilty only about the amount one eats over and above what one needs for health and survival; almost inevitably, some of the negative feelings about overeating are going to leach over into regular eating, creating a generally neurotic attitude toward food. Indeed, in seminal research on what she calls the “false hope syndrome” of personal change, Janet Polivy and her collaborators have shown that dieting not only doesn’t work, but has a wide range of negative psychological effects.¹

Because firm behavior—and thus market institutions—can influence the effectiveness of negative emotions as a tool for self-regulation, there may be scope for legal intervention. The economic approach to law assumes that the legal system is configured, or at least should be configured, for the purpose of promoting economic welfare. To the extent that legal interventions can increase the efficiency of negative emotions as mechanisms for implementing self-control, or mitigate the negative emotions associated with self-control even without enhancing self-control, they can serve a welfare-enhancing function.

In Part II of this Essay, we provide a more detailed overview of negative emotions and self-regulation. In Part III, we discuss the relevance of such emotions for law and public policy. In particular, we distinguish between four different legal approaches to enhancing self-control, and argue that the existence of negative emotions tends to favor two categories of interventions: those that involve restrictions on the supply of temptations, and those that recognize the inevitability of certain lapses in self-control and create “guilt-free zones”— permitting people to consume vices the easy way, without guilt. In Part IV, we focus on one particular type of negative emotion, the pain that people experience when they pay for goods and services, and we discuss how credit cards can mitigate that pain and therefore undermine consumer self-control. We conclude in Part V.

¹ Janet Polivy, The False Hope Syndrome: Unrealistic Expectations of Self-Change, 25 Int J Obesity S80, S82 (2001) (discussing how individuals who fail to satisfy unrealistic goals of self-change may feel disappointment, discouragement or perceive themselves as failures). See also C. Peter Herman and Janet Polivy, Realistic and Unrealistic Self-Change Efforts, 58 Am Psychologist 823, 823–24 (2003) (proposing a “false hope” model of dieting to account for why people continue to diet even though diets typically don’t accomplish their purpose and, worse, often have negative emotional consequences).
II. THEORETICAL BACKGROUND

As a number of recent papers in behavioral law and economics have pointed out, to understand how law and public policy can promote well-being requires a more realistic account of individual behavior than that proffered by standard economic models of behavior. Our analysis in this paper focuses on one specific limitation of the standard model that we have sought to address in our own work that is unrelated to law.

In the standard economic approach, people decide whether or not to take an action based on the benefits and costs of taking that action. When benefits exceed costs, it is assumed, an individual takes an action. The reality, however, is often quite different. In part because humans are inherently myopic, and in part because it is difficult to fully attend—or even recognize—the broader consequences of our actions, humans are overprone to engage in many vice activities. Consider, for example, the task of dieting. The standard model would assume that an individual merely chooses whether or not to diet based on an evaluation of costs and benefits. But because the benefits—the taste of the food and the pleasant feeling of being full—are immediate and tangible, while the costs—increased weight and health effects—are delayed and somewhat nebulous, dieters are overprone to eat.

Fortunately, humans have developed a variety of strategies for self-regulation. Some strategies involve the use of external commitment devices or the avoidance of situations in which one is likely to

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[O]ne can make a strong case that all law exists to effect changes in human behavior. . . . [W]e can consider law effective when it gets its job done, and efficient when it does so with minimum waste. If the enterprise of law is, in the main, to change human behavior according to socially percolated preferences, then its ability to deploy legal tools to effect these changes at the least cost to society often (though importantly not always) depends on the accuracy of the behavioral models on which law relies.


4 See George Ainslie, *Pecueconomics: The Strategic Interaction of Successive Motivational States within the Person* 57 (Cambridge 1992) (suggesting that living for the present is the natural mode of behavior that can only be overcome through the acquired skill of consistent behavior over time).
lose control of one's behavior. But an important source of self-regulation is internal: people cultivate a tendency to experience negative emotions—in particular, guilt and fear—when they engage in certain "undesirable" activities. Such emotions often serve the purpose of *immediatizing* the delayed costs in the form of immediate emotions. Eating highly caloric foods not only makes us more obese in the future; if we are on a diet it also makes us feel more guilty and ashamed in the present. Because these emotional costs are immediate, they are not discounted in the same way as are the delayed consequences of succumbing to temptation, and thus can help deter overconsumption.

Figures 1 through 3 illustrate this general theoretical perspective. Figure 1 provides a division of all activities into vice activities and nonvice activities. By vice activities, we mean activities that offer short-term rewards coupled with larger long-term costs, and so people should refrain from such activities. Figure 1 further divides vices into two subcategories: those we are potentially capable of resisting, and those to which we will inevitably succumb.

By potentially resistible, we mean vices that can be resisted if negative emotions are applied; and by irresistible vices, we mean that people will succumb even if negative emotions are applied to those activities. Hence, Figure 2 illustrates the ideal of self-control in which

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5 See Thomas C. Schelling, *Self-Command in Practice, in Policy, and in a Theory of Rational Choice*, 74 Am Econ Rev 1, 6–7 (1984) (listing strategies of self-regulation that include relinquishing authority to someone else; committing, disabling, or removing oneself; removing resources; submitting to surveillance; incarcerating oneself; arranging rewards/penalties; rescheduling one's life; avoiding precursors; arranging delays; using teams; automating behavior; and setting bright line rules); George Ainslie, *Specious Reward: A Behavioral Theory of Impulsiveness and Impulse Control*, 82 Psych Bull 463, 473–76 (1975) (discussing various theories of how an individual can control his or her impulses, including a number of commitment devices).

