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Boundedly Rational Borrowing

Cass R. Sunstein†

Excessive borrowing, no less than insufficient savings, might be a product of bounded rationality. Identifiable psychological mechanisms are likely to contribute to excessive borrowing; these include myopia, procrastination, optimism bias, "miswanting," and what might be called cumulative cost neglect. Suppose that excessive borrowing is a significant problem for some or many; if so, how might the law respond? The first option involves weak paternalism, through debiasing and other strategies that leave people free to choose as they wish. Another option is strong paternalism, which forecloses choice. Because of private heterogeneity and the risk of government error, regulators should have a firm presumption against strong paternalism, and hence the initial line of defense against excessive borrowing consists of information campaigns, debiasing, and default rules. On imaginable empirical findings, however, there may be a plausible argument for strong paternalism in the form of restrictions on various practices, perhaps including "teaser rates" and late fees. The two larger themes, applicable in many contexts, involve the importance of an ex post perspective on the consequences of consumer choices and the virtues and limits of weak forms of paternalism, including debiasing and libertarian paternalism.

I. THREE KINDS OF PEOPLE

The world contains three kinds of people: those who borrow the right amount, those who borrow too much, and those who borrow too little.

The evaluation of whether borrowing is optimal might be made ex ante or ex post. Economists and economically oriented lawyers prefer the ex ante perspective. From that perspective, people might borrow too little if they lack adequate information about the high benefits or low costs of borrowing in a particular instance. Or they might borrow too little if some kind of emotion—unjustified fear of debt, for example—disables them from borrowing money in circumstances in which they would do so if not thus disabled. Excessive borrowing could have a similar ex ante explanation. Borrowers might be insufficiently informed of the costs of credit, believing that those costs are far lower than they actually are. Alternatively, borrowers might suffer from a cognitive or motivational problem, such as impulsiveness, that leads them to borrow, and perhaps to face high interest rates, when fully rational people would not do so.

At least as plausibly, the question of optimal borrowing should be investigated ex post, with close reference to the actual effects of bor-

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rowing behavior on people's lives. If we are concerned about human welfare, there is much to be said in favor of the ex post perspective. Sometimes there is a gap between what people want and what people like; if so, the wanting-liking gap might be large enough to justify governmental concern. A central question is the effects of consumer choices, including borrowing, on consumers. We might find that insufficient or excessive borrowing ensures that people's lives go significantly less well than they otherwise would.

Suppose, for example, that people's consumption choices lead them to purchase products that do not much improve their well-being, but that the resulting debt much impairs their well-being—by, for example, making current earnings go to debt repayment rather than food and medical care. Or perhaps consumer behavior leads to a battle for greater relative position, one that amounts to a kind of arms race in which people try to keep pace with one another. That arms race, involving competition over "positional goods," almost certainly plays a role in recent increases in consumer debt. If borrowing means that people's welfare is significantly reduced, then there is a real problem, one that might justify some kind of legal intervention.

The risk of excessive borrowing is paralleled by the risk of insufficient borrowing. Perhaps people's lives would go better if they were willing to incur debt at various stages. Perhaps many young people, and some older ones too, are unduly fearful of debt, and hence refuse to borrow money when it is very much in their interest to do so. It is fully imaginable that the problem of excessive borrowing is equaled or exceeded by the problem of insufficient borrowing.

I do not seek in this Essay to reach any final conclusions about the sources and magnitude of boundedly rational borrowing or about the appropriate legal response. My narrower goal is to provide a kind of regulator's guide, or a conceptual map—a general outline of the reasons that boundedly rational borrowing might occur and the possible legal remedies. My hope is that the discussion will be applicable to a wide range of situations in which bounded rationality is a potential problem; hence, much of the analysis could be applied to such behavior as smoking, drinking, eating, exercising, saving, vacationing, and working. Evaluation of the relevant mechanisms and remedies would require detailed empirical investigation, which I do not venture here.

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2 See Robert H. Frank, Luxury Fever: Why Money Fails to Satisfy in an Era of Excess 11 (Free 1999) ("In short, both the things we feel we need and the things available for us to buy depend largely—beyond some point, almost entirely—on the things that others choose to buy.").
There are two larger themes. The first, already suggested, involves the importance of evaluating the effects of consumer behavior ex post rather than ex ante—of investigating the consequences of consumer choices for the lives of consumers. Too often, the ex ante perspective has ruled that evaluation off limits. The second involves the uses and limits of weak paternalism. It is possible to imagine approaches to boundedly rational behavior that preserve freedom of choice while also steering people in directions that will promote their own well-being. As a presumption, regulators should favor weak rather than strong paternalism, simply because the preservation of choice is an important safeguard against government error.

II. MECHANISMS

My focus here will be on excessive borrowing. A key question is why people might be excessive rather than optimal borrowers. The most obvious reason, suggested above, involves a lack of information: borrowers might not be adequately informed of the costs and benefits of borrowing. They might not read the fine print; they might believe that short-term “teaser rates” are actually long-term, or at least neglect the fact that such rates will have only a small beneficial effect on their finances. To suggest this possibility, it is not necessary to observe that human beings are boundedly rational. But now assume that we are dealing with homo sapiens, not homo economicus. Five problems are likely to contribute to excessive borrowing.

