

Overoptimism and Bankruptcy Policy

by Richard Hynes*

Abstract: This article demonstrates that overoptimism and related cognitive failures that allegedly afflict consumers have ambiguous normative implications for debtor-creditor law. Scholars have argued that overoptimism causes consumers to borrow too much and that generous debt relief laws can improve social welfare by curbing this excess borrowing. However, this argument implicitly assumes a very specific type of overoptimism; this argument assumes that consumers underestimate the likelihood of moderately adverse events that would not lead to default if consumers had borrowed the efficient amount. If one instead assumes that consumers underestimate the likelihood of severely adverse events that would lead to default even at the efficient level of debt, then this overoptimism will cause consumers to overestimate the probability that they will repay the loan and therefore overestimate the cost of borrowing. This will cause overly optimistic consumers to borrow less than the efficient amount. If this is the case, the government can improve welfare by encouraging borrowing through the tax system through less generous debt relief laws.

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If markets functioned perfectly, we would have no need for laws that provide relief for a consumer in default. Consumers would simply purchase insurance against risks like unemployment that lead to default. Alternatively, consumers would negotiate with their lenders for insurance, in the form of debt relief, just as they negotiate over any other term of the credit contract. Yet economists and legal scholars on both sides of the current political debate over bankruptcy reform agree that *some* government intervention is necessary to correct for fairly standard forms of market failure, such as adverse selection, costly contracting, or externalities, that prevent consumers from procuring the efficient level of insurance or debt relief.

Many scholars, particularly some of those who favor the continued availability of generous debt relief laws, believe that the government must intervene to protect consumers from their own cognitive failures. While scholars have made similar calls for paternalistic intervention in markets for centuries, most economists have received these calls for intervention with hostility on the grounds that the advocates of paternalism fail to specify the precise form of cognitive failure and thus cannot make sound policy prescriptions. In recent decades scholars have tried to address this challenge by alleging more specific forms of cognitive failure.¹ This article considers only one type of alleged cognitive failure: the claim that individuals rely on various heuristics that lead to overoptimism, specifically that consumers systematically underestimate the likelihood of certain adverse events.²

¹See, e.g., Cass R. Sunstein, *Introduction*, in *BEHAVIORAL LAW & ECONOMICS*, 3-5 (Cass R. Sunstein, ed., 2000) (outlining some of the alleged cognitive failures).

²Overoptimism is often presented as one of many heuristics that lead consumers to misperceive the likelihood of events. *Id.* at 4-5 (discussing a number of heuristics). However, the other alleged heuristics could also lead consumers to underestimate the likelihood of low probability adverse events. As discussed in Section III.B, these heuristics can sometimes conflict with each other making it difficult to make sound

Applying this overoptimism hypothesis to consumer finance, scholars have alleged that consumers underestimate the likelihood that they will suffer some adverse event that will make debt repayment difficult or impossible.³ As a consequence, consumers borrow too much, and therefore the government should adopt generous debt relief laws in order to shift the risk of loss to lenders. Presumably lenders do not suffer from these same cognitive failures⁴ and have better access to information. Shifting the risk of loss to lenders will cause lenders to limit credit to appropriate levels.⁵

Although scholars have challenged the alleged consumer overoptimism,⁶ this article demurs

empirical predictions.

³See, e.g., Thomas Jackson, *The Fresh Start Policy in Bankruptcy*, 98 HARV. L. REV. 1393, 1411-12 (1985) (“In particular, these heuristics apparently tend to lead individuals in one direction: toward underestimating the risks that their current consumption imposes on their future well-being.”); Lawrence M. Ausubel, *Credit Card Defaults, Credit Card Profits and Bankruptcy*, 71 AMER. BANKR. L. J. 249, 269 (1997) (“Just as many consumers may systematically underestimate the extent of their current and future credit card borrowing, it should be expected that many consumers may systematically underestimate (at the time they borrow) the probability with which they will eventually fall into bankruptcy”); Margaret Howard, *Theory of Discharge in Consumer Bankruptcy*, 48 OHIO ST. L. J. 1047, 1052 (1987) (arguing that excessive borrowing may reflect a “naive optimism that things will work out”).

⁴But see Robert K. Rasmussen, *Behavioral Economics, The Economic Analysis of Bankruptcy Law and the Pricing of Credit*, 51 VAND. L. REV. 1679 (1998) (questioning the rationality of lenders).

⁵See, e.g., Jackson, *supra* note 3, at 1426 (“The availability of the right of discharge induces creditors to restrict the individual's credit intake and thus to ensure that he does not seriously underestimate his future needs.”).

⁶See, e.g., F.H. Buckley, *The Debtor As Victim*, 87 CORNELL L. REV. 1078 (2002) (reviewing THERESA A. SULLIVAN, ELIZABETH WARREN & JAY LAWRENCE WESTBROOK, *THE FRAGILE MIDDLE CLASS* (2000) (“However, [Sullivan, Warren & Westbrook] fail to uncover evidence of substantial consumer irrationality [that would explain why consumers borrow too much debt.]”); Schwartz & Wilde, *Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests*, 69 VA. L. REV. 1387, 1442-46 (1983) (“... there is no reason to think that these [estimation] mistakes lead to a systematically optimistic bias, nor is there any way to know how serious they are.”). Note, however, that even if these mistakes do not systematically lead to an optimistic bias, one might still argue for intervention if the consequences of overoptimism are more severe than those of excessive pessimism.

as to the validity of this claim and asks if, by alleging that consumers are overly optimistic, bankruptcy scholars have stated a case for generous debt relief rather than merely *some* mandatory debt relief. In brief, the argument that overoptimism implies a need for generous debt relief suffers from the same criticism that has long plagued arguments in favor of paternalistic intervention: the nature of the consumer's irrationality (in this case overoptimism) is not sufficiently defined to support a meaningful policy prescription. Specifically, if the overly optimistic consumer underestimates the likelihood of moderately adverse events, she will in fact borrow too much and the government can improve her welfare by adopting policies that discourage borrowing. If, however, the overly optimistic consumer underestimates the likelihood of severely adverse events, she will borrow too little and the government can improve her welfare by adopting policies that encourage borrowing. While one can argue that the former effect will dominate the latter, no one has shown this empirically. Moreover, this argument is difficult to reconcile with much of the scholarship in favor of generous debt relief.

This article remains agnostic as to the existence of overoptimism and does not reject the possibility that, as an empirical matter, overoptimism leads to excessive borrowing. Moreover, this article does not advocate less generous debt relief. Rather, this article demonstrates the need for a more detailed exposition of the cognitive failure based arguments in favor of generous debt relief so that these arguments can be fully evaluated. Just as scholars have shown that assumptions of consumer irrationality lead to ambiguous normative implications in other areas of the law, such as tort law,⁷ one cannot make general statements about the relationship between overoptimism and the

⁷See Eric Posner, *Probability Errors: Some Positive and Normative Implications for Tort and Contract Law* (Univ. Chi. Law & Econ., Olin Working Paper No. 161, 2002)

optimal bankruptcy policy unless one is prepared to make very specific assumptions about the precise nature of this overoptimism.

Section I sets forth the standard argument for why overoptimism leads to excessive borrowing. Section II explains why overoptimism could lead to either under- or overborrowing. Section III justifies the fundamental assumption of this paper: once the consumer defaults, the amount that she owes will not affect the amount that she must repay under current American debtor-creditor law. Section IV explains why the results of this article differ so sharply with the products liability literature despite the fact that a loan can be seen as a product. Section V concludes.