6 To simplify our discussion, we focus on the problem of overengaging in vice activities. There is an analogous problem of underengaging in virtue activities—activities that offer short-term costs coupled with larger long-term benefits. For virtue activities, people sometimes seem to have developed an analogous ability to immediatize the future benefits by experiencing positive emotions such as pride or satisfaction upon engaging in the activity. Even so, we suspect there is an asymmetry between negative and positive emotions, and in particular that positive emotions are more difficult to sustain. For a discussion of virtues and vices, see Klaus Wertenbroch, *Self-Rationing: Self-Control in Consumer Choice*, in George Loewenstein, Daniel Read, and Roy Baumeister, eds, *Time and Decision: Economic and Psychological Perspectives on Intertemporal Choice* 491 (Russell Sage 2003) (discussing consumer self-control generally); Daniel Read, George Loewenstein, and Shobana Kalyanaraman, *Mixing Virtue and Vice: Combining the Immediacy Effect and the Diversification Heuristic*, 12 J Behav Dec Making 257 (1999) (comparing consumer choice between virtue and vice in sequential and simultaneous choice situations); Klaus Wertenbroch, *Consumption Self-Control by Rationing Purchase Quantities of Virtue and Vice*, 17 Marketing Sci 317 (1998) (providing experimental evidence of consumer self-control, discussing the implications of such evidence for the pricing of consumer goods, and developing a conceptual framework for empirical tests of self-imposed constraints with respect to both vices and virtues).
negative emotions are applied only to vices that can be resisted and not to either vices that can't be resisted or nonvice activities—as reflected by the shaded area lying exactly over the region of vices one can potentially resist. If this were representative of reality, then the use of negative emotions would be a very efficient method of self-regulation; it would control those behaviors that can be controlled, while at the same time negative emotions would never have to be experienced.

Unfortunately, we believe, Figure 3 provides a more realistic representation of most people's situations. Negative emotions are, in fact, quite a crude method of self-regulation, in part because it is difficult to know, ex ante, which activities will be vices and which will not, and which vices will be resistible and which will not. Inevitably, one is going to miss some potential areas of self-control (region d in Figure 3), and to apply negative emotions to activities that are not vices (region a) and to activities that are vices but that one will succumb to regardless of emotional self-threats (region b). Region b represents consuming the hard way because one pays twice for one's indulgences, both materially and emotionally. Thus, for example, a dieter who attempts to prevent herself from eating via the threat of guilt is likely to neglect to use this tactic in some situations in which it should have been successful, feel guilty about eating even food that is necessary for day-to-day functioning, and also threaten herself with guilt in some situations in which overeating is inevitable. Collectively, these situations reflect the downside of using negative emotions as a tactic for self-control.

III. RELEVANCE TO LAW

Thus far, we have discussed how negative emotions can play a role in individual self-regulation and individual consumption choices. If that were the whole story, negative emotions would have little relevance for law. However, the effectiveness and efficiency of negative emotions as tools for self-regulation depends not only on the behavior of individuals, but also on the behavior of the firms with which they interact. To the extent that the legal environment influences the behavior of firms, therefore, it can also affect the effectiveness and efficiency of negative emotions. Indeed, because in our society the supply of temptations is virtually unregulated, the situation has become ever bleaker for consumers. With the exception of certain very limited categories of consumption (which in some cases only apply to a limited subset of consumers, such as minors), tempting consumers is generally not seen as a business activity to be regulated. Most capitalist societies, including the United States, put very few limits on the products that can be marketed to consumers or the methods that can be used to market them. In fact, the general presumption—frequently
articulated by businesses—is that firms are offering consumers exactly the goods and services they want, because otherwise consumers wouldn’t pay for them. Although this presumption is probably often correct, our discussion above, and much research in behavioral economics, suggests that there are predictable ways in which people buy things that they do not want.7

In this unregulated environment, the evolving reality is bleak for consumers. Firms are always looking for ways to get consumers to purchase more items. Although this sometimes takes the form of providing items that provide real value to consumers (as is assumed in standard law and economics), it also takes the form of finding ways to overcome efforts at self-regulation. Of course, this need not be pernicious; in a competitive environment, successful firms may be those that best overcome consumers’ efforts at self-regulation, whether they do so deliberately or inadvertently. But whatever the source, the result is that the set of vices that are potentially resistible (the inner circle in Figures 1 through 3) is shrinking over time. Because the set of activities to which negative emotions apply is slow to adjust, the result is less successful self-control and more consuming the hard way. Moreover, consumers are likely to respond to the expansion of temptations and the sharpening of tactics used to undermine their self-control by ratcheting up their use of negative emotions. Although this strategy may sometimes work, we suspect that in many cases it only serves to make consumption the hard way feel even worse.

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7 One reason is hyperbolic time discounting, which causes people to attach greater weight to immediate payoffs than they would from a more removed perspective. See Ted O’Donoghue and Matthew Rabin, Doing It Now or Later, 89 Am Econ Rev 103, 106 (1999) (discussing how present-biased preferences can lead to unwanted behavioral outcomes); David Laibson, Golden Eggs and Hyperbolic Discounting, 112 Q J Econ 443, 445–46 (1997) (discussing how hyperbolic discounting can lead to overconsumption and undersaving); Ainslie, Pecoeconomics at 78 (cited in note 4) (discussing experiments that demonstrate that short-term discounting is much steeper than long-term discounting). Another reason is projection bias, the failure to appreciate the degree to which future tastes will be different from current tastes, which can lead to errors such as overshopping on an empty stomach, or purchasing an item on impulse. See George Loewenstein, Ted O’Donoghue, and Matthew Rabin, Projection Bias in Predicting Future Utility, 118 Q J Econ 1209, 1210 (2003) (discussing evidence of such a bias and describing how the bias can lead to unwanted purchases). For a more general discussion of when people choose options that don’t maximize their happiness, see Christopher K. Hsee and Reid Hastie, Decision and Experience: Why Don’t We Choose What Makes Us Happy? 10’ Trends in Cognitive Sci 31(2006).

