# Breaching the Mortgage Contract: The Behavioral Economics of Strategic Default

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## INTRODUCTION

More than a quarter of all American mortgage holders owe their lenders more than their homes are worth. These underwater homeowners face a strange dilemma: What should they do when they realize that it is cheaper to go into foreclosure than it is to keep paying down their mortgage debts? American homeowners have rarely faced this "strategic default" question on such a massive scale. Foreclosure has historically been reserved for people who were unable to make payments—because they were unemployed, because their adjustable interest rate jumped up and they could no longer afford the monthly payment, or because their household finances suffered some other shock.<sup>2</sup> In the current economy, the equation is quite different: mortgagees can afford to pay each month, but their total debt swamps the value of the underlying asset.<sup>3</sup> For many of them, the savings from walking away would be substantial,4 but one estimate suggests that the average homeowner does not default until the value of the house is sixty-two percent lower than the balance of the mortgage.<sup>5</sup> On its face, this presents a puzzle. Why do people stay in their homes? And, on the other hand, when and why do people walk away? This Article argues that the mortgage commitment implicates powerful norms of promise

<sup>1.</sup> John Krainer & Stephen LeRoy, *Underwater Mortgages*, FEDERAL RESERVE BANK OF SAN FRANCISCO ECONOMIC LETTERS (2010), http://www.frbsf.org/publications/economics/letter/2010/el2010-31.html (last visited Sept. 5, 2011).

<sup>2.</sup> See id. (describing the financial hardships that force the typical mortgagor to sell her home).

<sup>3.</sup> See Roger D. Congleton, On the Political Economy of the Financial Crisis and Bailout of 2008–2009, 140 Pub. Choice 287, 287–89 (2009) (describing the decline in the median asking prices for homes since Sept. 2007); see also Fin. Crisis Inquiry Comm'n, Preliminary Staff Report: The Mortgage Crisis 25 (2010) [hereinafter Preliminary Staff Report: The Mortgage Crisis] (explaining that borrowers typically default on a mortgage if they have both negative equity and if they experience an income shock).

<sup>4.</sup> See Neil Bhutta, Jane Dokko & Hui Shan, The Depth of Negative Equity and Mortgage Default Decisions 1–3 (Fed. Reserve Bd., FEDS Working Paper No. 2010-35, 2010).

<sup>5.</sup> *Id.* at 2.

keeping and fair play, and most people think that breaching a contract is morally wrong. However, the mortgage contract specifies the consequence of breach (foreclosure) such that underwater borrowers may see default and foreclosure as the morally neutral exercise of an option in the contract. The studies reported here ask when people think of foreclosure as a penalty for a serious legal and moral violation and when they think that handing over a house is an acceptable alternate performance of the contractual obligation.

To illustrate the controversy, I begin with an example from the popular discourse around strategic default. In February 2009 the moderators of a blog run by the New York Times posted a letter from a homeowner in California whose home had lost more than half its value. The homeowner wrote to ask how he should price the hit that his credit rating would take in the event of default—essentially a question about the financial cost of poor credit. A vigorous debate ensued. Most comments ignored the pricing question altogether and moved directly to the ethical implications of default. "You cut a deal with another party. You need to live up to that deal. . . . Forget credit scores. Do you want to be a cheat and a liar?" wrote one. Or, more bluntly: "Since you're willing to sacrifice integrity for money, why not just rent out your wife for a few years and pay off the whole thing very quickly?"8 In response, others specifically invoked the notion of the foreclosure provision as an option. For example: "I don't see what's wrong with walking away . . . . You have a contract which specifies what happens if you break the contract, so in effect that's just another option within the contract.... [Y]ou're playing within the rules of the game."9

Clearly, readers disagreed about the moral implications of walking away. Some saw it as a willful act of promise breaking, while others thought that it was the exercise of an option explicitly permitted by the deal itself.

Strategic default implicates powerful but competing norms. Americans take their promissory obligations very seriously, even in

<sup>6.</sup> Stephen J. Dubner, *Our Daily Bleg: A Real-Estate Dilemma*, N.Y. TIMES (Feb. 9, 2009, 12:48 PM), http://freakonomics.blogs.nytimes.com/2009/02/09/our-daily-bleg-a-real-estate-dilemma/.

<sup>7.</sup> Paul Lightfoot, posting at *id.* (Feb. 12, 2009, 3:59 PM), http://www.freakonomics.com/2009/02/09/our-daily-bleg-a-real-estate-dilemma/comment-page-10/#comments.

<sup>8.</sup> Al Shealy, posting at id. (Feb. 9, 2009, 1:20 PM), http://www.freakonomics.com/2009/02/09/our-daily-bleg-a-real-estate-dilemma/#comments.

<sup>9.</sup> Julian, posting at *id.* (Feb. 9, 2009, 1:54 PM), http://www.freakonomics.com/2009/02/09/our-daily-bleg-a-real-estate-dilemma/comment-page-2/#comments.

the face of clear and conflicting economic incentives. 10 Most people think that it is wrong to break a promise, and most people think that breach of contract is a form of promise breaking. 11 However, mortgage contracts are akin to contracts with liquidated damages clauses in that they specify the penalty for breach, and this may reduce the moral constraints on default. 12 Although there are some penalties for default beyond the transfer of the house, 13 many states do not permit deficiency judgments,14 and a poor credit score can be a price worth paying. Depending on the context, a borrower may think of the obligation to pay the mortgage as a moral commitment and see the foreclosure as a painful penalty to pay for a serious legal and moral violation. Or, she may think of the foreclosure as an option in the contract—not a punishment, just an agreed-upon consequence of default on loan payments. I present three empirical studies below to specify the social and contextual triggers that reframe foreclosure as a contract option rather than a moral violation.

My argument proceeds as follows: traditionally, an informal norm weighed in favor of honoring the mortgage contract, and that norm was bolstered by the harsh penalty of foreclosure. Today, though, foreclosure is an increasingly weak penalty. When homeowners are deeply underwater, and the home is the only asset at risk when they default, it is much cheaper to pay the penalty—hand over the home and take the credit hit—than it is to pay the mortgage. Behavioral research suggests that when a contract includes a clause that specifies the penalty for breach, people are more willing to breach; they see breach as something like the exercise of an option rather than the repudiation of a deal. However, the analogy of the foreclosure "option" in the contract to a liquidated damages clause is imperfect because when a borrower defaults, the lender goes uncompensated. When there is real harm at stake, it may be more

<sup>10.</sup> Tess Wilkinson-Ryan & Jonathan Baron, Moral Judgment and Moral Heuristics in Breach of Contract, 6 J. EMPIRICAL LEG. STUD. 405, 405 (2009).

<sup>11.</sup> Id. at 415.

<sup>12.</sup> Ernst Fehr & Bettina Rockenbach, *Detrimental Effects of Sanctions on Human Altruism*, 422 NATURE 137, 138 (2003) (reporting that players in an experimental game were less likely to reciprocate altruistic behavior when a partner could use sanctions to punish noncooperative behavior).

<sup>13.</sup> Restatement (Third) of Prop.: Mortgages § 8.4 (1997).