I. The Standard Argument of Overborrowing and the Need for Generous Debt Relief

Scholars from both sides of the debate over bankruptcy reform claim that some consumers incur too much debt, where “too much” is presumably defined as more than the efficient amount that consumers would choose in the absence of a market failure. Those favoring a reduction in the generosity of debt relief suggest that some consumers opportunistically increase their debts once they realize that they are likely to default and therefore will not have to repay the full amount of their loans.⁸ For example, a consumer who realizes that bankruptcy is inevitable may go on one last spending binge at the expense of lenders who do not learn of her precarious financial condition in time to adjust her credit limit. Once default becomes inevitable, this additional spending costs the

⁸See, e.g., Michelle J. White, *Economic Versus Sociological Approaches to Legal Research: The Case of Bankruptcy*, 25 LAW & SOC’Y REV. 685, 694 (1991) (“Further, once it becomes likely that an individual will file for bankruptcy, she has an incentive to borrow more, for both her new and old debts will be discharged in bankruptcy.”) Note, however, that if the lender can prove that the debtor incurred the debt with no intent to repay, the court may exempt his debt from discharge. See, e.g., *Anastas v. Am. Sav. Bank*, 94 F.3d 1280 (9th Cir. 1996). For a more thorough exploration of this issue, see *infra* notes [45](#) and accompanying text.

consumer nothing because she will never have to repay the additional debt;⁹ once default becomes inevitable, additional loans amount to “free money” from the consumer’s perspective.

Those who favor generous debt relief argue that overly aggressive credit marketing causes the excessive debt levels,¹⁰ presumably because consumers suffer from some sort of cognitive failure that causes them to succumb to this marketing. The form of cognitive failure that makes consumers vulnerable to aggressive credit marketing is often not specified in the consumer bankruptcy literature,¹¹ but occasionally one finds references to some version of the overoptimism or underestimation hypotheses of the behavioral economics literature. A common version of this argument is that consumers may underestimate the chance that they will suffer some setback, such as unemployment, divorce or illness, that will make it very difficult, and very painful, for them to repay their loans.¹² This causes consumers to underestimate the real cost of borrowing and to borrow more than the efficient amount. In such a world, debt relief may improve social welfare by forcing the lender to absorb the loss associated with the adverse event. Because the lender can estimate the probability of loss more accurately than the consumer, he will charge an interest rate that more

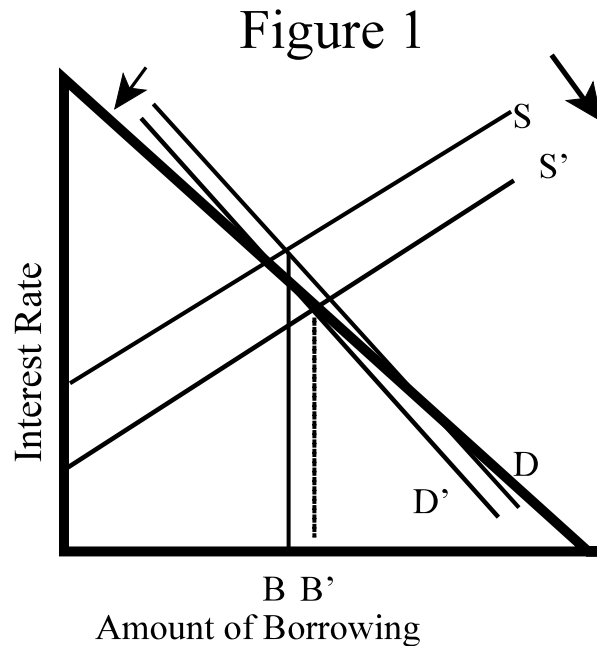
⁹See *infra* Section III.A (explaining that once a consumer defaults the amount of her obligations becomes irrelevant.) Of course this assumes that a bankruptcy court will not rule that these additional debts are non-dischargeable. See *infra* note [45](#).

¹⁰See, e.g., Elizabeth Warren, *The Market for Data: The Changing Role of Social Sciences in Shaping the Law*, 2002 WIS. L. REV. 1 (“In the early 1990s, the industry went on the offensive again. Consumer credit was highly profitable, and banks were engaged in a marketing frenzy. But as debt levels rose, so rose the number of bankruptcies.”)

¹¹See, e.g., Buckley, *supra* note [6](#), at 1079 (noting ambiguous nature of the thesis in Sullivan et al for why consumers incur too much debt).

¹²See, e.g., Jackson, *supra* note [3](#), at 1411-12; Charles G. Hallinan, *The ‘Fresh Start’ Policy in Consumer Bankruptcy: A Historical Inventory and Interpretative Theory*, 21 U. RICH. L. REV. 49 (1986). To be fair, Professors Jackson and Hallinan focus on the need for mandatory debt relief rather than the question of how generous this debt relief should be.

accurately reflects the cost of borrowing or will otherwise ration the availability of credit.¹³



Advocates of generous debt relief sometimes use the graph in Figure 1 to illustrate their analysis.¹⁴ This graph illustrates the claim that recent efforts designed to make consumer bankruptcy less generous will increase consumer borrowing and thus lead to an increase in financial distress and bankruptcy filings. According to those who favor generous debt relief, a reduction in the generosity of debt relief will substantially increase the supply of credit (from S to S') because lenders believe that they are more likely to be repaid.¹⁵ However, this change in the law will not have an appreciable effect on the demand for credit (demand for credit will only move from D to D') because consumers

¹³See, e.g., Jackson, *supra* note 3, at 1426.

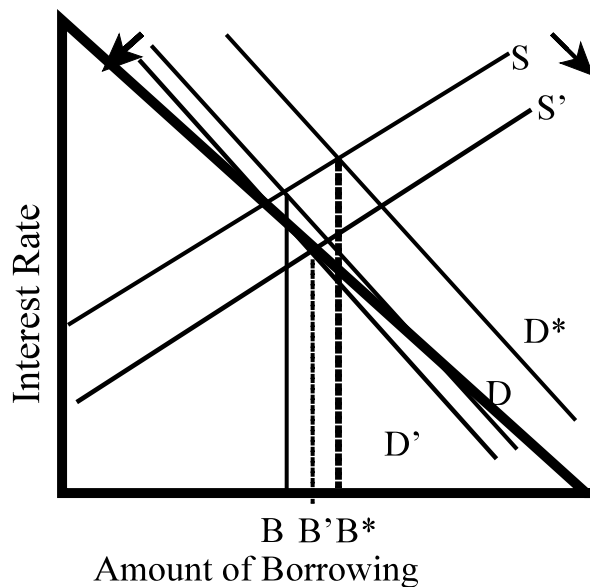
¹⁴See, e.g., Ausubel, *supra* note 3, at 268.

¹⁵*Id.*

underestimate the probability that they will use debt relief and thus underestimate the value of this term of the credit contract.¹⁶ As a result, the total amount of borrowing increases, say from B to B' . As the level of borrowing increases, so too does the number of defaults.¹⁷

Note that Figure 1 illustrates a positive claim (less generous debt relief will lead to more borrowing and more defaults) used to support the normative claim that debt relief laws should remain generous. However, the link between the positive analysis and the normative conclusion rests on the assumption that current levels of borrowing are too high (or at least not too low), and therefore further increases in borrowing would reduce consumer welfare.

Figure 2



¹⁶*Id.* Indeed, consumers may not even bother to learn of changes in the law because they are confident that the law will not apply to them. *Id.*

¹⁷See, e.g., Jean Braucher, *Means Testing Consumer Bankruptcy: The Problem of Means*, 7 *FORDHAM J. CORP. & FIN. L.* 407, 426-27 (2002).

Figure 2 illustrates another possibility. Assume, for the sake of argument, that if consumers were rational the demand for credit would be given by D^* , and therefore the optimal level of borrowing is given by $B^* > B$. Because the less generous debt relief causes overly optimistic consumers to borrow an amount that is closer to the optimal level of borrowing, $B^* > B' > B$, it is *possible* that the less generous debt relief improves social welfare, though there are offsetting effects. Though less generous debt relief moves the level of borrowing closer to the optimal level of borrowing, it does so at the cost of reducing the insurance the consumer receives when she defaults. Therefore, the appropriate level of debt relief will result in some level of borrowing that is slightly less than the optimal amount of borrowing if consumers were fully rational.

Of course, one cannot just assume that the optimal level of debt would equal B^* , and many will find the possibility that consumers incur too little debt absurd. For example, one may think that consumers discount the future “too heavily” and therefore borrow too much.¹⁸ However, this article focuses on one form of cognitive failure, overoptimism, and the ensuing analysis demonstrates that one can use both the consumer bankruptcy and behavioral economics literatures to construct plausible arguments for why overoptimism can lead underborrowing.