8 The behavioral law and economics literature, including other essays in this Symposium, also has discussed how firms provide products that consumers incorrectly perceive to create value. See, for example, Cass R. Sunstein, Boundedly Rational Borrowing, 73 U Chi L Rev 249, 253 (2006) (explaining that consumers sometimes experience “miswanting,” meaning they want and buy products that do not improve their welfare while failing to purchase items that would improve their welfare).
How should law and economics theorists respond to such concerns? In simple terms, our perspective above suggests ways in which people do not maximize their utility from final outcomes. As such, our perspective is similar in spirit to the recent literature on behavioral law and economics, which acknowledges that people cannot always be counted on to know, or do, what is best for them. In this literature, the policy goal generally has been to maximize the utility of final outcomes, without explicit consideration of the emotions involved in self-regulation. Applied to our perspective, this policy goal would lead us to focus exclusively on how policy could increase the size of region c relative to region d in Figure 3—that is, to increase the fraction of those vices successfully resisted to those one can potentially resist.

Applying the standard behavioral-law-and-economics welfare criterion to our perspective thus treats negative emotions as merely a mechanism for implementing final outcomes. We believe, however, that the emotional costs experienced in regions a and b in Figure 3 warrant treatment like costs of any type. If law and economics is to better the human condition, and these negative emotions detract from happiness, then they deserve to be included among the costs and benefits that should normatively guide public policy. As many of the papers in this Symposium highlight, law and public policy can play important roles in aiding consumer self-control. However, it is important not to lose sight of the ultimate goal, which is to improve the human condition. Law should not only be oriented toward increasing self-control—helping us to save money, eat healthy foods, and behave in a moral fashion—but to do so at the lowest possible cost, including psychic cost. Taking account of these psychic costs of emotional self-control can change the relative attractiveness of different types of laws, regulations, and policies.

To enumerate these consequences, it is useful to distinguish between four categories of policies that might be used:

1) Delayed demand-deterrence. One type of demand-side intervention involves attempting to deter people from succumbing to vices by threatening future punishments for vice behaviors or by providing delayed rewards for not succumbing to vices. Examples include attempts to deter crimes of passion (which can be considered an extreme form of vice) via criminal penalties, or attempts to encourage dieting by providing more attractive rates on life insurance for people who lose weight. We believe that these strategies are generally likely to be ineffective for the very reason that people succumb to vices in the first place—because people tend to put disproportionate weight on costs and benefits that are immediate relative to those that are delayed, and more generally have a hard time fully attending to future consequences.
2) Immediate demand-deterrence. A second type of demand-side intervention involves altering immediate outcomes. Perhaps the most common approach here is to ratchet up the immediate costs associated with vices. These costs could be psychic costs of exactly the type under discussion. Thus, for example, educational interventions often attempt to make people aware of the immediate costs of succumbing to various types of vices, and many discussions of policy correctly emphasize the importance of presenting consequences in a vivid, emotionally compelling, fashion. However, to the extent that such interventions involve manipulating immediate emotions such as guilt and fear, they run into exactly the same problems as do the self-control strategies under discussion: when they don't succeed in altering behavior, they merely impose additional costs on people.

A more promising form of immediate demand-deterrence is to make people choose between different types of temptations. The goal

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9 See Kim Witte and Mike Allen, A Meta-Analysis of Fear Appeals: Implications for Effective Public Health Campaigns, 27 Health Ed & Beh 591, 605-06 (2000) (summarizing their findings that effective fear appeal messages can be created through vivid references to the threat, but that a strong appeal to fear only works if it is accompanied by an equally strong message that an individual can effectively avoid the danger); Kim Witte, et al, Preventing the Spread of Genital Warts: Using Fear Appeals to Promote Self-Protective Behaviors, 25 Health Ed & Beh 571, 582 (1998) (showing in a genital warts study that young women did not respond if they did not feel a severe threat and recommending instillation of a feeling of susceptibility as a first step for any fear appeal campaign so that subjects will be motivated to act); Howard Leventhal, Fear Appeals and Persuasion: The Differentiation of a Motivational Construct, 61 Am J Pub Health 1208, 1220 (1971) (asserting that to initiate danger control in a subject he or she must be convinced that a threat exists, that it is serious, and that it is relevant, with the exception that a subject may resist influence if the threat is too vivid and dangerous so that the subject loses hope); Howard Leventhal, Findings and Theory in the Study of Fear Communications, in Leonard Berkowitz, ed, 5 Advances in Experimental Social Psychology 119, 136 (Academic 1970) (asserting that the more fear that an individual has, the more favorable his or her attitude will be towards the recommended solution).