<sup>14.</sup> See Grant Nelson, Confronting the Mortgage Meltdown: A Brief for the Federalization of State Mortgage Foreclosure Law, 37 PEPP. L. REV. 583, 587–94 (2010) (detailing the different approaches that states take to the personal liability of debtors for remaining debt after foreclosure sale).

difficult for individuals to rationalize the move from mortgage-aspromise to default-as-option.

So what tips people from the former conception to the latter? I argue that the modern American mortgage system has moved away from a conception of the lender-borrower relationship as a local, personal commitment. This has been a huge shift, and it encompasses a number of discrete changes. First, borrowers who believe that lenders have been reckless and greedy are more likely to endorse strategic default. Second, loans used to be local and personal; the originating bank held and serviced a mortgage for the entire loan period. Default is perceived as less immoral when the original promisee is no longer a party to the contract. Finally, foreclosure itself used to be shameful and stigmatizing, but, with more and more visible foreclosures in an area, people consider default to be less immoral and more acceptable. In this Article, I measure the moral beliefs about these discrete changes.

In Part I, I lay the foundation for the subsequent arguments and empirical evidence by reviewing the state of the modern mortgage, including the relevant state law approaches to foreclosure. This foundation is a crucial piece of the argument because I describe the legal regime and the economic context in which foreclosure is, unusually, a weak penalty. In Part II, I argue that the strategic default decision is helpfully analogized to other breaches of contract. I draw parallels between strategic default and the theory of efficient breach. This Part concludes with a discussion of the psychology of contract and, in particular, research on common moral intuitions about breach of contract. Parts III, IV, and V offer empirical evidence in support of my claims. In Part III, I argue that reciprocity and a sense of fair play are significant considerations for would-be defaulters, even in the face of clear financial incentives, and I present an experiment on the role of fairness in housing decisions. In Part IV, I hypothesize that the transfer of the mortgage from one lender weakens the moral obligation to repay. I show results from an experiment suggesting that the moral norm against default is weaker for a transferred loan. In Part V, I present data from a scenario study indicating that an increase in the number and salience of home foreclosures erodes the commitment to mortgage repayment as a moral duty. Finally, in Part VI, I discuss some of the implications of this argument for mortgage policy, particularly loan modification and securitization.

## I. FORECLOSURE IS A WEAK SANCTION

At first blush, it surely seems implausible to argue that foreclosure is a *weak* sanction or a *small* penalty. In fact, though, in the lexicon of behavioral economists, the penalty of foreclosure is indeed small for the homeowners most deeply underwater. By this I do not mean that foreclosure is not painful or expensive; I only mean that it is ultimately cheaper to pay the penalty (to foreclose and accept the consequences) than it is to pay the mortgage. In this Part, I begin by describing the psychology of small penalties and arguing that weak sanctions have behavioral consequences we should care about in the mortgage context. I then turn to a more careful exposition of the reasons that one can plausibly construe foreclosure as a weak rather than a strong penalty for a class of underwater homeowners.

# A. Cognitive and Behavioral Consequences of the Weak Sanction

In a number of experiments on interpersonal exchange, researchers have found evidence that people are less likely to perform if the penalty for breach is specified. This literature, sometimes called the "weak sanctions" literature, shows that when a small penalty is too low to deter bad behavior, it is often nonetheless salient enough to cause a shift away from a social norm. In the classic study of Israeli day cares, Uri Gneezy and Aldo Rustichini found that parents were less likely to pick up their children on time from day care when the day care imposed a four-dollar late fine. With no penalty, tardiness is discourteous, even a sign of disrespect. When the penalty is introduced, however, late pick-up simply becomes an option in the contract.

The effect of small sanctions has also been studied in experimental economics games; when researchers introduce a penalty for selfishness into a game characterized by high levels of voluntary

<sup>15.</sup> See Tess Wilkinson-Ryan, Do Liquidated Damages Encourage Breach? A Psychological Experiment, 108 MICH. L. REV. 633, 659 (2010) (reporting the results of an experiment in which participants indicated greater willingness to breach a contract that included a liquidated damages clause than one that did not); see also Uri Gneezy & Aldo Rustichini, A Fine Is a Price, 29 J. LEGAL STUD. 1, 7 (2000) (showing graphical evidence of the uptick over a course of twenty weeks in late-coming parents in the group of parents asked to pay a fine).

<sup>16</sup>. Wilkinson-Ryan, supra note 15, at 651-54 (reviewing literature on small sanctions experiments).

<sup>17.</sup> See Gneezy & Rustichini, supra note 15, at 7.

reciprocity, players become more rather than less selfish. <sup>18</sup> In a Trust Game, for example, the first mover, the Investor, allocates some amount of money to the second player, the Trustee. Whatever money is passed is tripled. The Trustee then has the choice to pass some of his earnings back to the Investor. When there are no constraints on the Trustee's behavior, he often passes back between one-third and one-half of his total. When the Trustee is subject to a small penalty for small returns, he is more likely to return nothing and pay the penalty.

This shift in decisionmaking has even been shown at the level of neural activity. Researchers conducted a Trust Game<sup>19</sup> in which nontrustworthy behavior was subject to punishment by the experimenter. Players made their decisions in an fMRI machine.<sup>20</sup> The results suggested that nonsanctioned players were processing the decision in areas of the brain associated with social rewards. Trustees in the penalty game, on the other hand, looked as though they were solving a math problem—their greatest activation was in the parietal cortex, an area of the brain associated with rational, self-interested decisionmaking.<sup>21</sup>

In general, these kinds of studies suggest that a formal rule against selfishness may have the effect of displacing the informal norm that previously regulated the behavior.<sup>22</sup> In the mortgage context, the formal rule is that defaulting homeowners in many states can enter foreclosure proceedings and walk away from their mortgage debt, though the longstanding informal norm weighs in favor of honoring the mortgage commitment and paying down the debt. When foreclosure is very costly, both the informal and the formal rule push in the same direction. When foreclosure is comparably inexpensive, though, the norm invokes moral commitments that the rule elides. In

<sup>18.</sup> Daniel Houser, Erte Xiao, Kevin McCabe & Vernon Smith, When Punishment Fails: Research on Sanctions, Intentions, and Non-Cooperation, 62 GAMES & ECON. BEHAV. 509 (2008).

<sup>19.</sup> The Trust Game was developed by Joyce Berg, John Dickhaut, and Kevin McCabe, *Trust, Reciprocity, and Social History*, 10 GAMES & ECON. BEHAV. 122, 124 (1995). The game involves two players, an Investor and a Trustee. The Investor begins with ten dollars. She has the choice to pass none, some, or all of her endowment to the Trustee. Whatever is passed is tripled. The Trustee then has the choice to pass none, some, or all of her resulting wealth back to the Investor.

<sup>20.</sup> Jian Li, Erte Xiao, Daniel Houser & P. Read Montague, *Neural Responses to Sanction Threats in Two-Party Economic Exchange*, 106 PROC. NAT'L ACAD. SCI. 16,835 (2009). A Trust Game with sanctions is a game in which the Trustee pays a small penalty if she returns less than the Investor requests.

<sup>21.</sup> Id. at 16,837.

<sup>22.</sup> See generally Bruno Frey & Felix Oberholzer-Gee, The Cost of Price Incentives: An Empirical Analysis of Motivation Crowding-Out, 87 Am. Econ. Rev. 746 (analyzing the motivational effects of price incentives on prosocial behavior).

the next Section, I describe the economic and legal context in which foreclosure is such a weak sanction.