1) Cumulative cost neglect. Even if boundedly rational, consumers might well hesitate before borrowing $20,000 at a high rate of interest. But if a long series of much smaller purchases has that same effect, the cost might well be less visible. A distinctive form of bounded rationality stems from neglect of the aggregate effect of large numbers of relatively small borrowing choices. Call this “cumulative cost neglect.” When borrowing is excessive, the reason often lies in that form of neglect. Addictive behavior is the most serious problem here, but cumulative cost neglect can be a problem even without addiction.

2) Procrastination and inertia. For many borrowers, it is not difficult to avoid high interest rates and late charges. Timely payments will

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3 An excellent discussion, from which I have learned a great deal, is Oren Bar-Gill, Seduction by Plastic, 98 Nw U L Rev 1373 (2004) (explaining today's staggering levels of credit card debt with a behavioral theory based on consumer biases).

eliminate the problem. But some borrowers procrastinate, ensuring that some bills are paid late. As a result, significant charges can accumulate. It is apparently difficult for some people to overcome the costs of inertia even when transaction costs are minuscule; I speculate that the economic level of late fees is, in nontrivial part, a result of procrastination.

3) Unrealistic optimism. Some borrowers suffer from excessive optimism, believing that they will be able to repay a debt when this is unlikely. Unrealistically optimistic borrowers will make welfare-reducing consumption choices, simply because they will fail to appreciate the problems associated with their borrowing. Most young smokers falsely believe that they will not be smoking in a few years. So too, many borrowers, I suggest, falsely believe that they will not have a serious debt problem as a result of their behavior. Unrealistic optimism affects consumers at the time when they are making large expenditures. It also interacts with cumulative cost neglect.

4) Myopia and self-control problems. Some borrowers are myopic, emphasizing the short term at the expense of the future. Myopic borrowing might be seen as a taste for current well-being over future well-being, in a way that raises no concerns about bounded rationality; but if a day’s welfare produces long-term distress, bounded rationality is probably involved. Myopia contributes to self-control problems, by which consumers make decisions that undermine their well-being over time. In this way, excessive borrowing belongs not only in the same general family with insufficient savings, but also with insufficient exercise, obesity, poor diet, and excessive smoking and drinking.


6 See Slovic, 13 J Behav Dec Making at 259 (cited in note 4) (noting that young smokers tend to underestimate the risk of becoming addicted to tobacco); Slovic, 47 Duke L J at 1140 (cited in note 4) (discussing a longitudinal study finding that although 32 percent of high school seniors who smoked one or more packs a day predicted they would not be smoking in five years, only 13 percent had actually quit smoking five to six years later).


8 Some problems generally assessed under the rubric of myopia and self-control problems might well be better handled under the framework presented in George Loewenstein and Ted O'Donoghue, "We Can Do This the Easy Way or the Hard Way": Negative Emotions, Self-Regulation and the Law, 73 U Chi L Rev 183, 186–87 (2006). In particular, Loewenstein and O'Donoghue's emphasis on the role of emotions and temptation has obvious applications to borrowing behavior as well as to the more familiar contexts of overeating, drinking, and smoking.
5) Miswanting and relative position. Most generally, some consumers suffer from a problem of "miswanting"; they want (and buy) things that do not promote their welfare, and they do not want things that would promote their welfare. When this is so, then the idea of consumer sovereignty loses some of its underlying justification; people's decisions do not actually make their lives go better. Some borrowing behavior is undoubtedly a product of miswanting. A related problem arises when borrowing is a product of competition to achieve better relative position with respect to goods—a competition from which consumers do not benefit as a whole. When individual consumers are participating in a competition for better relative position, they are acting rationally, and they are not miswanting: if relative position matters—and it does—then people should try to maintain it. But to the extent that easy borrowing accelerates that competition, it is likely to produce a great deal of harm.

We do not know whether for society as a whole borrowing is more properly described as insufficient or as excessive. Even for particular people, it is difficult to know whether a particular level of borrowing is optimal. And for behavior that unambiguously qualifies as excessive, it is hard to uncover the role of each of these variables. At least in theory, however, these forms of bounded rationality are likely to produce significant problems for some consumers. Optimistic observers might well contend that borrowing is generally rational, and perhaps they are right. But the fact that the average American household has an average credit card debt of $6,500 is at least suggestive, and no one doubts that credit card debt is closely associated with bankruptcy filings by consumers. More generally, a great deal of evidence about the credit card market throws the optimistic view into some doubt.


11 See Frank, Luxury Fever at 9 (cited in note 2) (arguing that eliminating competitive spending would make people better off because it would allow resources to be spent in other ways).

12 Bar-Gill, 98 Nw U L Rev at 1385 (cited in note 3).

13 See id at 1385–86 (discussing empirical studies indicating a causal relationship between credit card debt and consumer bankruptcy filings).

14 See generally id.
It is certainly plausible to distinguish between excessive and optimal borrowing. It is even plausible to suggest that market pressures will lead companies to appeal to the human tendency, grounded in the factors just outlined, to borrow excessively. Suppose, purely for purposes of argument, that excessive borrowing occurs at a significant rate, and that it causes individual and social harm. What is the appropriate solution? Is there anything that law might do to help?

III. WEAK PATERNALISM

Let us begin by distinguishing between strong and weak paternalism. As I understand it here, strong paternalism forecloses choice, typically on the ground that all or most people will choose unwisely. Mandatory seat belt laws and bans on the use of cocaine and heroin can be understood as strongly paternalistic (though third-party effects are relevant as well). In the context of excessive borrowing, an appreciation of bounded rationality might well spur proposals for strong paternalism, on the theory that people will make choices that undermine their own well-being. If borrowing is likely to be boundedly rational, some such proposals might seem to make a great deal of sense on certain empirical assumptions.