10 See Andrew Caplin, Fear as a Policy Instrument, in George Loewenstein, Daniel Read, and Roy Baumeister, eds, Time and Decision: Economic and Psychological Perspectives on Intertemporal Choice 441, 452 (Russell Sage 2003) (explaining that negative publicity needlessly increases fear and lowers utility for individuals who are not deterred from undertaking an undesirable activity). Beyond the fact that they impose deadweight losses when they fail to accomplish their goals, fear appeals can and do often backfire because people respond to the fear not by halting the undesired behavior, but by trying not to think about or pay attention to the threat. For example, there is good evidence that people often fail to get tests that could detect cancer because they don't want to think about cancer or are afraid of getting bad news. See, for example, Witte and Allen, 27 Health Ed & Beh at 605-06 (cited in note 9) (stating that fear appeals must be used cautiously as they can backfire by creating defensive responses in people if the target audience does not believe they can effectively avoid the threat); Kim Witte, Fear as Motivator, Fear as Inhibitor: Using the Extended Parallel Process Model to Explain Fear Appeal Successes and Failures, in Peter A. Andersen and Laura K. Guerrero, eds, Handbook of Communication and Emotion: Research, Theory, Applications, and Contexts 423, 430 (Academic 1998) (discussing the tendency of individuals to control fear through a denial of danger when they do not believe they have an effective solution).
here is to induce people to choose a less harmful vice—or perhaps even a nonvice activity—instead of a harmful vice. At Cornell University, for instance, there was a traditional end-of-the-year celebration ("Slope Day") at which students traditionally consumed excessive amounts of alcohol. In order to curb alcohol consumption by creating a reason to stay sober, the university has altered the event into a concert with big-name bands. Another, somewhat more speculative, example would be for banks to alter how they offer frequent-flyer airline miles. Under the current system of bank cards, consumers receive miles as a function of how much they spend, and hence are encouraged to spend. As an alternative, consumers could instead receive miles as a function of how much money they hold in their savings account, which would encourage them to save.

3) Supply-side restrictions. To the extent that it is difficult to curb demand-side behavior, it might be fruitful to focus on supply-side restrictions, and in particular to curb supply-side behaviors that seem clearly designed to encourage unwanted vice consumption. Our society already bans many goods that are desired by some consumers but considered more broadly to be vices, such as various types of recreational drugs, and cigarettes for children. But supply-side restrictions need not be so heavy-handed as banning products, and more importantly could entail “lighter” interventions aimed at marketing techniques designed to trigger cravings for vices. An existing example is the ban on subliminal advertising. But closely related marketing techniques are not banned—for example, pumping enticing cookie smells into the atmosphere of shopping malls to stimulate hunger. Less heavy-handed supply-side interventions might also take the form of altering the ways in which opportunities for temptation are supplied—for example, regulations that forbid two-for-one happy hours.11

In terms of our Figures, by restricting firms’ abilities to spark temptations or undermine self-control, these supply-side restrictions can be interpreted as increasing the set of vice activities that people can potentially resist. Ideally, this change will increase the set of vices that are successfully resisted and reduce the set of vices that are con-

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11 Michael Margolis, Gannett Prepares For Slope Illnesses, Cornell Daily Sun (May 4, 2005), online at http://www.cornellsun.com/news/display.v/ART/2005/05/04/427645746858?in_archive=1 (visited Jan 2, 2006) (discussing how Cornell University sought to change Slope Day by "changing the focus from drinking back to music”).

12 In May 2005, the British Beer and Pub Association, which represents more than 50 percent of all pubs, implemented such a ban on happy hours at pubs, providing just such a rationale for the policy. See Simon Freeman, Pubs Call Time on Happy Hour to Block Binge Drinking, Times Online (May 23, 2005), online at http://www.timesonline.co.uk/article/0,,2-162482,00.html (visited Jan 2, 2006).
sumed the hard way—that is, in Figure 3, increase region c and decrease region b.

Of course, supply restrictions, especially of the heavy-handed variety, have undeniable negative aspects. They can result in reduced (or less efficient) consumption of legitimate activities, and in superfluous external control and implementation costs for activities that would have otherwise been dealt with adequately by individual self-control. Moreover, supply restrictions are sometimes opposed on the grounds that they infringe on personal autonomy. And, when illegal suppliers emerge to serve latent demands, supply restrictions can contribute to a rise in crime.

4) Guilt-free zones. The first three categories of policy are all intended either to promote self-control or to substitute external control for self-control. The theoretical model we have been describing, however, points to another kind of policy that could increase consumer well-being: instead of trying to curb all vice behaviors, sometimes we should instead focus on diminishing the negative emotions associated with those vice activities that are inevitable, a strategy that we refer to as creating “guilt-free zones.”

To illustrate, consider again the case of dieting. Given the pervasive failure of diets, some researchers, such as Janet Polivy, have argued that the damage they cause far surpasses any benefits they might offer. In one seminal study, she assigned a group of women who wanted to lose weight to an “undiet” in which they were told to eat whatever they wanted. Although the undiet program did not affect weight, it did make the women less dissatisfied with themselves, and less depressed.13

Somewhat more subtly, some diets have the feature that they allow one to eat as much of selected foods (for example, low-calorie foods or protein) as one likes. By drawing a “bright line” between eating that is sanctioned and that which is not, it becomes easier to apply negative emotions only to nonsanctioned eating and to keep sanctioned eating effectively guilt-free.14 By providing very clear guidelines about what and how much people should consume from different food groups, governments and NGOs that provide dietary

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13 Janet Polivy and C. Peter Herman, Undieting: A Program to Help People Stop Dieting, 11 Int J of Eating Disorders 261, 266 (1992) (presenting the results of a ten-week undieting program showing a reduction in feelings of ineffectiveness and depression and an enhancement in self-esteem). For a randomized comparison of the undiet to a more traditional diet regimen, see Michael R. Lowe, et al, Restrictive Dieting vs. “Undieting”: Effects on Eating Regulation in Obese Clinic Attendees, 26 Addictive Beh 253, 263–64 (2001) (discussing experimental results where dieters who had been “preloaded” with a milkshake ate significantly more ice cream relative to their intake before dieting than “preloaded” undieters).

14 We thank Edward Glaeser for suggesting this example.
information and advice to citizens may be serving a similar function. Adherence to such guidelines can aid not only efforts at self-control, but can also reduce guilt, to the extent that consumption that falls within the guidelines becomes relatively guilt-free.\(^\text{15}\)

Figure 4 illustrates the logic of guilt-free zones. As the figure shows, guilt-free zones have three kinds of effects. They can have the negative effect of encouraging, through the removal of guilt, vices that the individual would otherwise be able to resist (area c). Their major benefit is to remove negative emotions from vices that the consumer was going to succumb to anyway (region b), and from nonvice activities (region a). Whether guilt-free zones deliver net benefits, therefore, depends on the size of regions a and b relative to region c.