## B. The Mortgage Crisis: Upside-Down Loans

The movement from traditional mortgages to mortgages with nontraditional financing has changed the penalties associated with foreclosure so that foreclosure is now a weak sanction. When a home goes into foreclosure, the borrower faces three threats to her material well-being. The first is that she loses her house. The second is that she loses her other assets and even future wages if the lender succeeds in obtaining a deficiency judgment. The third is that she takes a big hit to her credit rating. These are serious negative consequences to foreclosure, but these consequences may be much smaller than the overall financial impact of paying down a big loan for a house worth much less. Sometimes the rational decision for underwater homeowners is default.

Traditionally, the biggest negative consequence associated with foreclosure is losing one's home, which is typically a real harm. Nonetheless, the impact of displacement may be smaller for buyers who are relative newcomers to their neighborhoods or who did not have plans to remain in their homes for very long. In addition, for many recent homeowners, foreclosure does not necessarily mean homelessness or even a big step down on the housing ladder. Homeowners paying down a mortgage that originated in 2006 may realize that they can rent a substantially similar property for a fraction of their mortgage payment. This phenomenon is somewhat unusual, historically, and it is the combined result of both a shift in lending practices in the last fifty years and a bursting housing bubble. In this Section, I offer a brief review of the recent history of American homeownership to help explain the economic trajectory that has made default more profitable than homeownership for so many borrowers.

Overall, the first decade of the twenty-first century saw a spike in high-risk loans, a spike in home sales, and then a nearly unprecedented fall in home prices, leaving more homeowners more deeply underwater than at any time in recent history. More than two-thirds of American adults own a home. Homeownership has traditionally been understood as a stabilizing force in American society.<sup>23</sup> This is partly symbolic in that homeownership is one way of

<sup>23.~</sup> See P. Michael Collins, Pursuing the American Dream: Homeownership and the Role of Federal Housing Policy 5 (2002).

expressing one's investment, as a citizen, in the community and the country.<sup>24</sup> Homeownership also has practical effects on stability. As Adam Levitin and Susan Wachter have pointed out, owning a home is a hedge against the increasing costs of living faced by renters.<sup>25</sup> Owners move less frequently than renters. Paying down a mortgage over many years is a kind of savings plan, particularly for older people, making it easier for homeowners to absorb income shocks like retirement. This is a fairly conservative model of homeownership, and it was reflected in lending practices. Until 2005, lenders financed only a small minority of loans—fewer than ten percent—using nontraditional mortgages.<sup>26</sup> Homeownership was reserved for buyers with substantial savings for a large down payment, stable employment to make monthly payments, and a long-term plan to reside in the home.

In the last fifteen years, this picture has begun to change. During the early 1990s, fewer than eight million new loans were originated each year.<sup>27</sup> In 2000, that number began to climb, reaching a peak of over twenty million mortgages originated in 2003.<sup>28</sup> As the number of mortgages rose, so did the fraction of those mortgages with nontraditional financing. Nontraditional mortgages adjustable-rate mortgages, jumbo loans, interest-only loans, and balloon loans. Interest-only loans, for example, accounted for only two percent of mortgages in 2004 but rose to twenty percent in 2007.<sup>29</sup> In general, these kinds of loan structures permit new homeowners to purchase a home with less capital and lower initial payments. In turn, these borrowers have less equity in the home during the first stage of the loan.<sup>30</sup> Furthermore, many loans at the beginning of the new

<sup>24.</sup> See, e.g., D. Benjamin Barros, Home as a Legal Concept, 46 Santa Clara L. Rev. 255, 255 (2005) ("As our cultural cliché 'a house is not a home' suggests, 'home' means far more than a physical structure. 'Home' evokes thoughts of, among many other things, family, safety, privacy, and community. In the United States, home and home ownership are held in high cultural esteem, as American as apple pie and baseball.").

<sup>25.</sup> Adam J. Levitin & Susan M. Wachter, *Information Failure and the U.S. Mortgage Crisis* (Georgetown Univ. Law Ctr., Bus. Econ. & Regulatory Policy Working Paper Series, Research Paper No. 1,605,275, Public Law & Legal Theory Working Paper Series, Research Paper No. 1,605,275, 2010), *available at* http://ssrn.com/abstract=1605275.

 $<sup>26.\,</sup>$  Fin. Crisis Inquiry Comm'n, Preliminary Staff Report: Securitization and the Mortgage Crisis 10 (2010).

<sup>27.</sup> PRELIMINARY STAFF REPORT: THE MORTGAGE CRISIS, supra note 3, at 4.

<sup>28.</sup> Id.

<sup>29.</sup> Id.

<sup>30.</sup> And, in fact, some of these loans were not fully amortizing, so that even at the end of the loan period, borrowers would need to make a large "balloon" payment to pay off the mortgagor.

century were refinances, and one report estimates that in 2003, for example, one in three American homes were refinanced.<sup>31</sup>

On the homeowner side, then, people were buying more and refinancing more, with less equity and bigger interest payments, and this precipitated the recent financial crisis.<sup>32</sup> In 2008, the housing market crashed, pushing home values in some areas below half of their purchase price.<sup>33</sup> In 2009, one in twenty homeowners were in default.<sup>34</sup> In the "sand states"—California, Arizona, Florida, and Nevada—fifteen percent of homes were in serious delinquency.<sup>35</sup> Thus, for the first time since the Texas oil recession of the 1980s, foreclosure became a legitimately attractive option for millions of Americans.

# C. Real Estate Law: The End of Deficiency Judgments

Even if a home were worth much less than the outstanding mortgage, default would nonetheless remain unattractive as long as the lender could and would penalize the homeowner by pursuing the borrower's remaining assets and wages. In fact, the prospect of losing assets other than the house in the foreclosure process is increasingly unlikely for two reasons. First, many of the states that have been hardest hit by the housing crisis are states with nonrecourse laws, meaning that the lenders are not permitted to seek a deficiency judgment against debtors who have gone through the foreclosure proceeding. Second, even in cases in which banks are legally empowered to go after delinquent homeowners, that pursuit is often impractical, in part because the banks lack resources to deal with a high volume of foreclosure actions.

When a homeowner stops making mortgage payments, the subsequent consequences of default are partly determined by the laws of the state in which the home is located. For example, imagine a

<sup>31.</sup> Preliminary Staff Report: The Mortgage Crisis, supra note 3, at 4.

<sup>32.</sup> See Barry Bosworth & Aaron Flaaen, America's Financial Crisis: The End of an Era 3 (2009), available at http://www.brookings.edu/papers/2009/0414\_financial\_crisis\_bosworth.aspx (describing the origins of the financial crisis).

<sup>33.</sup> Id.

<sup>34.</sup> Id.

<sup>35.</sup> Id.

<sup>36.</sup> Id.