II. The Ambiguous Implications of Overoptimism

Recall the standard explanation for why underestimation leads to overborrowing: consumers underestimate the likelihood that an adverse event will reduce their disposable income and thus will make it more costly, in terms of lost utility, to repay an extra dollar of debt (call this the “Utility Effect.”). While this Utility Effect may be important when applied to moderately adverse events that

¹⁸Today, this argument would be phrased in terms of “hyperbolic discounting.” See, e.g., David Laibson, *Golden Eggs and Hyperbolic Discounting*, 112 Q.J. ECON. 443 (1997).

leave the debtor with sufficient disposable income to repay a reasonable amount of debt, the implications of overoptimism are ambiguous for two basic reasons. First, the Utility Effect presumes that the consumer will repay at least some of her additional debt after she suffers the adverse event that she underestimates. However, American debtor-creditor law generally does not consider the aggregate level of a consumer's debts when setting her required repayment after default.¹⁹ Therefore, if the consumer's overoptimism causes her to underestimate the likelihood of an adverse event that is so severe that she would default even if she borrowed the efficient amount of debt, this overoptimism cannot cause her to underestimate the costs of repaying an additional dollar of debt beyond the efficient amount because she will not repay any of this additional debt when this severely adverse event occurs. There can be no Utility Effect if the consumer will not repay any of the additional debt. Second, the standard argument overlooks the fact that if the consumer *underestimates* the likelihood of some events, the consumer must *overestimate* the likelihood of other events. If the consumer overestimates the likelihood that she will avoid a severely adverse event and thus will repay her loans in full, she will overestimate the dollar value of her expected repayment (call this the "Nominal Effect.") If the consumer *only* underestimates the likelihood of severely adverse events so that there is no offsetting Utility Effect, the Nominal Effect will cause her to borrow too little, not too much.

A. A Simple Model

Imagine a two-period world in which a single consumer borrows some endogenously determined amount, B , in the first period and promises to repay some amount, R , in the second. The consumer has no money in the first period, and in the second period she will have some uncertain

¹⁹See *infra* Section III.A.

amount of wealth, w , with which to repay this loan; w is distributed $f(w)$ between w_{min} and w_{max} . Because this article models debt relief as a form of insurance, assume that lenders are risk-neutral and that the consumer is risk-averse in that her per period utility is given by the strictly concave function, $U(C_i)$, where C_i denotes the consumer's consumption in period i . The consumer discounts future values at a rate δ .

Society has enacted a system of debt relief that allows a defaulting debtor to retain some amount of wealth, $D(g, w)$, for her own consumption, where g is some measure of the generosity of the debt relief such that for all w , $dD(g, w)/dg \geq 0$. The consumer's second-period wealth never reduces her consumption after default, but never increases her consumption by more than one dollar either, $1 \geq dD(g, w)/dg \geq 0$. A central assumption of this article is that a debtor's consumption after default will not vary with the amount of debt she has incurred, $dD(g, w)/dB = 0$; while this assumption may appear controversial, Section III.A demonstrates that it is largely consistent with American debtor-creditor law. Assume further that the consumer defaults whenever she can increase her consumption by do so, whenever $w - R < D(w, g)$ -- or whenever $w < w_D$ where w_D is defined as $w_D \equiv D(w_D, g) + R(B, g)$.²⁰ Finally, assume that the lender must pay some transactions costs, T , whenever the debtor defaults.²¹

²⁰We will revisit this assumption in Section II.A.3.

²¹Because the lender is risk-neutral and the consumer is risk-averse, the optimal contract would fully insure the consumer by providing her the same consumption regardless of the realization of w . Because a debt contract specifies a fixed repayment, the debtor must always default in order to achieve this insurance. This assumption of transactions costs, borrowed from the costly state verification literature, assures that the consumer and lender will choose a contract that will require the consumer to repay her debts in full for at least some realizations of w . See, e.g., Douglas Gale and Martin Hellwig, *Incentive-Compatible Debt Contracts: The One-Period Problem*, 52 REV. ECON. STUD. 647 (1985).

Figure 3

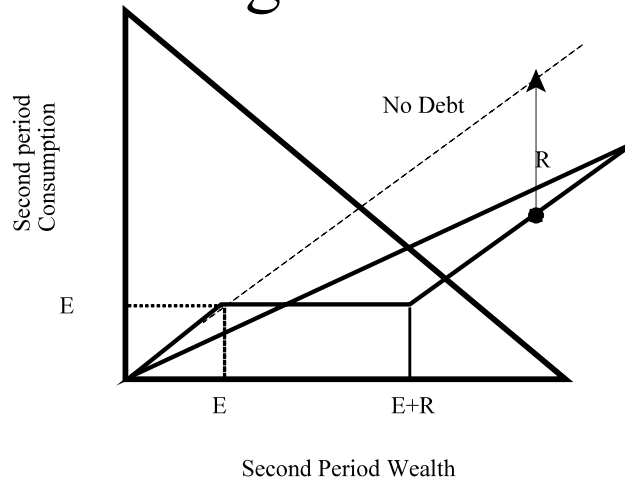


Figure 3 provides an example in which the government allows a consumer to exempt a fixed amount of wealth, E , from attachment.²² When the consumer's wealth is extremely low, when $w < E$, her consumption increases dollar for dollar with her assets because she is allowed to exempt, and consume, the little amount that she has. If the consumer has enough assets to fully utilize her exemption but not so much that she wishes to repay her loan in full, if $E < w < E+R$, the consumer's consumption does not vary with her assets because she will default and must use any wealth in excess of E to repay her lenders. Once $w > E+R$, the consumer repays her debts in full and her consumption rises dollar for dollar with her income.

Assume that the consumer has all of the bargaining power in that she is able to make a take

²²Note that the model allows for much more general forms of debt relief.

it or leave it offer to a lender.²³ All lenders have some other opportunity that provides them with an expected rate of return of δ . Therefore, the consumer need only propose loans that give an equivalent expected rate of return, or loans that satisfy equation 1. Equation 1 implicitly defines R as a function of the amount borrowed and the generosity of debt relief, or $R(B, g)$ where, for a given level of debt relief, an increase in borrowing will increase the promised repayment that the lender demands ($dR(B, g)/dB > 0$) and for a given level of borrowing an increase in the generosity of debt relief will increase the promised repayment that the lender demands ($dR(B, g)/dg > 0$).

$$(1) \quad B = \delta \left(\int_{w=w_D(g, B)}^{w_{max}} R f(w) dw + \int_{w=w_{min}}^{w_D(g, B)} (w - D(g, w) - T) f(w) dw \right)$$

The consumer takes the system of debt relief as given and will choose the level of borrowing that solves the following unconstrained maximization problem:

$$(2) \quad \text{Max}\{B\} : U(B) + \delta \left(\int_{w=w_D(g, B)}^{w_{max}} U(w - R(B, g)) f(w) dw + \int_{w=w_{min}}^{w_D(g, B)} U(D(w, g)) f(w) dw \right)$$

Assuming, for now, that there are no market failures and excluding possible corner solutions, such as an optimal level of borrowing equal to zero, the optimal level of borrowing, B^* , is defined by the consumer's first order condition:

$$(3) \quad U'(B^*) = \delta \int_{w=w_D(g, B^*)}^{w_{max}} U'(w - R(B^*, g)) f(w) dw \frac{dR(B^*, g)}{dB}$$

In other words, the consumer borrows until the marginal utility of consumption in the first

²³The results of this article do not depend on the lack of market power.

period equals the expected cost of repayment in terms of lost utility in the second period. Note, however, that she will only make this repayment when her wealth is sufficiently large that she will not default, when $w > w_D(B^*, g)$. Finally, note that because the consumer takes the existing system of debt relief as given, equation 3 defines the optimal level of borrowing as a function of the generosity of debt relief. Therefore, one can solve for the optimal level of debt relief, g^* , by choosing the level of generosity that maximizes the consumer's utility.