A. Against Strong Paternalism

In general, there are three problems with such proposals. The first involves individual heterogeneity. Even if many borrowers suffer from bounded rationality, others do not; and it is unfortunate if government is punishing the latter group to help the former. Indeed, any governmental help for those who are boundedly rational may remove a desirable incentive to learn over time.

In addition, what seems to be bounded rationality may simply involve idiosyncratic tastes. If some people are eating a great deal of ice cream, and gaining a lot of weight as a result, this may be because they greatly enjoy ice cream. No problem of bounded rationality need be involved. If some people are refusing to exercise, it may be because they really dislike exercise and because the health gains from exercise, even over a lifetime, do not justify the costs. Some apparently excessive borrowers may know that they will be able to pay back their loans

15 See, for example, id at 1434 (arguing that “highly sophisticated corporations will often exploit consumers’ behavioral biases”).
16 See, for example, id at 1421 (“[I]t may be desirable to categorically prohibit the use of penalties, negative amortization rates, and even some types of teaser rates in unsolicited offers.”).
17 See id at 1417 (noting that “the implementation costs of ... different policy proposals must be weighed against the potential benefits from these proposals”).
as a result of growing income in future years; for them, it is worthwhile
to pay high interest rates now in return for the option to consume a
great deal immediately. Perhaps they are borrowing in order to pro-
vide good opportunities for their young children; perhaps they will be
in a better position to eliminate their debt when their children are
older. Perhaps they are borrowing in the reasonable expectation that
their earnings will increase in the future, when they will have less time
to enjoy themselves.

The second problem involves the risk of government error. No
less than ordinary people, government officials are subject to various
forms of bounded rationality, including myopia, cumulative cost ne-
glect, and unrealistic optimism.18 Worse still, public officials are subject
to parochial pressures, including interest group power, that can greatly
distort their judgments. A government that indulges in strong pater-
nalism might make erroneous decisions as a result of its own blunders
and the efforts of groups with a strong stake in the outcome. In the
domain of borrowing behavior, it is easy to imagine apparently public-
interested restrictions that are actually an effort to promote the inter-
est of well-organized private groups. It is even plausible to suggest
that an appreciation of behavioral issues raises more, rather than fewer,
concerns about the risk of government error, simply because officials
are human beings too.

The third problem has to do with the corrective potential of indi-
vidual choice. If government allows people to opt out of its preferred
arrangement, it will create an immediate safeguard. That safeguard
can protect against government error and work to protect against one-
size-fits-all solutions. It also ensures that if circumstances change over
time, and if markets and individual initiative create novel opportuni-
ties and arrangements, people can take advantage of them. In the con-
text of borrowing, markets are rapidly changing,19 and strong paternal-
ism might be responding to a problem that is diminishing. One of the
advantages of weak paternalism is that it may be technology-forcing,
in the sense that it can spur innovations that respond to individual
needs in ways that government may be unable to imagine. Because
strong paternalism forbids private choice, it may freeze a solution that,
at best, works for most rather than all, and that might cease to work
for most as time passes.

18 See the discussion of "behavioral bureaucrats" in Christine Jolls, Cass R. Sunstein, and
Richard Thaler, A Behavioral Approach to Law and Economics, 50 Stan L Rev 1471, 1543–45
19 See Tom Brown and Lacey Plache, Paying with Plastic: Maybe Not So Crazy, 73 U Chi L
B. Paternalism with Liberty

For all of these reasons, there should be a firm presumption against strong paternalism. And in fact a great deal of recent attention has been focused on forms of paternalism that steer boundedly rational people in directions that will promote their own well-being. Three ideas have received particular attention.

1. Asymmetrical paternalism.

Colin Camerer and his coauthors have argued in favor of "asymmetrical paternalism," in the form of interventions that promise to deliver significant benefits to those who do suffer from bounded rationality, without imposing significant costs on those who do not so suffer. A core example is a "cooling off" period. A waiting period for certain decisions can protect people facing self-control problems without much harming people who do not face those problems. If people are asked to wait for a certain period before buying encyclopedias, getting married, or becoming divorced, many may be helped while few will be hurt, and those who are hurt are unlikely to be hurt much. So too with information disclosure, which should protect those who suffer from certain cognitive biases without injuring consumers who do not need any such information. The central goal of asymmetrical paternalism is to develop modest initiatives that serve to correct individual errors without adversely affecting those who do not err.

2. Libertarian paternalism.

It is also possible to imagine "libertarian paternalism," in the form of approaches that steer people in welfare-promoting directions while also allowing them to do as they wish. An approach is both libertarian and paternalistic if it retains freedom of choice while also leading people to make decisions that will improve their well-being. Defining examples are private and public default rules, based on a sensible view about the proper course of action; consider automatic enrollment plans for savings, which lead to dramatic increases in savings rates. Or consider the Save More Tomorrow (SMarT) plan, by

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which some employers have provided their employees with a novel option: *allocate a portion of future wage increases to savings*. Employees who choose this plan are free to opt out at any time. A large number of employees have agreed to try the plan, and only a few have opted out. The result has been significant increases in savings rates.