<sup>37.</sup> See, e.g., John Mixon, Fannie Mae/Freddie Mac Home Mortgage Documents Interpreted as Nonrecourse Debt (with Poetic Comments Lifted from Carl Sandburg), 45 CAL. W. L. REV. 35, 37 (2008) (noting that it is often not worth the hassle to the lender to pursue a deficiency judgment and that some states have a statutory redemption policy onerous enough that lenders prefer "speedy liquidation" and waive their rights to deficiency).

homeowner who owes \$200,000 on her home, which is then sold at auction for \$125,000. Her obligations to the lender at that point depend on the state and on the lender. The Restatement (Third) of Property (Mortgages) takes the traditional position that a lender who is still owed money even after a foreclosure sale can go after the borrower for the remainder of the debt by obtaining a deficiency judgment.<sup>38</sup> In many states, however, the borrower owes the bank nothing. California is a nonrecourse state, for example.<sup>39</sup> Some states, like Pennsylvania and New York, have adopted a middle-ground solution where deficiency judgments are permitted, but borrowers owe only the difference between the outstanding loan and the fair market value of the house, usually a smaller amount than the actual difference between sale price and debt.<sup>40</sup> Finally, many states permit lenders to pursue a judgment for the full value of the difference between the loan amount and the sale price, including the power to garnish a borrower's wages and seize her assets.<sup>41</sup>

Even where full recovery is allowed, the fate of a borrower in default also depends on the lender and the lender's interest in and ability to pursue a deficiency action. In many cases, lenders do not pursue a deficiency judgment because the homeowners have no assets and no income—that's why they are in foreclosure in the first place. However, in other cases, the sheer volume of foreclosure actions is overwhelming, and lenders lack the resources to go after delinquent borrowers.<sup>42</sup>

The lender's practical ability to sue for a deficiency judgment is partially dependent on the state's foreclosure procedure. Although some states permit "power of sale" foreclosure, many require the lender to file in court, which is time-consuming and costly:

A typical judicial foreclosure entails a long series of steps: filing of a foreclosure complaint and *lis pendens* notice; service of process on all parties whose interests may be prejudiced by the proceeding; a hearing, frequently by a master in chancery who then reports to the court; the decree or judgment; the notice of sale; a public foreclosure sale,

<sup>38.</sup> RESTATEMENT (THIRD) OF PROP.: MORTGAGES § 8.4 (1997) ("If the foreclosure sale price is less than the unpaid balance of the mortgage obligation, an action may be brought to recover a deficiency judgment against any person who is personally liable on the mortgage obligation in accordance with the provisions of this section.").

<sup>39.</sup> See Cal. Civ. Proc. Code § 580(b) (West 1980) ("No deficiency judgment shall lie in any event after a sale of real property or an estate for years therein for failure of the purchaser to complete his or her contract of sale."). The nondeficiency statute does not apply to home equity loans or refinances.

<sup>40.</sup> See N.Y. REAL PROP. ACTS. LAW § 1371 (McKinney 2009); 42 PA. CONS. STAT. ANN. § 8103(c) (West 2009).

<sup>41.</sup> See, e.g., Fla. Stat. Ann. § 702.06 (West 1996).

<sup>42.</sup> See Mixon, supra note 37, at 37.

usually conducted by a sheriff; post-sale adjudication as to the disposition of the foreclosure proceeds; and, if appropriate, the entry of a deficiency judgment. <sup>43</sup>

When states like Florida have a flood of new foreclosure actions and a slow, inefficient system for processing them, the cost of seeking deficiency judgments deters banks from going after defaulters. Thus, for one or more of an array of reasons, the house is often a homeowner's only asset at risk in default.

# D. Credit Scores: New Tools for Pricing Low Credit

Anyone who defaults on a home will see a big drop in her credit score. Most people are powerfully motivated by fear of the consequences of a poor credit score. However, as scary as it is to be denied access to credit, the consequences of poor credit are not infinite, and they can be priced with only a bit of research. Companies like YouWalkAway.com, a web-based service that helps homeowners navigate the foreclosure process, guide defaulters on how to minimize the hit to credit and how to compare the cost of seven years of low credit to the cost of making big payments on a house worth very little. However, as scary as it is to be denied access to credit are not infinite, and they can be priced with only a bit of research. Companies like YouWalkAway.com, a web-based service that helps homeowners navigate the foreclosure process, guide defaulters on how to minimize the hit to credit and how to compare the cost of seven years of low credit to the cost of making big payments on a house worth very little.

Most people overestimate the effect of bad credit or at least are uncertain enough about the consequences to fear the worst. Foreclosure causes a credit score drop of about 85 to 160 points. <sup>46</sup> For people with average credit, this means a drop into the 500s, a zone in which it is very difficult to open new lines of credit. Foreclosure counseling services like YouWalkAway.com advise clients to think through their next housing step before they lose their homes, even securing a rental property before defaulting so that the credit check happens before the hit. Similarly, families that anticipate needing a new car might purchase one before foreclosure. The effect of sites like YouWalkAway.com is to bring some certainty to the calculation. Even

<sup>43.</sup> Grant S. Nelson & Dale A. Whitman, Reforming Foreclosure: The Uniform Nonjudicial Foreclosure Act, 53 DUKE L.J. 1399, 1403 (2004).

<sup>44.</sup> See Brent T. White, Underwater and Not Walking Away: Shame, Fear and the Social Management of the Housing Crisis, 45 WAKE FOREST L. REV. 971, 984–85 (2010) (describing how homeowners think about credit scores).

<sup>45.</sup> YOUWALKAWAY.COM, http://www.youwalkaway.com (last visited Feb. 4, 2011). Other sites with similar "foreclosure calculators" include PAY OR GO, http://www.payorgo.com (last visited Feb. 4, 2011) and STRATEGIC MORTGAGE DEFAULT SYSTEM, http://www.strategicloan default.com (last visited Feb. 4, 2011).

<sup>46.</sup> See, e.g., Les Christie, How Foreclosure Affects Your Credit Score, CNNMONEY (Apr. 22, 2010, 4:44 PM), http://money.cnn.com/2010/04/22/real\_estate/foreclosure\_credit\_score/index.htm.

if the cost of poor credit is not dropping,<sup>47</sup> tools like YouWalkAway.com permit underwater borrowers to put a price on reputation cost and move on with their cost-benefit calculation.

In sum, foreclosure is a weak sanction at this particular economic moment. The convergence of the recent high volume of expensive, nontraditional loans and a burst housing bubble mean that paying mortgage debt is unusually expensive. Legal and practical barriers to banks seeking deficiency judgments and the increasing ability of homeowners to accurately price the cost of a temporarily low credit score make foreclosure unusually cheap. Given these circumstances, it should not be surprising to find underwater homeowners appraising the strategic default decision with the same attention to the formal rule (you can walk away if you pay the penalty) that psychologists and economists have observed in other weak sanctions contexts.

## II. ECONOMICS AND PSYCHOLOGY OF DEFAULT

Strategic default in the mortgage context is partially analogous to a more familiar legal analysis: willful breach of contract. Mortgages are contracts, and we can draw on contracts research from other domains to inform an analysis of contract decisionmaking in this context. I briefly lay out the economic analysis of breach of a mortgage contract and then describe the behavioral research that has challenged the economic view.