Guilt-free zones are instances of a wider class of policies in which the inevitability of some undesired outcome is accepted, but efforts are made to reduce the costs. In the area of drug treatment, for example, many scholars and policymakers advocate an approach that is commonly called “harm reduction,” which accepts the inevitability of drug use and addiction but attempts to limit the harm that they create. For example, many of the negative health, crime and social consequences of heroin addiction do not result from the drug itself, but from the prohibitive cost of maintaining a habit (which itself can be traced at least in part to the fact that the drug is illegal). Providing drug addicts with heroin substitutes, such as methadone, reduces the harm that would otherwise arise from the addiction.

As another example, Judge Richard Posner argues in his book, Preventing Surprise Attacks,\(^\text{16}\) that the goal of eliminating terrorism is unattainable and that policy should instead focus on mitigating the impact of terrorist attacks.\(^\text{17}\) As he articulated in an interview on National Public Radio:

> [P]eople are indignant. They assume that we can achieve anything, including security, which we can’t. But what is necessary for realism is to understand that we will never have an airtight warning system against surprise attacks, and that means that while we

\(^{15}\) As another example, consumers often create guilt-free zones for themselves by creating different “mental accounts” for specific categories of consumption. For example, by creating an “entertainment account” designed to pay for luxuries such as a fancy restaurant dinner, one may be able to enjoy those luxuries with little or no guilt. Richard Thaler, Mental Accounting and Consumer Choice, 4 Marketing Sci 199, 207 (1985) (explaining that people tend to categorize their budgetary expenditures).


\(^{17}\) Id at 208 (noting that the strongest conclusion that emerges from his research is that no intelligence system, regardless of configuration, can ensure that the United States will not be subject to another surprise attack).
have to devote thought and resources to our intelligence system, we also have to think about how to mitigate these attacks when they come.\textsuperscript{18}

In sum, we have enumerated the effects of four types of policy responses to the existence of negative emotions as a tool for self-regulation. We have argued that the first two—delayed demand-deterrence and immediate demand-deterrence—are unlikely to be effective. We believe our perspective argues for focusing on ways to reduce the burden on consumers either by regulating the supply of temptations (with a particular focus on marketing techniques) or by creating guilt-free ways for consumers to enjoy their consumption. In the next Part, we illustrate these points by taking a close look at the psychology of consumer spending.

IV. THE PAIN OF PAYING

Human behavior is influenced by a variety of negative emotions. In the realm of consumer behavior, perhaps the most important of these is the pain that consumers experience when they spend money, which Prelec and Loewenstein have labeled the “pain of paying.”\textsuperscript{19}

According to the standard economic account of consumer choice, when a person decides whether to purchase a particular item, she thinks about how she would otherwise spend the money and makes the purchase if the alternative use for the money provides less utility than the purchase. Consider a consumer who is debating whether to spend $50 on a fancy dinner. She might, for instance, decide that purchasing the fancy meal tonight would mean giving up a round of golf this weekend, and she would then purchase the fancy meal if she prefers it to the round of golf. In other words, the cost of purchasing an item is the forgone consumption of other goods.

For real-world consumers, however, this decision procedure would be problematic because people tend to underweight the forgone consumption associated with purchasing an item. Part of this tendency comes from simple myopia, given that for most purchases the forgone consumption almost inevitably occurs at some time in the future. But part of this tendency also comes from the fact that forgone consumption is often rather nebulous. In addition to the inherent uncertainty


\textsuperscript{19} Prelec and Loewenstein, 17 Marketing Sci at 4 (cited in note 3) (“When people make purchases, they often experience an immediate pain of paying, which can undermine the pleasure derived from consumption.”).
of future income flows, consumption needs, tastes, and so on, identifying the marginal items that would actually need to be forgone is quite a difficult task. Hence, without some form of self-control, real-world consumers might save far less than they do.

Fortunately, consumers are able to at least partially solve this problem by cultivating negative emotions associated with paying for goods—that is, by cultivating a tendency to experience a pain of paying. Much as in our general framework, such emotions serve as a proxy for forgone consumption, and—more importantly—immediatize that forgone consumption. 20 Hence, a consumer will purchase an item when the benefits from the item outweigh the pain of paying for it. The pain of paying, we would argue, is the main reason that people don’t spend on anything that strikes their fancy. People don’t eschew fancy dinners because, or at least only because, they think about what they will have to give up if they indulge, but because, if the dinner is too expensive, they wouldn’t even enjoy the overall experience. 21

There is a natural analog for such emotions in standard economic analysis. In standard consumer-optimization problems, the value of the Lagrange multiplier (at the optimum) reflects the marginal utility of money. On the margin, then, when a consumer decides whether to purchase a specific item, she can effectively just compare the utility from the item to the utility of the money needed to purchase it. In the standard theory, however, the Lagrange multiplier is simply a useful tool that simplifies the purchase decision by providing an index of the opportunity costs. When the consumer actually makes a purchase, the Lagrange multiplier, in effect, melts away; the pleasure that the consumer ultimately obtains from the purchase is a function only of what she has purchased, and not of the (opportunity) cost that she has paid.