There is a large overlap between asymmetrical paternalism and libertarian paternalism. The reason is that interventions that are choice-preserving (and hence libertarian) are generally asymmetrical, because they are not likely to impose significant costs on people who do not suffer from bounded rationality. But the two concepts are not the same. It is possible to imagine a form of paternalism that is libertarian but not asymmetrical—as, for example, in a default rule that does not help people who are boundedly rational, but that leads to an outcome that would protect some segment of the population. (A default rule in which zero percent of wages go to savings certainly qualifies as libertarian, and it steers employees in a particular direction, but it cannot qualify as a form of asymmetrical paternalism.) We could also imagine a form of asymmetrical paternalism that denies choice and hence does not count as libertarian; consider a ban on certain purchases that are almost never made by people who do not suffer from bounded rationality.

3. Debiasing through law.

Under a third approach, weak paternalists might seek to “debias” people through law, by taking advantage of empirical work on strategies operating to debias people from the effects of bounded rationality. Consider an approach that attempts to respond to unrealistic optimism on the part of consumers by harnessing the availability heuris-
tic. With such strategies, excessive optimism is met by vivid narratives of possible harm, in a way that is meant to give people a more realistic appreciation of the risks at stake. Debiasing strategies are the weakest form of weak paternalism; the relevant steering operates directly on bounded rationality and allows people to act as they see fit. When debiasing strategies are used, consumers and others remain entirely free to choose.

4. Objections to weak paternalism.

It is tempting to object to weak paternalism on the ground that even if it is weak, paternalism involves a form of governmental manipulation of consumers, in a way that might violate their autonomy and produce welfare losses as well. Slippery slope problems might also seem especially severe in this domain. Suppose that government believes itself entitled to debias and that officials and relevant groups know exactly how to accomplish that task. If so, regulators might well be tempted to engage in a form of "mind control," steering both preferences and choices in their preferred directions. As the history of government propaganda suggests, there can be no assurance that any debiasing will be exercised benignly. And if regulators and their allies know about the power of default rules, perhaps they will default people into options that serve parochial interests rather than the interests of those who are supposed to be benefited. It is easy to imagine, for example, that groups with a financial interest in increased savings might favor approaches that increase savings, whatever the welfare effects on workers. It is also possible to imagine interest group maneuvering that would protect certain kinds of lenders at the expense of others.

The simplest response to this objection is that some forms of weak paternalism are unavoidable. In many cases, weak paternalism, in the form of government steering, is inevitable, and it is utterly pointless to ask whether such steering is desirable. For example, any legal system must rely on default rules; "every policy must have a no-action default, and defaults impose physical, cognitive, and . . . emo-

29 See Sunstein and Thaler, 70 U Chi L Rev at 1174-75, 1182-83 (cited in note 21) (discussing the coercive effects of various legal arrangements to demonstrate the inevitability of paternalism).
tional costs on those who must change their status.”

Default rules specify, among other things, what happens when parties have not agreed on the time of performance, or when employers and employees have not specified whether employment is at will or for cause, or whether employees are entitled to vacation time and to be free from discrimination on the basis of age. In the world of borrowing, no less than in the world of employment, default terms are pervasive; they identify the background for bargaining by saying who must obtain what sort of agreement from whom. This background inevitably affects preferences and choices. This is the sense in which government steering, and in that sense weak paternalism, is unavoidable.

Those who object to weak paternalism sometimes speak as if government can be absent—as if the default terms that set the background come from nature or from the sky. This is a major confusion. To be sure, it is possible that the default terms that now apply in any particular context are generally best, in the sense that they promote the interests of the parties on net. But that view must be defended, not asserted. The central point is that whether or not the default terms are desirable, they help to shape preferences and choices, and in that sense reflect a form of weak paternalism.

Perhaps the committed antipaternalist could acknowledge this point and argue, more cautiously, that there should be a strong presumption against weak paternalism except to the extent that it is inevitable. And it is true that many forms of weak paternalism are far from inevitable. Regulators may or may not choose information campaigns, cooling off periods, and debiasing strategies. Should there be a presumption against those admittedly optional approaches? This question is hard to answer in the abstract. Suppose we believe that most of the time, boundedly rational behavior is not likely to be terribly damaging and that market forces, together with social influences and private learning, will provide a corrective. Suppose we believe that regulators are highly likely to be confused or self-serving, and that their apparent efforts to correct bounded rationality will usually do more harm than good, even if the efforts at correction involve weak paternalism. If so, a presumption against weak paternalism would be justified.

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Eric J. Johnson and Daniel Goldstein, *Do Defaults Save Lives?*, 302 Science 1338, 1339 (2003) (discussing how a default in favor of organ donation will lead to greater participation as people make a choice they may not otherwise go out of their way to make). Two qualifications are necessary here. First, it is possible to follow an approach of “coerced choosing,” by which no default rule is in place and people are forced to select a rule or policy. In many cases, however, coerced choosing is not feasible, and in many others it is not desirable. Second, the ellipses eliminate the words “in the case of [organ] donation,” where the emotional costs may be especially high; but emotional costs often attach to changes in default rules.
Nothing said here rules that presumption out of bounds. On imaginable empirical assumptions, it makes a great deal of sense. A recognition of bounded rationality does not by itself justify any particular form of governmental response; cognitive error on the private end might be matched or even exceeded by cognitive (and other) failure by public institutions. Perhaps this is so of boundedly rational borrowing; recall that I have not attempted to show that the problem of excessive borrowing is serious enough to justify a governmental response of any kind. But it is also plausible to think that in many contexts, bounded rationality causes significant harm, that the market does not provide an adequate corrective, and that modest regulatory interventions can make people much better off. Let us shift, then, from more general questions to some concrete possibilities.