## A. Strategic Default and Breach of Contract

A borrower's obligation to repay a mortgage loan is embodied in a standard form contract.<sup>48</sup> The terms of the borrower's performance typically specify the interest on the loan, the date of each monthly payment, and the lender's recourse in the case of nonpayment.<sup>49</sup> Borrowers who breach their loan contracts are in default. For the homeowner, default is a profitable breach of the mortgage contract when it is cheaper overall to walk away from a house and loan than it

<sup>47.</sup> In fact, the cost of poor credit may indeed be dropping as the average credit score declines.

<sup>48.</sup> See, e.g., Oren Bar-Gill, Making Credit Safer, 157 U. PA. L. REV. 1, 15 (2008) ("Mortgage contracts are standard form contracts.").

<sup>49.</sup> See, e.g., Sample Forms: Mortgage, LUXURY HOMES & PROPS. http://www.luxuryhomes andproperties.com/\_public/\_files/forms/assign\_mortgage.htm (last visited Feb. 4, 2011).

is for the homeowner to remain in the home and keep making payments. For example, imagine the simplified case of a homeowner with an interest-only loan who owes \$250,000 on a home worth \$100,000. She is paying \$1,500 each month, but she could live in a similar place for about half of that cost. Even after a sharp hit to her credit, she saves money by defaulting on her original mortgage. For many borrowers, even taking into account the stress of defaulting and moving, the strategic, self-interested choice is default.

## B. Psychology of Promise and Contract

An economic analysis of contracts predicts that parties will breach a contract when breaching is overall more profitable than performance. This analysis neglects the very real effects of moral norms on contract behavior. Most people take their contractual obligations seriously and assume that breaking a contract is akin to breaking a promise.<sup>51</sup> Stewart Macaulay's seminal study of business contracts in 1963 revealed a surprising reliance on the informal norm against "welshing" rather than the legal rules of contract.<sup>52</sup> Zev Eigen has demonstrated that people will perform onerous tasks if they believe that those tasks are specified in a contract that they knowingly signed, even when it becomes clear that performance is not worthwhile.<sup>53</sup> In earlier research, I found that people think that expectation damages are an inadequate remedy to breach, that breach is morally problematic even if the breacher pays full damages, and that most people think that the moral context of breach ought to matter.<sup>54</sup> A promisor who breaks a contract to avoid taking a big loss is treated more sympathetically than one whose motives seem greedy.<sup>55</sup> Mortgage contracts are contracts too, and anecdotal evidence like the blog comments cited in the Introduction suggests that people

<sup>50.</sup> As I observed above, walking away from an underwater home is not Pareto-superior to repayment. As long as the lender is unable to recover the difference between the original loan and the sale price, default makes the borrower better off but the lender worse off.

<sup>51.</sup> See Wilkinson-Ryan & Baron, supra note 10, at 405.

<sup>52.</sup> Stewart Macaulay, *Non-Contractual Relations in Business*, 28 AM. Soc. Rev. 55, 60 (1963); *id.* at 58 ("Businessmen often prefer to rely on 'a man's word' in a brief letter, a handshake, or 'common honesty and decency'—even when the transaction involves exposure to serious risks.").

<sup>53.</sup> Zev Eigen, When and Why Individuals Obey Form-Adhesive Contracts: Experimental Evidence of Consent, Compliance, Promise and Performance 27 (July 14, 2010) (unpublished paper), available at http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1640245.

<sup>54.</sup> See Wilkinson-Ryan & Baron, supra note 10, at 405.

<sup>55.</sup> Id. at 414.

believe that they ought to live up to a promise to repay. As in other contracts contexts, people are sensitive to the moral context of default, not just the financial equation.

Indeed, all else being equal, most people prefer to honor their promissory obligations. However, when a contract specifies damages, people are more willing to breach and pay damages when it is profitable to do so—that is, when breach is efficient, the liquidated damages clause causes a weak sanction effect.<sup>56</sup> In a 2010 paper, I offered experimental evidence that breach is less morally objectionable when the contract in question includes a liquidated damages clause.<sup>57</sup> Breach becomes part of the agreement rather than a repudiation of the meeting of the minds. In a series of questionnaire studies, I showed participants examples of contract scenarios and asked them to put themselves in the position of the promisor. I then asked them to give me the lowest dollar amount that they would be willing to accept to breach their contract and take a better offer. When they read a contract that included a liquidated damages clause, they were willing to take significantly less than they would accept in cases in which the contract omitted mention of breach.

Although this Article's argument relies on an analogy between default and breach, real estate contracts are admittedly quite different from other kinds of contracts; in fact, real estate law is a category of property rather than contract law.<sup>58</sup> If a foreclosure were in fact a liquidated damages clause, then the stipulated remedy would be exclusive; it is not. Many states, and the Restatement approach, permit lenders to seize assets, garnish wages, and otherwise pursue defaulters until the defaulters repay their entire debt.<sup>59</sup> Furthermore, strategic defaults are not efficient breaches because they leave at least one party, the lender, worse off.<sup>60</sup> When a borrower decides to default on a home loan, the lender does not recover the full value of the loan. This can be because the borrower simply has no more money, because state law does not permit recourse, or because the debtor files for bankruptcy; the result is that the debt is disgorged. This means real

<sup>56.</sup> Id.

<sup>57.</sup> Wilkinson-Ryan, supra note 15.

<sup>58.</sup> For example, mortgage contracts are part of the Property Restatement. See, e.g., RESTATEMENT (THIRD) OF PROP.: MORTGAGES § 1 (1997) (covering the creation of mortgage contracts).

<sup>59.</sup> Supra Part I.C.

<sup>60.</sup> See, e.g., Steven Shavell, Damage Measures for Breach of Contract, 11 Bell J. Econ. 466, 467 (1980) (discussing the importance of Pareto efficiency in the analysis of contractual damages).

harm to the lender. For this reason, foreclosure is arguably a more serious moral violation than breaching a contract and paying damages, in the sense that it involves harm to another party. It is not as bad as theft, perhaps, but a defaulter would be hard pressed to argue that walking away puts the bank in the same position it would have been in had the defaulter continued to make payments.

In a world in which foreclosure is actually cheaper than staying put, the question is whether or not people still view foreclosure as a moral issue, invoking all the self-recrimination and social stigma that come with serious moral violations. The rest of this Article takes up that question—what kinds of factors affect the moral calculus of strategic default?<sup>61</sup>

## III. RECIPROCITY AND FAIRNESS

## A. Retaliation

In the context of behavioral economics, reciprocity means that people respond to friendliness with cooperation, even costly cooperation, and hostility with retaliation, even costly retaliation. 62 Reciprocity norms are particularly important in contract—a fact that scholars have noted at least since the early 1960s. 63 In the mortgage context, reciprocity matters too. As one commenter from the *New York Times* blog said, "Don't think for a moment that a bank won't take the opportunity to screw [the homeowner], no matter how 'unethical' or 'fair' the situation. Why should banks get to follow by the 'it's just business' rule and [the homeowner] can't?" 64

<sup>61.</sup> I take up this question keeping in mind that reasoning about financial decision-making is motivated reasoning. Psychology professor Thomas Gilovich describes motivated weighing of evidence as a series of questions in which evidence that leads to a costly conclusion is evaluated with the question, "Do I have to believe this?" and evidence that weighs in one's own interest is evaluated by a standard of "Can I believe this?" For homeowners whose loans are deeply underwater, there is a real motivation to think of why it might be morally permissible to treat the foreclosure as a liquidated damages clause. This paper asks how they navigate the decision, what kind of information they seek and use, what kinds of structural factors affect their judgment, and how they hold themselves accountable for the choices they make. THOMAS GILOVICH, HOW WE KNOW WHAT ISN'T SO: THE FALLIBILITY OF HUMAN REASON IN EVERYDAY LIFE (1991).