B. Why Overoptimism May Lead to Underborrowing: The Nominal Effect

Now assume that the consumer is excessively optimistic in that she underestimates the likelihood of severely adverse events, events that would cause her to default even if she borrowed the efficient amount, B^* . Specifically, assume that the consumer erroneously believes that her second-period wealth is distributed $s(w)$ where $s(w) < f(w)$ for $w < w_D(B^*, g)$. However, if the consumer underestimates the likelihood of these severely adverse events, she must overestimate the likelihood that these adverse events will not occur, and therefore she must overestimate the likelihood that her wealth will equal or exceed $w_D(B^*, g)$. Assume further that in addition to overestimating the total probability that w will exceed $w_D(B^*, g)$, she does not underestimate the probability of any particular level of wealth above $w_D(B^*, g)$, i.e., assume that $s(w) \geq f(w)$ for $w \geq w_D(B^*, g)$.

Assume that the lender still knows the true distribution of w and that the consumer learns how the amount of borrowing affects the required repayment by consulting a schedule provided by the lender.²⁴ The consumer will now borrow an amount B_s^* that solves:

²⁴A rational consumer could infer the correct distribution of w from this schedule, but the overoptimism hypothesis presumes an irrational consumer. In effect, the consumer assumes that the lender is overestimating the probability of an adverse event occurring.

$$(4) \quad U'(B_s^{\wedge}) = \delta \left(\int_{w=w_D(B_s^*, g)}^{w_{max}} U'(w - R(B_s^{\wedge}, g)) s(w) dw \frac{dR(B_s^{\wedge}, g)}{dB} \right)$$

Equation 4 is identical to equation 3 except that the consumer's overly optimistic estimation of the distribution of second-period wealth, $s(w)$, replaces the correct distribution, $f(w)$. For any level of borrowing, the right-hand side of equation 4 (when the consumer is overly optimistic) is greater than the right-hand side of equation 3 (when the consumer knows the true distribution), and thus the consumer will borrow less, not more, as each dollar borrowed yields less and less utility in the first period ($B^* \geq B_s^{\wedge}$). The right-hand side of equation 4 is greater than the right-hand side of equation 3 because we have assumed that $s(w) \geq f(w)$ for all $w \geq w_D(B^*, g)$. This means that the consumer overestimates the probability that she must repay her debt and thus overestimates the dollar value of her expected repayment. This is the Nominal Effect described above.

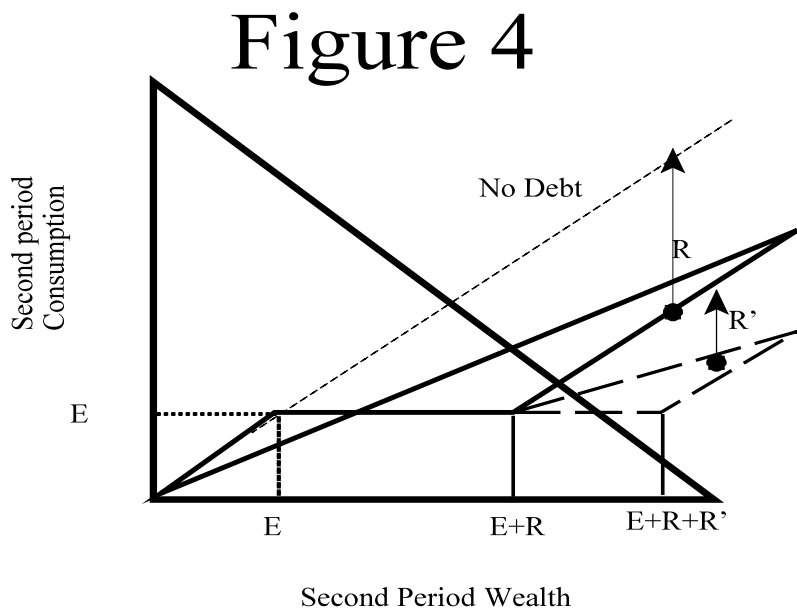


Figure 4 presents the basic intuition behind the Nominal Effect by plotting, on a new dashed line, the consumer's second period consumption if she borrows an amount B' in addition to the efficient amount, B^* . Remember that once the consumer chooses to default, the aggregate amount of her debt will not affect the amount that she must repay. Therefore, even if the consumer borrows the additional amount B' and consumes it in the first period, this will not reduce her consumption in the second period when her wealth is so low that she would have defaulted without the additional debt. That is, if the debtor's wealth is so low that she would have defaulted if she had borrowed the optimal amount, B^* , $w < E + R^*$, she will consume the same amount in the second period regardless of whether she borrows the additional amount, B' , and the dashed line disappears for values of w below $E + R^*$. The consumer cannot possibly underestimate the cost of repaying the additional loan, B' , when severely adverse events occur (when $w < E + R^*$) because this loan will not reduce her consumption (or increase her actual repayment) when these events occur. It is only when she does not suffer this severely adverse event (when $w > E + R^*$) that the additional dollar of debt will reduce her second-period consumption at all. Therefore, by underestimating the likelihood of a severely adverse event and overestimating the likelihood that this adverse event will not occur, the consumer overestimates the likelihood of repayment and overestimates the expected repayment. This will cause her to borrow too little, not too much.

The explanation for why the underestimation of severely adverse events may lead to underborrowing can be seen as the mirror image of the standard explanation for why opportunistic consumers borrow on the eve of default.²⁵ For opportunistic consumers, borrowing and consuming more today costs nothing because they know that they will default tomorrow. For overly optimistic

²⁵See *supra* note 8 and accompanying text.

consumers, borrowing and consuming today seems costly because they believe (wrongly) that they will *not* default tomorrow. Thus overly optimistic consumers overestimate the cost of additional borrowing.

While this model does not include a psychic cost associated with bankruptcy or default, such a cost would not change the prediction that the underestimation of severely adverse events cannot lead to overborrowing. The consumer will default when a severely adverse event occurs even if she borrows the efficient amount and therefore the consumer will incur the psychic costs of default regardless of whether she borrows another dollar. For the psychic costs to alter the analysis, they would have to increase as the debtor becomes more indebted. While possible, such an assumption is far less compelling than a statement that consumers experience emotional pain as a result of default.

If the government knows that consumers underestimate the likelihood of severely adverse events, it should impose some system of mandatory debt relief.²⁶ To take an extreme example, assume that a consumer believes that there is no chance that she will suffer a severely adverse event, $s(w)=0$ for $w < w_D(B^*, g)$. If permitted, this consumer would eagerly waive any debt relief laws in exchange for even a slight reduction in the interest rate because she erroneously believes these debt relief laws to be of no use to her.

While the government should adopt some system of mandatory debt relief to correct for this overoptimism, it should encourage borrowing through the tax system or adopt a system of debt-relief that is less generous than the one that consumers would choose in a perfect market. If a consumer

²⁶See, e.g., Schwartz & Wilde, *supra* note 6, at 1430 (acknowledging that if consumers suffer from systematic overoptimism they will readily grant a security interest in their property and thereby waive debt relief).

overestimates the true cost of borrowing and the government adopts the same level of generosity that a fully informed consumer would adopt, g^* , the consumer will borrow less than the amount that best matches her preferences. Effectively, the government faces a trade-off. By reducing the generosity of debt relief, the government can encourage the overly optimistic consumer to borrow more and better smooth her consumption across time. On the other hand, reducing the generosity of debt relief leaves the consumer less than fully insured in the second period.

Finally, note that this explanation for why the underestimation of adverse events may lead to underborrowing does not depend on any strong assumptions about the degree of the consumer's risk aversion or the form of debt relief. It does depend, however, on the precise nature of the risk that the consumer underestimates. By altering the assumptions about the nature of the consumer's overoptimism, it is possible to reach the standard result that overoptimism leads to overborrowing.