IV. RESPONSES TO BOUNDEDLY RATIONAL BORROWING

Those inclined to weak paternalism might consider three approaches to excessive borrowing.

A. Information

The first response would be purely informational—the kind of approach taken by the Truth in Lending Act.\textsuperscript{31} Here the goal would be to ensure that borrowers know what they are doing. If important facts seem hidden, buried in fine print, or unintelligible, regulators might take corrective steps. The most obvious example is to require clear disclosure of interest rates. Suppose market and regulatory pressures now work well, so that consumers generally know about rates and so that competition is actively working to lower rates.\textsuperscript{32} If so, perhaps it is time to consider informational approaches for late fees, a significant source of revenue and perhaps a product of bounded rationality for many consumers. Whatever the target of disclosure, the advantage of this approach is that it is unlikely to impose any real costs on those who seek to borrow, while at the same time producing real benefits to those who might borrow excessively.

There are, however, serious problems with informational approaches. Most fundamentally, they do not adequately come to terms with bounded rationality. If borrowers are both myopic and excessively optimistic, there is a serious risk that purely informational re-


\textsuperscript{32} See Brown and Plache, 73 U Chi L Rev at 79 (cited in note 19).
sponses will do little or nothing.\textsuperscript{33} If consumers are suffering from cumulative cost neglect, then most disclosure strategies will not work—unless, perhaps, they explicitly focus people on cumulative costs, in which case disclosure is sliding into a form of debiasing. The general lesson is that the strategy of "provide more information," favored on standard economic grounds, should be helpful when people merely lack knowledge; but as a response to biases and self-control problems, it is most likely to be inadequate.

In fact the problem is worse still. When government attempts to "provide more information," it has to engage in some kind of framing. Because of bounded rationality, some frames will have more of an impact than others. For those who suffer from serious forms of bounded rationality, steps like those in the Truth in Lending Act may well do little good. Of course the key questions here are empirical ones; it would be extremely valuable to have a sense of the effects of the Truth in Lending Act. It is possible that the effects are small. Perhaps more self-conscious efforts to inform consumers would have desirable effects. But unless the problem really is a simple lack of information, there is little reason for much confidence on that count.

B. Debiasing

A second possibility would involve debiasing. Here government would be highly alert to the psychological mechanisms that create a risk of excessive borrowing, and it would take steps specifically designed to counteract those risks. Consider the parallel domain of smoking behavior, where a great deal of work has been devoted to debiasing.\textsuperscript{34} Of course the argument for debiasing is far stronger for smoking; borrowing is most unlikely to kill people. But for those who borrow excessively, the underlying mechanisms are not unrelated to those that account for excessive smoking.\textsuperscript{35} Optimism bias, cumulative cost neglect, and myopia play a role in both settings. It might therefore be productive to use the "smoking model" far more generally, drawing on that model in any effort to develop debiasing strategies to combat the risk of excessive borrowing.

\textsuperscript{33} See Bar-Gill, 98 Nw U L Rev at 1417–20 (cited in note 3) (discussing the Truth in Lending Act and noting that impersonal disclosures of statistical information may not overcome consumers' cognitive biases).

\textsuperscript{34} See, for example, Sloan, Smith, and Taylor, \textit{The Smoking Puzzle} at 122–23, 127, 161 (cited in note 27) (evaluating the effectiveness of debiasing efforts on people's perceptions of the risks of smoking).

\textsuperscript{35} An obvious exception is that smoking can be physically addictive; for most excessive borrowers, the idea of addiction is only a metaphor.
An obvious approach would enlist salience and availability in the debiasing effort. It is well-established that in thinking about risks, people rely on certain heuristics, or rules of thumb, which serve to simplify their inquiry. Heuristics typically work through a process of "attribute substitution," in which people answer a hard question by substituting an easier one. When people use the availability heuristic, they assess the magnitude of risks by asking whether examples can readily come to mind. If people can easily think of such examples, they are far more likely to be affected than if they cannot. For example, "a class whose instances are easily retrieved will appear more numerous than a class of equal frequency whose instances are less retrievable."

This is a point about how familiarity can affect the availability of instances. A risk that is familiar, like those associated with guns, will be seen as more serious than a risk that is less familiar, like those associated with sunbathing. But salience is important as well. "For example, the impact of seeing a house burning on the subjective probability of such accidents is probably greater than the impact of reading about a fire in the local paper." Salience is highly related to vividness. A vivid example often does much more than statistical information in ensuring that people attend to potential risks.

How might these points be used in a debiasing campaign to counter excessive borrowing? We could imagine three possibilities. First, and best of all, credit card companies might attempt on their own to debias the most vulnerable borrowers, without any kind of govern-

36 See generally Kahneman, Slovic, and Tversky, Judgment under Uncertainty (cited in note 25) (offering a collection of works that discuss the presence of heuristics and biases in the daily lives of average individuals).

37 See Daniel Kahneman and Shane Frederick, Representativeness Revisited: Attribute Substitution in Intuitive Judgment, in Gilovich, Griffin, and Kahneman, eds, Heuristics and Biases 49, 53 (cited in note 5) (defining attribute substitution as the process by which "an individual assesses a specified target attribute of a judgment object by substituting another property of that object—the heuristic attribute—which comes more readily to mind").


