

# **Borrower Naivete in the Credit Market: Proposal for the Center for Equitable Growth Research Grant**

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A well-functioning credit market is a central driver of economic growth. At the same time, academics, policymakers, as well as the general public, have long been concerned that in some situations borrowing can actually end up hurting consumers. This concern has resurfaced with particular poignancy in the recent financial crisis, as subprime mortgages, credit cards, payday loans, and other credit constructs are widely believed to have confused and taken advantage of some of the poorest and financially most vulnerable groups in the population. Ensuring that credit markets continue to support economic growth, yet do so in a way that benefits a broad cross-section of the population, is therefore of central policy concern.

With Paul Heidhues of the University of Bonn, we have developed a workhorse theory for understanding credit contracts and borrower welfare when consumers are not fully sophisticated in their borrowing behavior, and for identifying interventions that increase welfare as well as equity in the credit market without interfering with the efficient flow of credit. Our theory rests on two related assumptions supported by a spate of evidence in economics. First, individuals are often less willing to sacrifice current consumption to make their payments on a loan than they would have hoped, preferring instead to put off repayment to later. Second, many individuals tend to be naive about this preference, thinking that they will be more willing to make sacrifices than they actually will be. We show that profit-maximizing lenders respond to these characteristics of consumers by offering seemingly cheap credit to be repaid quickly, and postulating stiff penalties for failing to meet the quick repayment terms—features that are common in subprime mortgage, credit-card, and other contracts. Naive borrowers believe they will repay quickly, and hence think that the loan is a good deal, so that they overextend themselves. And since they do not repay quickly, they pay the large penalties and end up in long-term debt. Surprisingly, due to lenders' exploitation of naivete, even very small amounts of naivete can lead to significant losses in well-being. To make things worse, the losses in well-being are associated with significant increases in inequality. Namely, not only lenders, but also sophisticated borrowers benefit at the expense of non-sophisticated borrowers, because they are able to take advantage of the good deals intended to lure in non-sophisticated borrowers, and that are ultimately financed by non-sophisticated borrowers. Since recent evidence indicates that lower-income and less educated borrowers are far less sophisticated in financial matters than higher-income and more educated borrowers, this redistribution goes in the wrong direction.

One of our main goals in this project is to identify practically implementable policy interventions that increase both efficiency and equity in the credit market. We suggest that eliminating large penalties for delaying repayment, for example by banning prepayment penalties in subprime mortgages or various fees in credit cards, can achieve both of these goals. These interventions suggested by the theory resemble some of the

regulations enacted in the last two years for high-interest mortgages and credit cards. We also identify more limited situations in which a policymaker might want to impose an interest-rate cap on credit.

Over the next year, we hope to address the following two related questions in our project. First, we will investigate the role of new information technologies—such as lenders' rapidly improving ability to collect and analyze large amounts of information about consumers, and the improving methods of credit scoring—in the credit market. We hypothesize that lenders have become better at distinguishing sophisticated and non-sophisticated consumers, so that they can now market credit products to individual consumers in a more targeted way. We believe that this development raises some central policy questions, such as what information about borrowers lenders should be allowed to collect and use, that have both privacy and efficiency implications. We will utilize our framework to analyze the effect of this development on outcomes and borrower well-being in the credit market.

In particular, we conjecture that lenders' ability to distinguish consumers can make *both* naive and sophisticated borrowers worse off—and lenders of course better off. Most importantly, if a lender knows that a borrower is naive, it can design a credit contract to maximally exploit the borrower's naivete at her expense, without having to worry that the borrower is sophisticated and will avoid the fees and penalties that make the credit profitable. In addition, sophisticated borrowers will no longer be able to take advantage of the good deals on credit.

Second, we will investigate the role of defaults in the credit market. It is likely that the high payments postulated by many types of credit contracts are instrumental in triggering default by borrowers. Since a default is also very costly to the lender, it seems that this consideration should make lenders less aggressive in exploiting borrowers' naivete, or lead them to find constructs that exploit naivete without the risk of pushing borrowers into default.