<sup>62.</sup> See generally Ernst Fehr & Karl Schmidt, Theories of Fairness and Reciprocity: Evidence and Economic Applications (2001).

<sup>63.</sup> Macaulay, supra note 52, at 60.

<sup>64.</sup> Kent, posting at *Our Daily Bleg: A Real-Estate Dilemma*, supra note 6 (Feb. 9, 2009, 2:16 PM), http://www.freakonomics.com/2009/02/09/our-daily-bleg-a-real-estate-dilemma/comment-page-2/#comments.

Other commenters raised an issue related to reciprocity; namely, the relative moral standing of the lenders:

All of the banks/businesses that are having problems due to investments in real estate had a responsibility to their customers and shareholders to conduct business by making loans to people only after performing due diligence and reasonable business practices. These banks are being bailed out with no accountability, but the well-meaning, prudent borrower is brow beaten into following the rules.  $^{65}$ 

Or, succinctly: "Unethical? It's nothing Wall Street hasn't been doing for the last few years." 66

In the case of mortgage default, the important norms at stake are essentially fairness norms. From the point of view of the homeowners, the questions are equitable concerns, such as whether it is fair to make a promise and break it, whether it is fair to impose negative externalities on other borrowers by foreclosing, and whether the lender is treating the borrower justly. The basic findings of fairness research suggest that most people reward generosity and punish selfishness, even when those responses are costly.<sup>67</sup> We might take an Ultimatum Game as the paradigmatic example. In an Ultimatum Game, two players, a Proposer and a Responder, are paired. The Proposer is allocated ten dollars and is given the opportunity to offer none, some, or all of the money to the Responder. The Responder can accept the offer, in which case the money is distributed as the Proposer suggested, or the Responder can reject the offer, in which case both parties get nothing. In general, Responders reject stingy offers even though rejection means a zero payoff.<sup>68</sup> Most people in the responding role reject any offer less than three or four dollars—they prefer to get nothing and stick it to the Proposer than to take home two dollars and let the Proposer keep eight dollars. Similarly, in a classic Trust Game, most players repay generosity even though they do not have to do so.69

The nature of the reciprocity concern in the mortgage lending debate is fairly straightforward: in the popular press and elsewhere,

<sup>65.</sup> joe [sic], posting at id. (Feb. 9, 2009, 2:28 PM), http://www.freakonomics.com/2009/02/09/our-daily-bleg-a-real-estate-dilemma/comment-page-3/#comments.

<sup>66.</sup> mannyv [sic], posting at id. (Feb. 10, 2009, 12:25 AM), http://www.freakonomics.com/2009/02/09/our-daily-bleg-a-real-estate-dilemma/comment-page-8/#comments.

<sup>67.</sup> Ernst Fehr & Simon Gachter, Fairness and Retaliation: The Economics of Reciprocity, 14 J. ECON. PERSP. 159, 159–60 (2000).

<sup>68.</sup> Daniel Kahneman, Jack Knetsch & Richard Thaler, Fairness and the Assumptions of Economics, 59 J. Bus. S285, S290 (1986).

<sup>69.</sup> Berg, Dickhaut & McCabe, supra note 19, at 124.

banks have been portrayed as greedy and predatory.<sup>70</sup> To the extent that people think that banks are bad actors generally, they will feel less inclined to cooperate.<sup>71</sup> When homeowners are facing the decision to default on a loan that they are able to make payments on, cooperation is costly. Most people do not altruistically transfer resources to immoral counterparties.<sup>72</sup> Particularly when lenders have sold subprime mortgages, they appear to have behaved irresponsibly. In public goods games, cooperative players and third-party observers are willing to pay money to punish free riders.<sup>73</sup> When banks have been bailed out, homeowners may perceive a kind of government-sanctioned free-riding on taxpayers.

In turn, homeowners may begin to feel spiteful toward banks that do not seem to be acting reasonably or dealing in good faith. Banks seem to have been acting with impunity for the last ten years, aggressively pursuing high-risk loans and then benefiting from government bailout efforts when their bets turned out to be losers. Homeowners took the advice of lenders, accepted the bets, and then, when the economy soured, received no government relief. In the meantime, many banks have resisted any write-downs of principal and, in fact, banks are often unable to reduce principal because of contracts with investors, an issue that I will take up in more detail in a later section of this paper.<sup>74</sup> From the borrower's point of view, this looks very odd. Take a borrower whose home has lost half its value. The homeowner does the math and sees that it is clearly in her best interest to walk away. Rather than walk away, she calls the bank and asks for a modification of her loan—which is to say, she offers in some sense to share the deficit. The bank says no, it will not or cannot do anything to change her loan. From the homeowner's perspective, this exchange suggests that the bank would rather absorb the entire deficit and impose extra costs on the homeowner (credit, etc.) than negotiate

<sup>70.</sup> See, e.g., Gretchen Morgenson, Inside the Countrywide Lending Spree, N.Y. TIMES, Aug. 26, 2007, at B1 ("Countrywide's entire operation, from its computer system to its incentive pay structure and financing arrangements, is intended to wring maximum profits out of the mortgage lending boom no matter what it costs borrowers, according to interviews . . . and internal documents.").

<sup>71.</sup> See, e.g., Kahneman, Knetsch & Thaler, supra note 68, at S291 (showing experimental results indicating that people prefer to give money to a fair player than a stingy player, even if it is costly).

<sup>72.</sup> *Id*.

<sup>73.</sup> See Fehr & Gachter, supra note 67, at 160.

<sup>74.</sup> See, e.g., David Streitfeld, Banks Resist Plans to Reduce Mortgage Balances, N.Y. TIMES, Apr. 13, 2010, at B1 (citing an official from Chase who responded to government pressure to modify loans by pointing out that "Chase cannot rewrite most of these deals. The bank's contractual arrangements with investors do not allow for principal reduction.").

a new arrangement. It should not be particularly surprising that homeowners would find this unreasonable. In the study below, I test the hypothesis that the perceived fairness of a lender's own behavior affects how borrowers conceive of their own moral obligations under the mortgage contract.

# B. Study 1: Lender Morality and Default

The studies in this Article use substantially similar methodologies, so I will go into some detail in describing the method of Study 1, and will then refer back to it in shorter form in the descriptions of Studies 2 and 3. The first set of studies tests the role of reciprocity norms in strategic default decisions using a hypothetical decision paradigm.

In each of the experiments reported here, online survey-takers were presented with a series of hypothetical default situations and were asked to report on their perception of and likely response to each scenario. The Each hypothesis was tested by presenting subjects with one of two nearly identical scenarios, scenarios in which only the variable of interest differed. For example, in the first reported study, I showed subjects a strategic default scenario in either a Bailout or a No Bailout condition, testing whether or not subjects were more hostile toward a bank that had accepted government bailout funds.