39 Id at 11 (discussing a study in which subjects who were provided with a list of famous men and women erroneously judged that the list contained more women than men when the women on the list were relatively more famous).

40 See Steven D. Levitt and Stephen J. Dubner, Freakonomics: A Rogue Economist Explores the Hidden Side of Everything 150–52 (Morrow 2005) (arguing that an individual's perception of risk can be affected by the imminence of the harm and the extent to which it is outrageous or dramatic).


42 See Richard Nisbett and Lee Ross, Human Inference: Strategies and Shortcomings of Social Judgment 43–53 (Prentice-Hall 1980) (noting that information is more vivid when it has emotional interest, is concrete, and has greater proximity; and arguing that vivid information impacts later inferences because it is more memorable than nonvivid information).
mental mandate. Either self-interested or public-interested companies might take steps in this direction. Such campaigns might involve vivid accounts, by real people, of problems created by excessive borrowing. To be especially effective, the accounts should involve brief, memorable narratives of typical behavior that has led people to serious harm. Second, government might engage in public education campaigns that are specifically designed to alert people to the risks. Such public education campaigns are likely to work best if they actually engage people's emotions. A third and last possibility would involve a disclosure mandate imposed on credit card companies themselves. Such companies might be required to provide vivid warnings of the risks of excessive borrowing, perhaps accompanied by narratives of real lives that have been adversely affected by it. This is the least plausible solution, because the risks associated with borrowing have not been shown to be sufficiently large to justify a compulsory warning program of this kind.

Would either of the first two steps be worthwhile? The question cannot be answered in an empirical vacuum. Everything depends on the magnitude of the problem and the effects of debiasing strategies in reducing it. All that can be said is that on the basis of what is now known, such strategies might well do some good and are most unlikely to produce significant harm.

C. Default Rules

Libertarian paternalists are especially interested in the use of default rules to move behavior in welfare-promoting directions; the creative use of default rules is central to the project of libertarian paternalism. Such rules can have exceptionally powerful effects on choices, behavior, and outcomes. I have already referred to the effects of automatic enrollment plans in increasing savings in the work place. Consider a few other examples.

1. Insurance policies.

For insurance, a natural experiment demonstrated the potential stickiness of default rules. Pennsylvania offered a default program for

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43 See Loewenstein and O'Donoghue, 73 U Chi L Rev at 189 (cited in note 8).
44 See Sunstein and Thaler, 70 U Chi L Rev at 1201 (cited in note 21) (concluding that policymakers should choose default rules that are likely to promote people's welfare).
drivers containing a full right to sue and a relatively high premium; purchasers could elect to switch to a new plan by “selling” the more ample right to sue and paying a lower premium. By contrast, New Jersey created a system in which the default plan included a relatively low premium and no right to sue; purchasers were allowed to deviate from the default program and to purchase the right to sue by choosing a program with that right and also a higher premium. In both cases, the default rule tended to stick. A strong majority accepted the default rule in both states, with only about 20 percent of New Jersey drivers acquiring the full right to sue, and 75 percent of Pennsylvanians retaining that right. 47 There is no reason to think that there was a systematic difference between the preferences of citizens of the two states.

2. Organ donation.

In the United States, those who want their organs to be available for others must affirmatively say so, usually through an explicit notation on their driver’s licenses. But in many other nations—Austria, Belgium, Denmark, Finland, France, Italy, Luxembourg, Norway, Singapore, Slovenia, and Spain—people are presumed to consent to allow their organs to be used, after death, for the benefit of others; they are permitted to overcome the presumption, usually through an explicit notation to that effect on their driver’s licenses. 48 Eric Johnson and Daniel Goldstein find that with respect to organ donation, people lack stable preferences and their decisions are very much influenced by the default rule. 49 Similarly, a controlled online experiment showed a substantial effect from the default rule: the opt-in system created a 42 percent consent rate, about half of the 82 percent rate for an opt-out system.

The real-world evidence is even more dramatic. Presumed consent nations show consent rates ranging from a low of 85.9 percent (Sweden) to a high of 100 percent (Austria), with a median of 99 percent. 50 The default also produces a significant, though less dramatic,
increase in actual donations, meaning that many lives are saved as a result of the presumed consent system.\textsuperscript{52}

3. Vacation time.

A substantial effect from the legal default rule was found in an experimental study of law student reactions to different state law provisions governing vacation time from firms.\textsuperscript{53} The study involved two conditions. In the first, state law guaranteed two weeks of vacation time, and law students were asked to state their median willingness to pay (in reduced salary) for two extra weeks of vacation. In the second condition, state law provided a mandatory, nonwaivable two week vacation guarantee, but it also provided employees (including associates at law firms) with the right to two additional weeks of vacation, a right that could be "knowingly and voluntarily waived." Students were asked how much employers would have to pay them to give up their right to the two extra weeks. All by itself, the switch in the default rule more than doubled the students' responses, raising the median amount from $6,000 to $13,000.

There are several possible explanations of the effects of default rules in these and other cases. Inertia undoubtedly plays a role.\textsuperscript{54} Action is necessary to change a default rule, and inertia therefore favors such rules. The default rule also conveys information by virtue of its status as such.\textsuperscript{55} Perhaps the state, or an employer, has chosen a default rule \textit{for a reason}, and if so, people should stick with it unless they have a reason of their own to depart. Finally, the default rule may create an endowment effect,\textsuperscript{56} leading people to favor the existing allocation of entitlements; for that reason the rule will tend to stick.