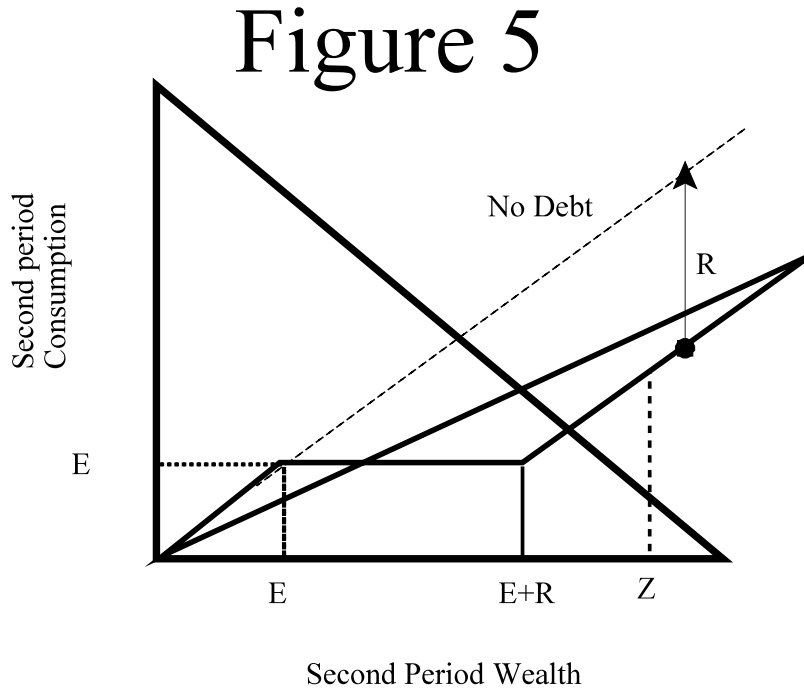
C. Why Overoptimism May Lead to Overborrowing: The Utility Effect

A consumer who underestimates the likelihood of some adverse events *may* underestimate the cost of borrowing and thus borrow too much. For this to be the case, the consumer must underestimate the likelihood of more moderate adverse events, such as short-term unemployment, that would not have caused her to default had she borrowed the efficient amount, B^* ; she must underestimate the likelihood of events that leave her with $w > w_D(B^*, g)$ and cause her to repay some of her additional debt with dollars that she values highly due to her low level of wealth.

Again, if consumers underestimate the likelihood of some events, they must overestimate the likelihood of others. If one posits that consumers underestimate the likelihood of moderately adverse events that still leave the consumer with $w > w_D(B^*, g)$ and correspondingly overestimate the likelihood of severely adverse events that leave them with $w < w_D(B^*, g)$, then the underestimation

will unambiguously lead to overborrowing. However, under these assumptions the underestimation hypothesis is really a story of excessive pessimism, not overoptimism, and is just a special case of the Nominal Effect described in the last section.

Therefore, if one is to argue that overoptimism leads to overborrowing, one must argue that i) consumers underestimate the probability of moderately adverse events that would not have led to default had the consumer borrowed a reasonable amount and ii) overestimate the likelihood that they will be very well-off. For example, one might assume that consumers believe that w is distributed $m(w)$ and that there is some arbitrary point, $Z > w_D(B^*, g)$, such that for all $w < Z$, $m(w) < f(w)$ and for all $w > Z$, $m(w) \geq f(w)$. Figure 5 illustrates an example assuming that debt relief takes the form of the simple wealth exemption illustrated in Figure 3.



Even this assumption is not enough to ensure that overoptimism will lead to overborrowing because it is possible that the Nominal Effect (which tends to cause the debtor to borrow too little) may offset the Utility Effect (which tends to cause the consumer to borrow too much). Assume instead that consumers underestimate *only* the likelihood of moderately adverse events, events that would not have caused them to default had they borrowed the efficient amount but that do leave them with a wealth of less than Z ; consumers underestimate the likelihood of $w_D(B^*, g) < w < Z$. More formally, assume that for all $w < w_D(B^*, g)$, $m(w) = f(w)$, for all $w_D(B^*, g) < w < Z$, $m(w) < f(w)$ and for all $w > Z$, $m(w) \geq f(w)$. The individual will borrow an amount B_M^{\wedge} that solves:

$$(5) \quad U'(B_M^{\wedge}) = \delta \left(\int_{w=Z}^{w_{max}} U'(w - R(B_M^{\wedge}, g)) m(w) dw \frac{dR(B_M^{\wedge}, g)}{dB} + \int_{w=w_D(B^*, g)}^Z U'(w - R(B_M^{\wedge}, g)) m(w) dw \frac{dR(B_M^{\wedge}, g)}{dB} \right)$$

Equation 5 is identical to equations 3 and 4 except that the consumer now assumes a distribution of $m(w)$ and we have artificially split the maximization in two parts to highlight the effect of the under- and overestimation. The right-hand side of equation 5 is now less than the right-hand side of equation 3, meaning the consumer will keep borrowing beyond B^* until her marginal utility of borrowing equals this lesser amount; $B_M^{\wedge} > B^*$. Because the consumer underestimates only moderately adverse events, she correctly estimates the probability of repayment at B^* and thus does not underestimate the expected value of the amount that she must repay; there is no Nominal Effect. However, she thinks that it is disproportionately likely that she will be asked to repay when she is wealthy and her marginal utility of consumption is low. This matches the common intuition that overly optimistic consumers underestimate the probability that they will suffer some event that will make repayment difficult and painful.

Note that if one takes an expansive view of overoptimism and assumes that consumers

underestimate the likelihood of severely adverse events (events that leave the consumer with $w < w_D(B^*, g)$) as well as moderately adverse events (events that leave the consumer with $w_D(B^*, g) < w < Z$), the results become theoretically ambiguous. The underestimation of severely adverse events will cause underborrowing because of the Nominal Effect. The underestimation of moderately adverse events will cause overborrowing because of the Utility Effect. Which effect will dominate is an empirical matter that will depend on the precise nature of the overoptimism, the degree of the consumer's risk aversion, and the debt relief laws that society has adopted.

III. Examining the Central Assumptions

Some of the assumptions that underlie the above analysis should not generate controversy; for example, almost everyone would agree that consumers are risk-averse and that the efficient level of borrowing will result in default some of the time. However, some might question the assumption that the amount of a consumer's indebtedness does not affect her required repayment after default and others might argue that consumers are more likely to underestimate the probability of some adverse events than others.

A. Does More Debt Mean More Repayment After Default?

This article assumes that once a consumer decides to default, the amount that she must repay does not increase with the total amount that she owes. At least in the United States, this assumption holds for both bankruptcy and non-bankruptcy debtor-creditor law.²⁷

²⁷Of course, the consumer's total obligations do place a ceiling on her repayment in that no court would require her to repay more than the amount she owes. However, in the United States bankrupt consumers rarely, if ever, repay all of their lenders in full. In fact, general unsecured creditors receive no payments in about ninety-five percent of all Chapter 7. See U.S. GEN. ACCOUNTING OFFICE, BANKR. ADMIN., CASE RECEIPTS PAID TO CREDITORS & PROFESSIONALS 1-2 (1994) (on file with the U. S. Gen. Accounting Office) ("Of the 1.2 million Chapter 7 bankruptcy cases closed in statistical year 1991 and 1992, about five percent (56,994) generated some receipts for distribution to professionals and creditors"). In addition, if the

1. Non-Bankruptcy Debtor-Creditor Law

To see that the consumer's total obligations do not affect how much she must repay after default, consider the ability of a creditor to garnish a consumer's wages. Federal law allows general creditors to garnish no more than twenty-five percent of the consumer's take-home earnings.²⁸ The aggregate amount of a consumer's obligations may affect how much a particular creditor will receive, but will have no bearing on the total amount that creditors can garnish, and thus no effect on the amount of earnings that the consumer can retain for her own consumption. Although state garnishment laws sometimes provide further protection of the consumer's future income,²⁹ no state statute instructs a judge to consider the aggregate amount of the consumer's obligations, and it is highly unlikely that judges consider this factor in the more open-ended analysis called for by some statutes.³⁰

Just as limitations on garnishment allow the consumer to retain some of her income after default, state property exemptions allow her to retain some of her assets as well. Like limitations on garnishment, property exemptions do not consider the aggregate amount of the consumer's obligations. Property exemptions allow the consumer to exempt certain types of assets, such as

consumer does repay in full, there has been no real default, at least in the economic sense, because the creditor has lost nothing.

²⁸Fair Debt Collections Practices Act, 15 U.S.C. § 1673 (2000) (restricting garnishment in favor of general creditors to no more than the lesser of twenty-five percent of the consumer's "disposable earnings" or the amount by which her disposable income exceeds thirty times the federal minimum wage.) "Disposable earnings" is defined in this context to mean earnings less any amount required by law to be withheld.. *Id.* at § 1672.

²⁹*See, e.g.,* TEX. PROP. CODE ANN. § 42.001(b)(1) (Vernon 2000) (prohibiting garnishment of earned but unpaid wages).