I tested subjects' differential responses to the experimental manipulations in two ways. First, I was interested in subjects' explicit views on the differences between the conditions. As such, I measured the within-subjects differences across the conditions. For example, did a given subject's willingness to default change in response to the new fact about the lender's behavior? Within-subjects analyses like this depend on the transparency of the experiment to the subject. Because each subject saw every scenario in both conditions, they could see precisely the variables being tested. Second, I was also interested in

<sup>75.</sup> Subjects were members of a panel recruited over a ten-year period, mostly through their own efforts at searching for ways to earn money by completing questionnaires. Approximately ninety percent of respondents were U.S. residents (with the rest mostly from Canada). The panel is roughly representative of the adult U.S. population in terms of income, age, and education but not in terms of sex, because (for unknown reasons) women predominate in this respondent pool. For each study, an email was sent to about five hundred members of the panel, saying how much the study paid and where to find it on the World Wide Web. Each study was a series of separate web pages, programmed in JavaScript. The first page provided brief instructions. Each of the others presented a case, until the last, which asked for (optional) comments and sometimes contained additional questions. Each case had a space for optional comments. Otherwise the subject had to answer all questions to proceed.

implicit attitudes or effects that would not necessarily show up in a within-subjects analysis. To test between-subjects effects, subjects in each study were randomly assigned to see one condition or the other first. For between-subjects analyses, I compared the responses of those subjects who saw one condition first to those who saw the other condition first. Most of the results reported here are primarily concerned with within-subjects differences, but some notable between-subjects effects are also reported.

#### 1. Method

In Study 1, I used subprime lending and the acceptance of government bailout funds as examples of lender behavior that might erode a homeowner's sense of reciprocal obligation. In each case, I also specified that modification had been refused and asked subjects to judge the reasonableness of the bank's actions.

Each scenario presents a situation that could conceivably be understood as a case of a bank behaving irresponsibly or selfishly without paying for it. Each participant saw each case in two versions: Bailout or No Bailout, Subprime or Traditional. This study was embedded into a larger questionnaire, so overall each participant read and responded to fourteen different vignettes, four of which are being reported here (Bailout, No Bailout, Subprime, Traditional). 76 Subjects read each scenario and then answered follow-up questions. They were asked to indicate the least percentage decrease in home value at which they would be willing to default ("WTD"). The response mode was presented as a choice of values; they could choose any decile between zero and one-hundred percent. They then answered questions about the morality of default and the reasonableness of the bank's actions on a ten-point scale.<sup>77</sup> The scales went from "not at all" wrong or unreasonable to "extremely" wrong or unreasonable. The hypothesis in each case was that greedy behavior on the part of banks would make people think that default was less immoral, that refusal to modify was more unreasonable, and that default would be acceptable at a higher home value. The first case is reprinted below.

<sup>76.</sup> The study is available at FINANCIAL DECISION-MAKING STUDY (PREC6), http://finzi.psych.upenn.edu/~baron/ex/tess/prec6.htm (last visited Aug. 16, 2011). The data file is publicly available at http://finzi.psych.upenn.edu/~baron/R/tess/prec6.data.

<sup>77.</sup> The results for all experiments were analyzed with t-tests. I will report the t-value (t), the degrees of freedom (df), and the p-value (p)—the probability of finding such a result randomly if no actual difference exists—for each significance test.

Please imagine that you own a home in California. You bought your home in 2005 for \$500,000 on an interest-only, non-recourse loan. A non-recourse loan means that if you stop making mortgage payments, the bank will take back your house, but it will not be able to come after you for the balance of what you owe.

Bailout Condition: Your mortgage is with Gateway Funding, a company that has been in the news because of its receipt of billions of dollars of government bailout money.

No Bailout Condition: Your mortgage is held by Gateway Funding, a national lender that has not been involved with government bailout programs and has received no aid from the federal government.

Both: The consequences of defaulting on your mortgage would be that the bank takes your house, and you would have a lower credit score for the next 7 years. Right now you owe the bank \$500,000, but you know that your house is worth much, much less in the current housing market. You are employed and just able to make your monthly payments. Gateway will not modify your loan agreement.

You know that if you walked away from your house and voluntarily entered foreclosure proceedings, you would save substantial amounts of money, even after accounting for the credit score hit. Imagine that your house is worth 10% less than when you bought it. Would you walk away? What about 50% less?

Please indicate below the first point at which you would prefer to default on your mortgage contract rather than stay in your home.

To what extent do you think it is morally wrong to default on your mortgage contract in this case?

To what extent do you think the bank's actions are reasonable in this situation?

The Subprime scenario used the same set of facts and response questions as the Bailout scenario, but it also offered information about the lender's risk profile rather than information about government funds. As before, all subjects read that they had a \$500,000 interest-only loan. The conditions differed only in whether subjects read the following statements about the mortgage-holder's lending practices.

Subprime Condition: Your mortgage is with Gateway Funding. You have a sub-prime mortgage, and Gateway has received considerable media attention for its aggressive, high-risk lending practices in the last five years.

Traditional Condition: Your mortgage is held by Gateway Funding, a fairly conservative, traditional mortgage company.

There were 153 subjects in Study 1. Respondents were paid three dollars each for their participation. They ranged in age from twenty to seventy-three, with a median age of forty-five. Thirty percent of subjects were male.

## 2. Results

For each of the three variables (Wrong, Reasonable, and WTD), I report mainly within-subjects results. I did extract between-subjects data for each item by exploiting the varied order of presentation. To

the extent that between-subjects results were significant or unusual, I note them in the text or the footnotes.

Overall, a home losing half of its value was the crucial tipping point. The median and mode response to the WTD question was 50%. The experimental manipulations did have some effects on that focal point, though. In the Bailout comparison, subjects reported that they would require less financial incentive (a smaller loss in home value) to walk away when the lending bank had received government bailout money. Perifically, 24.8% of subjects said that they would be willing to default at a higher home value if the bank had been bailed out. Participants in this experiment reported that defaulting was less morally problematic and that the bank's actions were significantly less reasonable in the Bailout condition.

The Subprime manipulation yielded similar results; subjects found default more attractive and less wrong when they read that the lender had engaged in aggressive, risky lending practices. All three variables differed significantly within-subjects in the predicted direction, across conditions. Subjects were willing to default on a home that had lost less of its value in the Subprime condition. Specifically, 24.1% of subjects reported that they would default sooner—with less total loss—in the Subprime condition. They thought that default was less morally problematic and that the bank's actions were significantly less reasonable in the Subprime condition. No significant differences emerged in between-subjects comparisons, though all trends were in the same direction.

Taken together, these results help illustrate the deep connection between legal obligations like loan repayment and moral norms implicated by those obligations. Subjects were more open to default, practically and morally, when the bank had received extra

<sup>78.</sup> On average, subjects reported that they would be willing to default at a home value about 3.5% higher in the Bailout condition (t=3.258, df=152, p=0.0014). Between-subjects results were also marginally significant for this question (meaning that a given subject who saw only the Bailout version gave a lower percentage loss required for default than a given subject who saw only the No Bailout version). Mean Bailout: 42.3% value loss; Mean No Bailout: 50.4% value loss (t=1.707, df=133.03, p=0.090).