How might these ideas be enlisted to reduce the risk of excessive borrowing? Here is a simple inspiration for seriously investigating that question: many people who are purchasing goods and services with credit cards would do much better if they used debit cards instead. With debit cards, they would avoid high interest rates and late fees. For many consumers, the use of credit cards is a product of habit and

\textsuperscript{52} Johnson and Goldstein estimate that switching to an opt-out system increases organs actually used by 16 percent, holding everything else constant. Id at 1339.


\textsuperscript{54} See Madrian and Shea, 116 Q J Econ at 1149–50 (cited in note 22) (arguing that inertia contributes to an employee's decision not to opt out of automatic enrollment in a 401(k) plan).

\textsuperscript{55} See id at 1182 (suggesting that many employees stick with the default contribution to a 401(k) plan because "employees view the default investment allocation under automatic enrollment as implicit advice from the company on 'the best' allocation of one's retirement assets").

inertia, rather than of any kind of reflective choice against the use of debit cards. Significant charges result from simple procrastination. On this view, a narrow question is how to ensure optimal decisions, in terms of individual welfare, in the choice between credit cards and debit cards. Fortunately, there is evidence that many consumers are shifting from credit cards to debit cards, perhaps in order to avoid the effects of their own bounded rationality. But it is reasonable to think that the shifts have been occurring more rarely than they should if consumer welfare is our goal.

Suppose that many people who are using credit cards would do better using debit cards instead. If so, it would be valuable to make debit cards a kind of default option, to be used unless borrowers specifically decide otherwise. Credit card companies might take, or be encouraged to take, steps in this direction on their own. They might say, for example, that unless consumers specifically say otherwise, payments will be automatically deducted every month from a specified checking account. The “opt out” might be done at the time of initial application for the card; perhaps better, it might be required on an annual, biannual, or monthly basis. Alternatively, regulators might encourage or require credit card companies to make automatic deduction an option for new credit card owners, saying that at the time of initial acquisition of the card, consumers must be given the opportunity to use automatic deduction, with a salient notation to this effect. Somewhat more aggressively, regulators might require companies to make automatic deduction the default option, subject to override either at the point of purchase or on an annual, biannual, or even monthly basis.

Here is another possibility. We have seen that with the Save More Tomorrow plan, workers can be encouraged to produce significant increases in savings rates. It is easy to imagine a parallel plan, “Borrow Less Tomorrow” (BLT). Private institutions could assist consumers who have borrowed excessively by helping them to pay down their debt, perhaps by encouraging them to enter into agreements to ensure that the level of debt would be lower each month than it was before. Credit card companies could themselves help certain customers in this way—not by mandating participation, but by encouraging people to participate if they choose. Perhaps governments could consider incentives to lead the private sector to provide this kind of assistance. In fact a BLT plan might be combined with the idea of automatic en-

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57 See Brown and Plache, 73 U Chi L Rev at 84–85 (cited in note 19).
58 See Thaler and Benartzi, 112 J Polit Econ at S185 (cited in note 23) (noting that participants in the SMarT program almost quadrupled their saving rates).
59 I am grateful to Matthew Rabin for the acronym.
rollment, ensuring that for expenditures above a specified limit, payments would come out of existing checking accounts, rather than being used to increase debt.

Whether any kind of weak paternalism makes sense in this context cannot be decided in the abstract. It is necessary to know the magnitude of the problem of excessive borrowing and the likely effectiveness of any weakly paternalistic response. My own tentative judgment is that an information campaign that encourages the use of automatic payment from existing accounts would probably do some good and little harm.

V. STRONG PATERNALISM

If boundedly rational borrowing is pervasive, and if consumer choices are frequently impairing consumers' welfare, it is possible that more intrusive government responses are desirable. Suppose that myopia, procrastination, cumulative cost neglect, and excessive optimism are leading many people to borrow money on behalf of purchases that produce little short-term gain but significant long-term harm. If so, prohibitions on voluntary agreements might be justified, at least if the aggregate benefits exceed the aggregate costs. When such agreements can be shown to injure the very people who enter into them, the firm presumption against strong paternalism might be overcome; and bounded rationality is often the source of the relevant injury.

In the context of the credit card market, there is an important supplemental point. The very structure of that market appears to lead many companies to appeal to bounded rationality, rather than to attempt to counteract it. As with state lotteries, where advertising campaigns appeal to unrealistic optimism and probability neglect, so too, plausibly, for borrowing: some companies encourage people to obtain cards with the hope that many of them will procrastinate and pay significant late fees and interest charges.

We could imagine a continuum of responses. The most modest would single out particular features of agreements that are peculiarly likely to reflect bounded rationality, and to operate to harm consumers ex post. A possible candidate is the "teaser rate," by which consumers are given an opportunity to use credit cards at a low rate—sometimes a zero interest rate—until the expiration of the introductory period. The teaser rate operates to tempt some consumers to begin to use credit cards, apparently with insufficient awareness of the

60 See Bar-Gill, 98 Nw U L Rev at 1376 (cited in note 3) ("Interestingly, if the credit card market is indeed as competitive as it appears to be, issuers have to exploit consumers' imperfect rationality in order to survive in this market.").
effects, over time, on their welfare. Many consumers who are excited about teaser rates do not sufficiently appreciate the small size of the actual gain. As Oren Bar-Gill explains, "The teaser strategy works. Despite the fact that most borrowing is done at the high post-promotion rates, consumers appear to be extremely sensitive to teaser rates."