³⁰*See, e.g.,* VA. CODE ANN. § 34-29 (1996) (authorizing the judge to exempt more than seventy-five percent of the wages of a low-income consumer.)

home equity, clothing or insurance policies, from attachment by judgment creditors. These exemptions vary greatly from state to state; sometimes they provide explicit limits on the amount of wealth the consumer may retain and sometimes they do not.³¹ No state statute, however, instructs a court to consider the consumer's aggregate obligations when determining the amount of property the consumer may exempt.

The discussion thus far deals with unsecured credit. Of course, the amount of the consumer's *secured* credit may limit the property she can retain because, with limited exceptions,³² property exemptions do not prevent a secured creditor from seizing her collateral. However, this point largely relates to the ability of a consumer to waive the protections afforded by law and does not refute the general claim that the aggregate amount of the consumer's *total* obligations has no effect on the amount she must repay in a state collection proceeding.

2. Bankruptcy

For the most part, bankruptcy also refuses to consider the amount of the consumer's total obligations when setting her required repayment. Virtually all consumers who file for bankruptcy choose either Chapter 7 or Chapter 13.³³ About seventy percent of non-business bankruptcy filings

³¹For example, Texas allows a consumer to exempt her home equity as long as her home is on a lot of less than one acre in a town, village or city or on a lot less than one hundred acres (200 for a family) elsewhere. *See* TEX. PROP. CODE ANN. §§ 41.001, 41.002 (Vernon 2000). By contrast, a family of four in Virginia may only protect \$11,000 in home equity. VA. CODE ANN. § 34-4 (2002). That is, of course, unless the home is held in the form of tenancy by the entirety. *See In re Harris*, 155 B.R. 948 (E.D. Va. 1993).

³²For example, if the consumer files for bankruptcy, she may be able to avoid some security interests in items such as household goods. *See* 11 U.S.C. § 522(f) (2000) (allowing debtors to avoid a lien on certain furnishings, goods, clothing, etc. held for personal use, provided that the security interest is not securing the purchase money).

³³Consumers can also file under Chapter 11 of the bankruptcy code. However, in the year 2001 less than six of every ten thousand non-business filings were Chapter 11 filings (789 out of 1,451,789). *See* ABIWorld, Non-Business Bankruptcy Filings by Chapter, 1990-2001, per Quarter, *at*

are Chapter 7 filings.³⁴ Chapter 7 grants the consumer a complete discharge of her loans, thereby freeing all of her future income from attachment. Chapter 7 also allows the consumer to exempt roughly the same property that she would be able to exempt outside of bankruptcy under applicable state law.³⁵ Therefore, the total amount the consumer owes does not affect how much, if anything, she must repay in Chapter 7.

Under the existing case-law, the total amount of the consumer's obligations may affect her ability to choose Chapter 7 in the first place because some courts are more likely to dismiss a consumer's filing as a "substantial abuse" of the bankruptcy code³⁶ if the consumer can repay her debts in full³⁷ or in significant part.³⁸ If courts focus on the percentage of debts repaid instead of the value repaid, debtors who borrow more may be more likely to qualify for Chapter 7 relief because it is less likely that they can repay any given percentage of their debt. Although this interpretation

<http://www.abiworld.org/stats/1990nonbuschapter.html>.

³⁴*Id.*

³⁵The consumer is always allowed to use the same exemptions that were available to her in a state collections proceeding, and she may be able to use certain federal, bankruptcy-only exemptions as well. *See* 11 U.S.C. § 522 (2000). However, the bankruptcy code also gives states the right to deny their consumers the use of these federal, bankruptcy-only exemptions, and the vast majority of states have done so. *See, e.g.*, Eric Posner, Richard Hynes & Anup Malani, *The Political Economy of Property Exemptions* (Univ. Chi. Law & Econ., Olin Working Paper No. 136 2001). Yet in doing so, some states have enacted property exemptions that apply only in bankruptcy. *See, e.g.*, CAL CIV. PROC. CODE §§ 703.130, 703.140 (2001).

³⁶11 U.S.C. § 707(b) (2000).

³⁷*See, e.g.*, *In re Kelly*, 841 F.2d 908, 915 (9th Cir. 1997) (“[a] finding that debtor is able to pay his debts, standing alone, supports a conclusion of substantial abuse.”); *In re Lamanna*, 153 F.3d 1 (1st Cir. 1998) (holding that the ability of a debtor to repay her debts is the most important consideration in the substantial abuse analysis); *See also*, 6 COLLIER ON BANKRUPTCY ¶ 707.04[4] (Lawrence P. King ed., 15th rev. ed. 1996 & Supp. 2001) [hereinafter COLLIER] (collecting cases).

³⁸*See, e.g.*, *Fonder v. United States*, 974 F.2d 996 (8th Cir. 1992) (finding that petitioner was able to repay 89% of unsecured debts over thirty-six months). *See also* COLLIER ¶ 707.04 [4] (collecting cases).

of substantial abuse is consistent with the assumption that an increase in debt does not *increase* the required repayment after default, it does create some complications that are discussed below in Section III.A.3

The other major form of consumer bankruptcy, Chapter 13, requires that consumers repay their creditors over a period of three to five years pursuant to a plan proposed by the consumer and approved by the bankruptcy court. There are two major tests for determining how much the consumer must promise to repay in her Chapter 13 plan,³⁹ and neither test explicitly considers the aggregate amount of her debt.

The best interests of the creditors' test effectively requires that a consumer's creditors receive at least as much in Chapter 13 as they would have received in Chapter 7.⁴⁰ As outlined above, the total amount of the consumer's obligations does not affect her aggregate repayment in Chapter 7 and therefore does not affect how much she must repay pursuant to the best interests of the creditors' test.

The other major repayment test of Chapter 13, the disposable income test, requires that, over the course of the plan, the consumer repay with all of her projected income above some court determined allowance for "reasonably necessary expenses."⁴¹ Because the consumer's total obligations should affect neither her income nor her "reasonably necessary expenses," her total obligations should again have no effect on her required repayment.

Scholars allege that the practice of bankruptcy diverges from the above theory and that in

³⁹These tests refer to how much the consumer must pay her unsecured creditors. Her secured creditors may object if they will not receive an amount equal to the value of their collateral. 11 U.S.C. § 1325(a)(5) (2000).

⁴⁰*Id.* at § 1325(a)(4).

⁴¹*Id.* at § 1325(b).

some jurisdictions bankruptcy judges insist that plans propose a minimum percentage repayment or a “floor percentage.”⁴² To the extent that this is true, consumers who owe more may have to pay more after default. However, this complication is not fatal to the analysis for several reasons: i) it is unclear how frequently courts adopt this interpretation, ii) these “floor percentages” appear to serve as a screening device and courts do confirm plans that promise less than the floor percentage if the debtor can establish an inability to pay more,⁴³ and iii) even if a consumer is unable to file under Chapter 13, she can still make use of non-bankruptcy debt relief laws and may be able to file under Chapter 7.

Finally, one might object to the claim that additional borrowing is costless as long as the consumer will default before repaying because a court may rule that these additional debts were incurred by fraud and are therefore nondischargeable.⁴⁴ However, the debtor’s very overoptimism is likely to prevent a finding of fraud because such a finding depends on the debtor’s subjective belief as to the likelihood of repayment rather than her objective insolvency;⁴⁵ as long as the debtor’s

⁴²*See, e.g.,* Jean Braucher, *Lawyers and Consumer Bankruptcy: One Code, Many Cultures*, 67 AM. BANKR. L. J. 501, 532 (1993) (“The reality is that chapter 13 trustees and judges in the four cities [studied] effectively deter 0% plans and keep most plans above a floor percent that is known to local practitioners.”) This impression is shared by those who advise consumers on how to file for bankruptcy. *See, e.g.,* ROBIN LEONARD, CHAPTER 13 BANKRUPTCY: REPAY YOUR DEBTS 7/1(5th ed. 2001) (“In some courts, the judge will not approve your plan unless you propose paying your unsecured creditors a significant portion of what you owe them, usually at least 70%. The lawyers then respond by rarely or never submitting plans with less than the specified percentage.”)