The reality is different, in a way that the reader will by now hopefully be able to anticipate. To the extent that negative emotions confer real utility, such emotions aid in self-control but create real costs. Most importantly, consumers who purchase items pay twice—once in terms

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20 This pain of paying is especially acute if one feels as if one is paying too much—that is, getting a bad deal. See Thaler, 4 Marketing Sci at 205 (cited in note 15) (referring to this phenomenon as “transaction utility” that solely depends on the perceived merits of a deal). Of course getting a good deal can have the opposite hedonic effect.
21 In addition to its direct negative impact, the pain of paying can also have an indirect negative impact because it might actually undermine the pleasure of consumption. For example, it might be difficult to savor the flavor and presentation of food at an expensive restaurant when one is distracted by intrusive thoughts about the cost of the meal. For more discussion of this point, see Prelec and Loewenstein, 17 Marketing Sci at 8 (cited in note 3) (describing an additional imputed cost of consumption that occurs when subjects ask themselves, “How much is this pleasure costing me?”).
of the forgone consumption, as in the usual analysis, but also in terms of the immediate pain of paying.\(^\text{22}\)

This perspective on purchase decisions has a number of policy implications.

A. Payment Mechanisms

As in our general framework, the market will have an incentive to undermine this self-control technique—to mitigate the pain of paying. Perhaps the most successful tool for accomplishing this purpose has been the introduction of new payment mechanisms. In standard economics, a new payment mechanism can make people more prone to buy an item only to the extent that it reduces the net discounted price of the item, reduces transactions costs, or offers credit to people who are liquidity constrained. But for people who experience a pain of paying, a new payment mechanism can also make people more prone to buy if it reduces the pain of paying.

Perhaps the simplest way to reduce the pain of paying is to delay the payment into the future. Firms have long offered schemes that require no payments for several months, especially for furniture and other durable goods. More recently, the expansion of the credit card market has accomplished the same thing on a much broader scale. Because the pain of paying is often associated with the act of paying cash, credit card buying has the feature that it can feel like you’re getting the good for free. Moreover, credit card buying has a second feature that can further reduce the pain of paying: when the bill comes, everything is lumped into a single payment, and so the payments become further decoupled from the purchase.\(^\text{23}\)

Of course, one might argue that by mitigating the pain of paying, credit cards appear to offer both a cost and a benefit: although they make people overprone to buy (as discussed above), they provide relief in the form of eliminating negative feelings. This relief is only temporary, however, because eventually the credit card bill must be paid. Moreover, the same decoupling of payments and consumption that renders the initial purchase more carefree has the opposite effect when

\(^{22}\) Prelec and Loewenstein describe a variety of ways in which the pain of paying can explain many patterns of consumer behavior that are otherwise difficult to make sense of—for example, a preference for prepayment and for zero marginal-cost pricing schemes such as monthly bus passes, all-you-can-eat restaurants, and Internet services. Id at 4.

\(^{23}\) Some subtle mental-accounting issues arise that could explain individual differences in buying behavior. In particular, credit card buying can reduce the pain of paying only to the extent that people experience the pain of paying on actual payments. If instead an individual experiences the pain of paying upon committing to a purchase, regardless of when payments occur, then credit card buying will not reduce the pain of paying.
it comes to paying off the credit card balance. When the credit card bill arrives, because payments aren’t clearly linked to specific purchases, and also, perhaps, because paying interest feels like paying for nothing, consumers seem to find it especially painful to pay off credit card debt. Thus, in one study, respondents reported that paying off credit card debt was even more painful than paying for parking tickets.24 From a welfare perspective, therefore, credit card buying may be particularly pernicious because it encourages people to make inframarginal purchases that don’t take proper account of opportunity costs, and to rack up debt that they subsequently find especially painful to pay off.

Our perspective offers a natural policy implication with regard to credit cards. Credit cards serve two purposes: (1) they facilitate purchases by reducing transactions costs, and (2) they are a form of borrowing. The fact that credit cards ease transactions is a real benefit, and should make one hesitant to regulate credit cards. But there is nothing inherent that requires the two services provided by credit cards to be tied together. Indeed, debit cards and old-fashioned American Express cards provide only the first service, while standard loan contracts provide only the second service. The tying of these two services into a single product, we believe, is problematic in a world of myopic consumers who rely on the pain of paying to control their purchases.

In fact, because credit card borrowing usually means that a person makes a series of disaggregated borrowing decisions, the use of credit cards as a means to borrow may be particularly inefficient. Consider two means of borrowing: (1) take out a loan of $10,000 on January 1 to be used for purchases over the next twelve months, or (2) slowly accumulate over the year a credit card balance of $10,000. The standard economic model would say that a person ought to be (roughly) indifferent between these two options. But we suspect that many consumers who accumulate $10,000 of credit card debt over a year would not have been willing to take out a $10,000 loan at the start of the year. Intuitively, they do not want to borrow and spend an extra $10,000, and so when faced with an aggregate decision of how much to borrow this year, they would choose much less. But when they make a

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24 Prelec and Loewenstein, 17 Marketing Sci at 23 (cited in note 3), asked eighty-eight adults to rate how pleasantly surprised they would be were they to receive an unexpected $300 rebate for ten different hypothetical expenditures they would otherwise have had to make, where a smaller ranking meant that they were more pleased. On average, respondents reported that they would be most pleased to receive a $300 rebate for miscellaneous credit card bills (mean rank of 3.66), next most pleased to receive a rebate for dental work (mean rank 4.51), third most pleased to receive a rebate for recent parking tickets (mean rank of 4.72), and least pleased to receive a $300 rebate on a fancy sport coat (mean rank of 6.38).
series of disaggregated, small borrowing decisions, people often end up borrowing a lot. Moreover, because credit card buying can eliminate the immediate pain of paying, whereas paying cash does not, people who borrow $10,000 upfront and pay with cash may end up spending much less than they would if presented with credit cards that had a $10,000 credit limit.