Suppose that teaser rates can be shown to lead boundedly rational people to become credit card holders, in a way that produces aggregate harm. If so, the argument for banning such rates may not seem entirely implausible. Unfortunately, a ban would impose costs on many borrowers, above all those who rationally opt for the teaser rates (either because they will switch cards after the expiration of the relevant period or because they are net gainers from the package they receive). Indeed, a ban on teaser rates would be not only strongly paternalistic but also asymmetrical in an important and unattractive sense: it would harm the sophisticated consumers who take advantage of them. Here as elsewhere, weak paternalism should be the first line of defense. But if a ban on teaser rates would protect people against excessive borrowing while also imposing modest costs on those who benefit from them, it might be worth considering. I do not, however, believe that the argument for such a ban has been made out.

A far more aggressive approach would be to enact usury laws. Such laws are price controls, and most of the time, the argument against price controls is devastatingly powerful: they create scarcity and typically harm the very people they are designed to help, by depriving them of access to a good that they want. In this context, an obvious danger with price controls is that they will make it impossible for (rational) people to obtain loans—perhaps injuring those people who most need those loans, and who are in the worst position to obtain needed resources through other routes. But the argument for usury laws is strengthened by identifiable features of the credit card market. It is exceptionally easy to obtain a credit card. Companies make much of their money from high interest rates and late charges. As Bar-Gill has explained, market pressures give companies a strong incentive to take advantage of bounded rationality. In the abstract, usury laws would appear to be a well-designed response. A ban on interest rates above a certain level would counteract the tendency to exploit bounded rationality by restructuring the system of pricing in the direction of annual fees—precisely the structure that would plau-

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61 Id at 1392.
62 See id at 1422–23 (arguing that consumer bias "opens the door to a serious reconsideration of usury in the credit card context").
63 See id at 1376.
Boundedly Rational Borrowing

possibly emerge if myopia, cumulative cost neglect, and unrealistic optimism were not involved.

On the other hand, usury restrictions would impose serious costs. It is possible to imagine that many fully rational people benefit from a situation in which annual rates are low and in which interest rates are high. This is obviously so if they do not maintain debt and hence pay no interest. Such people use credit cards essentially as debit cards; they lose nothing by the current arrangement and benefit from the existence of a kind of subsidy by card users who pay significant interest and large late fees. To be sure, there is a serious problem with this system, because it involves a perverse system of redistribution, from less wealthy people who maintain debt to relatively wealthy people who pay on time. But it is also the case that some people, some of the time, are better off with low annual fees and high interest than with higher fees and lower interest—at least if they have a reasonable expectation of growing income over time.

One question is the size of this population, and the extent to which its members are behaving rationally rather than in a way that is distorted by cognitive and motivational problems. This is an empirical question that cannot be resolved by abstractions. But it is reasonable to speculate that if usury laws provided a reallocation of consumer costs toward higher annual fees, the principal beneficiaries would be people who suffer from bounded rationality and hence from high consumer debt. But there is a strong response to the argument for usury laws: recent evidence suggests that there is intense competition over interest rates in the credit card market. Because such competition has been occurring, a governmental response does not appear to be necessary or even desirable.

Another form of strong paternalism would target the particular payment provisions that most harm those with bounded rationality, such as late fees. It is plausible to think that such fees are incurred precisely by those who most suffer from the problems catalogued here, including procrastination, myopia, and excessive optimism. If this is so, it might be worthwhile to consider restrictions on the magnitude of late fees, at least if the consequence of such restrictions would be to shift from fee payments to higher upfront charges. Such a shift would have the desirable effect of ensuring that company practices would not penalize those suffering most severely from bounded rationality.

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64 See Brown and Plache, 73 U Chi L Rev at 79 (cited in note 19).
CONCLUSION

Many people borrow excessively, whether excessiveness is measured ex ante or ex post. I have emphasized here the importance of the ex post perspective, simply because the most serious problems arise when borrowing behavior produces serious economic distress. A number of psychological mechanisms are likely to contribute to excessive borrowing, including procrastination, myopia, cumulative cost neglect, unrealistic optimism, and miswanting. These mechanisms help to illuminate many areas in which bounded rationality leads people to decisions that impair their welfare. Hence an analysis of boundedly rational borrowing should apply to other contexts in which more serious problems result from bounded rationality.

In exploring legal responses to problems of this sort, we should distinguish between weak and strong paternalism. Here as elsewhere, regulators ought to adopt a firm presumption in favor of weak paternalism and freedom of choice. Unfortunately, informational approaches are unlikely to provide a great deal of help, simply because they do not respond to bounded rationality. Debiasing is far more promising; if government enlists salience and availability in the interest of reducing excessive borrowing, it is unlikely to impose significant costs and it might produce real gains. It seems clear that many people who use credit cards would do better to use debit cards instead. One possibility is that private and public institutions should alter existing default rules so as to move closer to the preferred state of affairs.

Strong paternalism—in the form of restrictions on particular practices or more general usury laws—is usually to be avoided, partly because it is likely to introduce inefficiencies, and partly because it is likely to hurt many of the people that it is intended to help. Notwithstanding the peculiar nature of the credit card market, I do not believe that existing evidence provides adequate grounds for strong paternalism. Here, as elsewhere, it is best to begin, and probably to end, with weak paternalism of the kind that I have outlined here.