⁴³*See, e.g.,* Braucher, *supra* note [42](#), at 532.

⁴⁴11 U.S.C. § 523(a)(2) (2000).

⁴⁵*Chase Manhattan Bank v. Carpenter*, 53 B.R. 724 (N.D. Ga. 1985); *Montgomery Ward and Co., Inc. v. Blackburn*, 68 BR. 870 (Bankr. N.D. Ind. 1987).

overoptimism is honest (but unreasonable) she will still receive a discharge of her additional debts.⁴⁶

3. If Courts Deny Relief to Those Without Sufficient Debt

The analysis of Section II assumes the amount of the consumer's debts have no effect on her consumption after default. Although this assumption allows for the exploration of the basic intuition behind the results of this article, it appears that, at least in some jurisdictions, some consumers may receive more generous debt relief (a Chapter 7 discharge) than others solely because they have borrowed more and are thus less able to repay their debts.⁴⁷

The possibility that debtors may increase their consumption after default by increasing their level of borrowing provides yet one more reason why overoptimism may not lead to overborrowing. To simplify the analysis, assume that a court will deny all relief to a consumer if it feels that the consumer does not have *enough* debt to warrant relief; if the consumer is denied relief she will repay her debt in full. A consumer will still default if and only if her wealth falls below some critical amount, $w < w_D(B, g)$, but now she may be better off if her wealth is slightly below this value than if her wealth is slightly above this level. Mathematically, $U(w_D(B, g) - R(B, g)) < U(D(w_D, g))$. Because of this, the consumer's first order condition must now be written as:

$$(3a) \quad U'(B) = \int_{w=w_D(B, g)}^{w_{max}} U'(w - R(B, g)) f(w) dw \frac{dR(B, g)}{dB} + \frac{dw_D(B, g)}{dB} f(w_D(B, g)) [U(w_D(B, g) - R) - U(D(w_D, g), g)]$$

⁴⁶Georgia Bank & Trust Co. v. McKinney, 18 B.R. 607 (Bankr. M.D. Ga. 1982). [taken from Colliers 523-45.

⁴⁷See *supra* note [37](#) and accompanying text.

The new term is negative and represents the chance that a marginal increase in debt could allow the debtor to receive fairly generous debt relief rather than be forced by the courts to repay her debt in full. Of course, the first term will include an offsetting effect (embedded in $dR(B,g)/dB$) because the lender will charge the debtor for this possibility. However, we need not worry about the precise nature of $dR(B,g)/dB$ because we assume that it is the same regardless of the degree of the consumer's excess optimism.

If the adverse events that the debtor underestimates include those that are just severe enough to result in default if the debtor incurs the amount of debt that she is considering, then this underestimation may cause the consumer to borrow less than the ideal amount. That is, if the consumer is considering an additional amount of debt and underestimates the likelihood that this additional amount of debt will result in a default that will actually increase her consumption, then she will undervalue this second (negative) term and she will believe that the right-hand side of equation 3a is larger than it really is. As a consequence, she will borrow less so that the marginal utility of consumption in the first period is greater.

B. The Competing Theories of Optimism

To reach the conclusion that consumers borrow too much or that the government should adopt generous debt relief laws, one must do more than merely assume that consumers are overly optimistic. Rather, one must either allege other forms of market failure or carefully specify the nature of this overoptimism. That is, are consumers more likely to underestimate the probability of severely adverse events that will inevitably result in default or are they more likely to underestimate the probability of moderately adverse events that will leave them with enough wealth to repay their loans (but not enough to maintain an acceptable standard of living)?

Unfortunately, the large number of heuristics found in the current behavioral research means one can make plausible arguments to support both the underestimation of severely adverse events and the underestimation of moderately adverse events. For example, the availability heuristic suggests that people tend to overestimate the likelihood of events that are readily called to mind or available.⁴⁸ This causes individuals to overestimate the likelihood of particularly vivid adverse events, such as airplane crashes,⁴⁹ and to underestimate the likelihood of other harms. If one believes severely adverse events are generally vivid and that moderately adverse events are not, one may believe that consumers are more likely to underestimate the likelihood of moderately adverse events. However, to qualify as a severely adverse event, a harm need only be sufficient to cause a consumer with a *reasonable* amount of debt to default. Many events, such as an extended period of unemployment, almost surely qualify as severely adverse events and yet do not seem particularly vivid.

More troubling, one can also find arguments from the behavioral literature that suggest that consumers are more likely to underestimate severely adverse events. For example, one common argument is that individuals tend to completely ignore events that occur with a probability falling below some threshold level.⁵⁰ Moderately adverse events may occur far more frequently than

⁴⁸See, e.g., Sunstein, *supra* note 1, at 5.

⁴⁹See, e.g., Robert Eisner and Robert Strotz, *Flight Insurance and the Theory of Choice*, 69 J. POL. ECON. 355 (1985).

⁵⁰See Paul Slovic et al., *Preference for Insuring Against Probable Small Losses: Insurance Implications*, 44 J. RISK & INS. 237, 254 (1977) (suggesting that "people may refuse to worry about losses whose probability is below some threshold. Probabilities below the threshold are treated as though they were zero."). See also Wesley A. Magat et al., *Risk-Dollar Tradeoffs, Risk Perceptions, and Consumer Behavior*, in LEARNING ABOUT RISK: CONSUMER AND WORKER RESPONSES TO HAZARD INFORMATION 83, 91 (W. Kip Viscusi & Wesley A. Magat eds. 1987).

severely adverse events; clearly this would be the case if the consumer's second-period wealth were normally distributed. Therefore, it is possible that only the probability of severely adverse events fall below the threshold level and thus are completely ignored.

Unfortunately, the consumer bankruptcy literature does not resolve matters either because one can again find support for both the underestimation of moderately adverse events and the underestimation of severely adverse events. Consumer bankruptcy scholars suggest that many bankrupt consumers have suffered some adverse event that would not have resulted in default had the consumer borrowed only a reasonable amount;⁵¹ by definition these debtors have suffered a moderately adverse event. However, these same scholars suggest that a great many consumers arrive in bankruptcy because they have suffered some crushing event that makes even reasonable repayment impossible;⁵² by definition these consumers have suffered a severely adverse event.

One may believe that, as an empirical matter, the underestimation of moderately adverse events and the Utility Effect dominates the underestimation of severely adverse events and the Nominal Effect, yet such a belief is somewhat inconsistent with the large volume of scholarship written in opposition to proposed reforms designed to make bankruptcy less generous for some debtors. This scholarship argues forcefully that the vast majority of bankrupt debtors cannot repay

⁵¹See, e.g., Elizabeth Warren, *The Bankruptcy Crisis*, 73 IND. L. J. 1079 (1998) (suggesting that many consumers arrive in bankruptcy because they have borrowed too much to allow them to survive setbacks that would not bankrupt less indebted individuals.)

⁵²See, e.g., TERESA A. SULLIVAN, AS WE FORGIVE OUR DEBTORS 333 (1989) (noting that nearly half of the debtors surveyed suffered a large income shock within the two years prior to filing for bankruptcy); Elizabeth Warren, *What is a Women's Issue? Bankruptcy, Commercial Law, and Other Gender-Neutral Topics*, 25 HARV. WOMEN'S L.J. 19, 24 (2002) (noting that nearly 40% of bankruptcy filings in 1999 were divorced or single women, and that most of these involved a serious interruption in income. Nearly half of these debtors cited serious medical problems. *Id.* at 26. The Warren notes that both men and women often file due to loss of employment, illness, or divorce. *Id.* at 51).

their debts.⁵³ For the underestimation of these adverse events to lead to overborrowing, however, these shocks cannot be so severe that the consumers would have defaulted had they borrowed a reasonable amount of debt. Therefore, for overoptimism to lead to overborrowing, it has to be the case that these consumers can reasonably repay *something* to their creditors even if they cannot repay their debts in full. Specifically, one can insist that the consumer repay an amount equal to the repayment they would have promised on the efficient level of debt, R^* .