The simple policy response suggested by our perspective would be to permit charge cards and to permit debt, but to forbid charge cards that are automatically linked to debt accounts—in short, to ban credit cards as they currently exist. The current legal environment with regard to credit cards is perhaps exactly the opposite of that suggested by our perspective. Credit card companies make it easier and easier for people to acquire credit cards, with few restrictions, while at the same time bankruptcy laws are becoming more restrictive for the many people who (predictably) end up buying more than they should. As a result, the situation faced by many consumers is not unlike that faced by the hapless child who is presented with a pile of tempting candy yet threatened with severe consequences if she succumbs to temptation.25

B. In-kind Services

Many businesses offer employees a variety of in-kind services, such as vacations, company cars, and so forth. Such noncash compensation is often perplexing to economists, because the standard economic model argues that it is always better to give people a cash equivalent and let them choose how to spend it. There are some standard explanations, such as economies of scale—for example, a firm may be able to acquire a fleet of BMWs more cheaply than individuals could—or attempts by firms to exploit tax loopholes. But part of the reason for the popularity of in-kind services may be that they permit people to consume goods without having to pay for them. In a sense, in-kind transfers create a kind of guilt-free zone so that each year employees can enjoy a few luxury expenditures without incurring the offsetting psychic costs associated with the pain of paying.

From a policy perspective, the question arises whether it might be worthwhile to create further incentives for firms to offer in-kind services. The answer is not obvious. It depends, for instance, on the extent to which employees recognize the value of in-kind services. If employees underappreciate their value, then it might be useful to encourage more. It also depends on the cost of such services to firms. To the ex-

25 Indeed, one might wonder why on the one hand consumers are (nearly) fully penalized for their mistakes of overbuying, whereas credit card companies are not punished for their mistakes of overlending.
tent that in-kind payments help people to avoid the types of tradeoffs that cause stress, they could potentially enhance well-being.\textsuperscript{26}

C. Taxes

The same pain of paying that applies to purchase decisions can also apply when people pay taxes. If so, then the ways in which taxes are raised can affect people’s well-being. Some taxes are quite salient, and lead to large negative emotions when they are paid. Others are more hidden, and hence cause less pain of paying.

Consider, for instance, the difference between income taxes with withholding versus income taxes without withholding. Under the latter, each year people would be forced to write a big check to the government. Under the former, in contrast, small chunks are taken out on a regular basis. Moreover, the chunks are taken out before employees see the money, and hence people often take relatively little notice of these payments. Our perspective therefore suggests that, holding constant total taxes, income-tax withholding may create real benefits for taxpayers.\textsuperscript{27}

People opposed to large government spending often oppose hidden taxes. They reason—probably correctly—that by making taxes salient, people will be motivated to vote against higher taxes. However, to the extent that taxes impose a real psychic cost on people, this technique may achieve their ends at a high cost to taxpayers. A social planner concerned with maximizing the welfare of the people would impose taxes in the least painful way possible.

D. Public Amenities

Finally, the pain of paying has policy implications for the pricing and provision of public amenities, such as parks and roads. Here, the point is not so much to prevent the market from undermining consumers’ self-control devices, but rather to enable people to fully enjoy such amenities. The standard model suggests that the government charge usage fees as a means of screening people who have a strong prefer-

\textsuperscript{26} Gifts can serve a similar function. Even when they come from your spouse, and you have shared finances (as most do), receiving a desired item as a gift, instead of paying for it yourself, can reduce the pain of paying. Thaler, 4 Marketing Sci at 212 (cited in note 15).

\textsuperscript{27} Perhaps more hidden yet is the value added tax (VAT) combined with a requirement to quote prices in after-tax terms (as in many European countries). The benefits of the VAT are somewhat more subtle, however, because the VAT raises prices, which will increase the pain of paying for products. However, basic principles of mental accounting suggest that the pain of paying will be smaller when the extra payments are incorporated into the price rather than being presented as a separate tax. See Thaler, 4 Marketing Sci at 209 (cited in note 15) (describing evidence that individuals prefer integrated losses to segregated losses).

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ence for the public amenity (when users impose negative externalities on one another due to crowding), or for reasons of distributional justice (so that the people who use the goods pay for them). However, if people experience a pain of paying, it might be worth eliminating usage fees, or at least offering zero marginal-cost pricing schemes, in order to reduce the pain of paying. Of course, the amenities will have to be paid for in some fashion, so they will inevitably cause some pain, but they are liable to cause less pain when they take the form of income taxes that are deducted from paychecks before consumers even see the money than when they take the form of a fee that must be paid each time one uses the amenity.

V. CONCLUSION

In this Essay, we have argued that the law needs to take account of the negative emotions that economic and legal actors often experience when they engage in certain undesirable activities. In part, the law needs to take negative emotions into account because they play an important role in determining human behavior. But because most theoretical accounts of the law assume that it exists at least in part to improve the human condition, there is a second reason to incorporate negative emotions: to the extent that the human condition is characterized by unpleasant immediate emotions, the legal academy should take account of how laws, policies, and economic institutions affect the extent and mix of such emotions.

Although the pain of paying is most relevant to the topic of this Symposium—the law and economics of consumer choice—the same pattern occurs in other domains of behavior. In risk-taking behavior, for instance, immediate feelings of fear play the important role of deterring humans from taking risks that we should probably avoid. Much as above, however, when we take those risks anyway, we end up paying for them twice—once in terms of the negative consequences that we might incur, and also in terms of the immediate fear that we experience upon taking the risk. Applying our logic above, this fear has important implications for public policy. For instance, we should be wary of policies that attempt to alter behavior by promoting increased fear—that attempt to scare people into not taking or protecting themselves from risks. Although when they are frightened, some smokers will quit, some women will get a mammogram, and some men will get a PSA test (a test for prostate cancer), those who don’t are going to be made worse off by such fear-inducing messages. Indeed, there is evidence that fear appeals often backfire, creating worries that discour-
age people from getting tests for fear of getting bad news.\textsuperscript{28} A better policy, which is somewhat analogous to hidden taxes, would be to routinize such tests as much as possible—to make them a pro forma part of some other routine event, such as the biannual medical checkup. As another example, the current color-coded terrorist alert system that provides no guidance about what to do, but terrifies the population, is a perfect example of government policies that impose almost pure deadweight losses.