IV. Viewing Debt Relief Through the Lens of Products Liability

Scholars have extensively studied the appropriate scope of products liability when consumers misperceive the likelihood of loss.⁵⁴ The appropriate scope of products liability would seem to offer a close analogy to the appropriate scope of debt relief; one can characterize a loan as a product and debt relief as a form of liability for the seller of this product. As explained below, however, the prescriptions of the products liability analysis do not directly apply to the scope of debt relief. In fact, the most valuable aspect of the analogy between products liability and debt relief is that it helps illustrate why the conventional wisdom about the importance of overoptimism for bankruptcy policy is wrong.

A fundamental result of the products liability literature is that if consumers misperceive the risks associated with the use of a product, the manufacturer of that product should be held strictly liable for the harms that result from the use of the product.⁵⁵ If the manufacturer is not liable for

⁵³See *supra* note [52](#) and accompanying text; Warren, *supra* note [51](#) at 1100 (citing an unpublished study which concluded that only a very small proportion of Chapter 7 debtors are able to make any meaningful repayment).

⁵⁴See, e.g., STEVEN SHAVELL, *ECONOMIC ANALYSIS OF ACCIDENT LAW* 53-54 (1987).

⁵⁵*Id.*

such injuries, consumers who overestimate the risk of injury will overestimate the true cost of the product and consume too little. Consumers who underestimate the risk of injury will underestimate the true cost of the product and consume too much. By contrast, if the manufacturer must fully compensate the consumer for the consumer's injuries and therefore impounds the risk in the price of the product, the consumer's subjective estimation of the risk becomes irrelevant, and the consumer will consume the efficient amount of the product.

By contrast, generous debt relief does not make the consumer's estimation of the risk of an adverse event irrelevant because generous debt relief does not merely hold the creditor liable for the harms created by his product, his loan. That is, when analyzing who should bear the risk of loss, bankruptcy scholars often speak of the risk of bankruptcy or the risk of default.⁵⁶ Yet, the actual bankruptcy filing or default is a choice made by the consumer and is not the underlying exogenous shock that created the hardship. Rather, the risks central to the analysis of debtor-creditor law are those risks that lead the consumer to default or file for bankruptcy, risks such as unemployment, divorce or illness.⁵⁷ If the consumer does not buy a product, she cannot suffer the injury that products liability insures her against. Even if the consumer does not borrow any money, however, she still may lose her job.

A larger debt burden may make periods of unemployment more painful by reducing the ability of the consumer to withstand the loss of income, and debt relief would be closely analogous

⁵⁶See, e.g., Howard, *supra* note 3, at 1063-66 (analyzing consumer bankruptcy as an allocation of the risk of default)

⁵⁷ See, e.g., SULLIVAN ET AL, TERESA A. SULLIVAN, ELIZABETH WARREN & JAY LAWRENCE WESTBROOK, *THE FRAGILE MIDDLE CLASS: AMERICANS IN DEBT* (2000) (describing hardships that lead consumers into bankruptcy).

to products liability if it held the lender liable for this added suffering. One could define the injury caused by the additional loan as how much more the consumer would have valued the money she borrowed after the loss than at the time of the borrowing. However, debt relief laws make no attempt to measure this difference. Instead, through the discharge, debt relief allows the consumer to consume the additional amount after the loss *and* at the time of borrowing.

To see why the scope of the lender's effective liability changes the analysis, assume that a manufacturer is liable for all injuries that a consumer suffers, not just those caused by its products. If consumers knew the true probability of injury, such a change may not reduce aggregate welfare. Manufacturers could gather information on the likelihood of injury and price their products accordingly. If a manufacturer sells to a sufficiently large number of individuals, it could effectively diversify away much of the risk of loss and would not need to charge a significant premium for bearing the additional risk. In short, under highly idealized assumptions the manufacturer can provide insurance as cheaply as a third party insurance company. Moreover, even if third parties were better able to diversify the risks of loss, the manufacturer may be able to more cheaply contract with these third parties than could consumers.

In a world of fully informed consumers, such liability is unnecessary because a rule that completely exonerates the manufacturer of all liability would not reduce aggregate welfare either.⁵⁸ Because a fully informed consumer knows the risks associated with a product, she will factor this risk into the expected cost of the product and thus buy the efficient amount. If this consumer is worried about the risk of injury, she can purchase insurance from a third party instead of the manufacturer.

⁵⁸See SHAVELL, *supra* note [54](#), at 52.

This same analysis applies in the context of debt relief. Lenders may be able to effectively insure against the consumer's losses from unemployment, illness and other risks because they have very good information on these risks and are often large enough to diversify away the risk that any one consumer will suffer some adverse event.⁵⁹ In addition, lenders can cheaply contract with third parties to bear some of this risk. For example, many credit card issuers now resell their credit card receivables in the securities markets.⁶⁰ Requiring lenders to provide this insurance may not reduce welfare if consumers are fully informed because fully informed consumers would gladly pay for the insurance. However, if consumers are fully informed and there are no other market failures, there is no reason to mandate debt relief because consumers could purchase this insurance from third parties.

When consumers misperceive the risk of loss, extending liability beyond the harm caused by the product or the loan destroys the irrelevance of the consumer's subjective probabilities because it effectively bundles a broad insurance policy with the product or the loan. While a consumer who underestimates the risk of loss may underestimate the true cost of the product and may underestimate the trade-off between current and future consumption, this consumer will also underestimate the value of the insurance policy bundled with the product or the loan. Which of these two effects dominates will depend on the individual's preferences and the severity of the adverse event in question. To the extent that consumers underestimate the likelihood of adverse events that do not result in debt relief, they may underestimate the trade-off between current and future consumption

⁵⁹See, e.g., Hallinan, *supra* note [12](#), at 106

⁶⁰See, e.g., Susan Pulliam & Carrick Mollenkamp, *Heard it on the Street, Loan Rangers: Investors Zero in on Bank One*, WALL ST. J., March 6, 2002, at C1 (“At the end of the third quarter, Bank One had a roughly \$70 billion credit- card portfolio, of which it had securitized and sold about \$40 billion.”)

and therefore may borrow too much. However, to the extent that they underestimate the likelihood of adverse events that do result in default (and hence debt relief provides a form of insurance), consumers will also undervalue the value of the insurance that accompanies the loan and thus will borrow too little.

This does not mean that lenders should not bear some of the risk that the consumer will become unemployed or will suffer some other loss; if consumers underestimate their risk of loss, they will likewise undervalue insurance provided by third parties. One may conclude that by tying this insurance to the borrowing decision the government can effectively force consumers to purchase this insurance just as it can force consumers to purchase other forms of insurance, such as social security, by tying these insurance products to the employment contract. The point is that assigning this risk to the lender will not guarantee the fully efficient results that assigning the risk of harm associated with a product achieves in the products liability context.

IV. Conclusion

Scholars have argued for centuries that the government must regulate the credit market in order to protect consumers from their own ignorance. Economists have generally received this reasoning with hostility, often noting the lack of a specific model of consumer behavior that is preferable to the standard economic assumption of consumer rationality. In recent decades some scholars have accepted this challenge by positing more specific forms of cognitive failure. One popular hypothesis to emerge from this literature is that consumers employ various heuristics that lead them to systematic overoptimism. Bankruptcy scholars have embraced this overoptimism hypothesis in an effort to support their calls for more generous debt relief.

This article demonstrates that claims of systematic overoptimism are still not sufficiently

defined to allow for meaningful policy analysis, at least in the area of consumer finance. Overoptimism does justify some mandatory debt relief, but few would seriously argue against all forms of mandatory relief. The more critical question is whether overoptimism requires the government to adopt generous debt relief. To the extent that a consumer's overoptimism causes her to underestimate the likelihood of moderately adverse events that would not have led to default had she borrowed the efficient amount, such overoptimism may lead to overborrowing, and the government may improve her welfare by adopting more generous debt relief or otherwise discouraging borrowing. However, to the extent that her overoptimism leads her to underestimate the likelihood of moderately adverse events that would not have led to default had she borrowed the efficient amount, such overoptimism will lead to underborrowing, and the government may improve her welfare by adopting less generous debt relief or otherwise encouraging borrowing. Perhaps the relative importance of these two forms of overoptimism can be resolved as an empirical matter. Such an answer must come from further study, as neither the behavioral economics literature nor the consumer bankruptcy literature suggests a strong preference for one form of overoptimism over the other.