Recognizing the existence of negative emotions might lead us to alter our interpretations of the intrusiveness of paternalistic policies. Although paternalism has been widely viewed in a negative light, recent papers in law and economics have advocated a conservative approach—under the labels "libertarian paternalism"\textsuperscript{29} and "asymmetric paternalism."\textsuperscript{30} Through the selective application of nonintrusive paternalistic policies, this approach attempts to help people make better decisions while having little or no effect on rational decisionmakers. But this research has judged the intrusiveness of policies based almost exclusively on how policies affect final outcomes.

To illustrate how our interpretations might change, consider one of the most commonly advocated forms of light paternalism: the provision of information. The goal of paternalistic information provision is to recognize that people react differently to different presentations of information, and to present information to consumers in a way that most likely will lead them to behave in their own best interests. This usually means presenting the information in a way that explicitly and clearly states the costs and benefits associated with some activity. When one takes account of the costs of emotions, however, making information about the costs clear and explicit may in fact appear quite intrusive. As highlighted in the discussion of fear appeals, information can impose real costs, especially when it ultimately doesn't change behavior.

Food labels provide a further illustration of the point. People have argued for clear and explicit labeling of food content, with particular emphasis on ingredients that are unhealthy. This labeling has an obvious rationale: consumers should know about the ingredients and characteristics of different foods so they can make informed deci-

\textsuperscript{28} See note 10.

\textsuperscript{29} See, for example, Cass R. Sunstein and Richard H. Thaler, \textit{Libertarian Paternalism Is Not an Oxymoron}, 70 U Chi L Rev 1159 (2003) (advocating attempts to steer people's choices to promote their welfare while not restricting freedom of choice, in particular by using default rules, framing effects, and starting points).

sions about what to ingest and what to avoid. However, food labeling has a downside. Eating is a necessary activity, and all but the most abstemious are going to occasionally eat foods that are unhealthy. Indeed, eating is one of the most reliable sources of pleasure in life, and many unhealthy foods top the list of pleasurable foods. On those occasions when one does succumb to temptation, and even when one is consuming food in a perfectly reasonable fashion, knowing how much one is poisoning oneself can significantly detract from the pleasure. Judging from the obesity epidemic in our society, food labels are not accomplishing the purpose of helping people to control their behavior; and judging from the prevalence of eating disorders, such as anorexia and bulimia, there are at least some people with a distinctly neurotic attitude toward food. Hence, although there are clearly great benefits to food labels, it would be a mistake to ignore the fact that there are costs as well.31

On the other hand, forms of paternalism usually viewed as heavy-handed may not appear quite so intrusive when one takes account of the role of emotions. Part of the reason that paternalism is so widely feared is the label, which evokes the specter of a punitive, rigid, restrictive parent. However, who is more heavy-handed, the parent who simply removes the TV from the house, or the parent who gets a huge flat-screen TV with all the cable channels and TiVo and then threatens the child with dire consequences if he or she watches? Supply restrictions, which are ordinarily viewed as a form of heavy-handed paternalism, might in fact lighten the strain on individuals, especially relative to leaving people to defend themselves against the unhitched devices of the market armed only with the puny but heavy shield of their own negative emotions.

Should policy really be aimed at protecting us from negative emotions? Certainly, one recoils from the image of a life with, to quote a song by the Eurythmics, "no fear, no hate, no pain"—indeed, feeling guilt and fear is part of being human. For better or for worse, however, it seems very unlikely that the policies proposed herein are going to put an end to guilt and fear or other emotions associated with self-control. At best, they will tend to lessen their excess impact and to place consumers on a more even playing field vis-à-vis those who are

31 McDonald's seems to have found a sensible compromise policy that provides information without causing excessive guilt. Whereas it used to post dietary information in an obscure placard on the wall that few people could find, now it prints the information on the underside of the tray liners (and its location is noted on the top side). If consumers are eager to get the information, it is readily available; however, if they would prefer not to think about it, it can easily be ignored.

32 Eurythmics, No Fear No Hate No Pain (No Broken Hearts), Touch (RCA 1983).
trying to undermine their self-control. Negative emotions serve essential functions, as we have attempted to highlight in this paper; our goal is not to generally eliminate them but rather to eliminate those that serve no function and impose only costs. Ultimately, it may be possible to create an atmosphere in which people can sometimes consume the easy way, without experiencing negative emotions.
FIGURE 1
General Division of Activities

All activities

All vices

Vices one can potentially resist

FIGURE 2
The Ideal of Affect-Based Self-Control

All vices

Vices one can potentially resist

Threat of guilt/shame/remorse
FIGURE 3
The Reality of Affect-Based Self-Control

Deadweight loss (wasted imposition of guilt and remorse)

Failure to exploit opportunities for self-control

All vices

Vices one can potentially resist

Threat of guilt/shame/remorse

Successfully resisted vices

"Neurotic" attitudes toward nonvice consumption
FIGURE 4
Guilt-Free Zones

- New vices
- Reduction in deadweight loss
- Threat of guilt/shame/remorse
- Reduction in neuroticism

All vices
Vices one can potentially resist
Guilt-free zone
Unaffected

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