<sup>79.</sup> Mean difference on ten-point scale: 0.359 (t=2.616, df=152, p=0.010). Between-subjects results were also marginally significant in this case. On a ten-point scale, where 1 was "not wrong at all" and 10 was "extremely wrong": Mean Bailout: 4.74; Mean No Bailout: 5.57 (t=1.835, df=133.9, p=0.069).

<sup>80.</sup> Mean difference on ten-point scale: 0.53 (t=2.670, df=152, p=0.008). Between-subjects results were in the same direction but not significant.

<sup>81.</sup> Mean difference: 3.9% (t=3.300, p=0.0012).

<sup>82.</sup> Mean difference on a ten-point scale: 0.29 (t=2.091, df=152, p=0.038).

<sup>83.</sup> Mean difference on a ten-point scale: 0.35 (t=2.272, df=152, p=0.0244).

money either via the bailout or via subprime lending. And, in both cases, subjects thought that refusal to modify loans was significantly less reasonable when the banks themselves had been treated leniently. These are small overall differences, but they are robust. Because I am reporting primarily within-subjects differences, the data I show here also represent explicit, conscious beliefs on the part of subjects. They can compare one kind of bank to another and report on their differing moral obligations to each. The moral imperatives of promise keeping or debt repayment diminish when citizens perceive that banks are getting away with selfish behavior while ordinary people are being held to their promises.

Of course, the lenders in this kind of case are not actually doing anything contraindicated by the mortgage contract itself. The borrowers' feelings about the lenders' behavior are not derived from a notion that the lenders have legally breached the implied warranty of good faith; rather, the borrowers read in some kind of general norms. Psychology research has shown that people's expectations for contracts are driven in part by their assumptions about the norms of contract and promise. Psychologists Sandra Robinson and Denise Rousseau have described a phenomenon in which employees often feel that their employers have breached the employment contract when the employer breaks implicit promises or fails to uphold obligations of reciprocity.<sup>84</sup> The result is less job satisfaction, intention to leave a job sooner, and less trust overall. The important thing about this phenomenon is that people have certain assumptions about promissory relationships that extend beyond the agreement captured in writing. This has been documented in the employment context, and there are parallels to the mortgage context, where the sales promises may differ in tone if not in content from the loan document itself.

The notion that trust affects cooperation is not foreign to legal scholars. Dan Kahan has argued that there is a "logic of reciprocity" or a coherent set of predictions about how people deal with collective action problems.<sup>85</sup> When individuals observe others behaving in trustworthy ways, they reciprocate by themselves contributing to the public good. In an atmosphere of distrust, however, they do not contribute and, in turn, inspire others to defect as a means of retaliation. Kahan has suggested that this model applies to the cycle

<sup>84.</sup> Sandra L. Robinson & Denise M. Rousseau, *Violating the Psychological Contract: Not the Exception but the Norm*, 15 J. Organizational Behav. 245, 245 (1994) (describing the role of perceived breach of contract in the employment context).

<sup>85.</sup> Dan M. Kahan, The Logic of Reciprocity: Trust, Collective Action, and Law, 102 MICH. L. REV. 71, 103 (2003).

of distrust between law enforcement officers and inner-city residents: Authorities observe crime and raise penalties, citizens observe excessive penalties and retaliate, authorities observe retaliation and raise penalties, and on and on. We might compare this situation to the case of mortgage lenders who refuse to modify loans on the grounds that a nonmodification policy deters strategic homeowners from seeking unjustified paydowns. Homeowners may see this as a signal of distrust or suspicion, in turn encouraging them to retaliate or at least reconceptualize the obligation in terms of a profit-motivated business transaction. The straightforward point of reciprocity research is that people care about fairness in their dealings with others, and this is true whether the other is a friend or a bank.

## IV. ASSIGNED CONTRACTS AND SOCIAL DISTANCE

Studies of reciprocity, generosity, and other-regarding preferences have observed the commonsense phenomenon that whether or not people care about equity or altruism varies as a function of social distance. That is, I am more likely to care about reciprocity when the counterparty is my sister than my colleague, and more so my colleague than a passerby on the street. The concept of social distance includes notions both of reciprocity<sup>86</sup> and identifiability.87 Researchers using a Dictator Game have consistently found that reciprocity varies inversely with social distance.88 A Dictator Game is a simple two-player game in which one player, the Dictator, is given ten dollars and the Receiver is given zero dollars. The Dictator is just instructed to allocate the money. Once she makes her choice, the money is distributed and the game is over. Behavioral experimenters using a Dictator Game have found that Dictators share more when Receivers are not anonymous (even when the Dictators are anonymous to Receivers).89 Personal communication between the

<sup>86.</sup> Elizabeth Hoffman, Kevin McCabe & Vernon Smith, Social Distance and Other-Regarding Behavior in Dictator Games, 86 AM. ECON. REV. 653, 653–54 (1996); see also Gary Charness, Ernan Haruvy & Doron Sonsino, Social Distance and Reciprocity: The Internet vs. the Laboratory (Nov. 2003) (unpublished), available at http://papers.ssrn.com/sol3/papers.cfm? abstract\_id=312141.

<sup>87.</sup> Iris Bohnet & Bruno S. Frey, Social Distance and Other-Regarding Behavior in Dictator Games: Comment, 89 AM. ECON. REV. 335, 338–39 (1999) (arguing that the social distance effects observed by Hoffman, McCabe, and Smith, supra note 86, are due to an effect akin to identifiable victims).

<sup>88.</sup> Hoffman, McCabe & Smith, supra note 86, at 653–54.

<sup>89.</sup> Gary Charness & Uri Gneezy, What's in a Name? Anonymity and Social Distance in Dictator and Ultimatum Games, 68 J. Econ. Behav. & Org. 29, 30 (2008).

players in a game leads to increased intensity of other-regarding preferences.  $^{90}$ 

For the purposes of this Article, I operationalize social distance in two contexts. The first is the more obvious point: people feel differently about repaying Hometown Savings Bank than they do about repaying International Corporate Bank. Older generations describe the mortgage application in personal terms—they physically went to the local bank to talk to a loan officer whom they either knew or recognized as a local figure and then maintained a relationship with that bank for years. Think of George Bailey in *It's a Wonderful Life* explaining why he gave a loan to a local taxi driver: "I can personally vouch for his character," he says, and later reminds his customers that interpersonal trust is central to the business of local lending in order to stop their run on his bank.

This movie anecdote is obviously an exaggeration of the local model of lending that I describe, but the idea is that, in such a local model, the notion of default would have been explicitly connected to the harm it would cause to identifiable others. I do not ignore the possibility that people form good relationships with Citibank or JPMorgan Chase; I only propose that, overall, small local institutions are more likely to tap into both reciprocity norms and identifiability effects.

I also use the notion of social distance here in a sense that is particular to the contracts domain. In a contract, two parties enter into a binding agreement. Each party typically knows the identity of the other, and the promise is normally party-specific. Certainly in the world of ordinary promises, one person's pledge to another is personal to the promisee. If I promise my friend that I will read a draft of her paper, then she cannot transfer that promise to another aspiring scholar and expect to hold me to my promise. When a contract is assigned to a third party, the connection between promise and contract is weakened. The social norms of promise keeping and reciprocity are not so clearly applicable to a case in which the promisor is not also the recipient of the performance.

In the mortgage context, the lending organization usually changes over the course of the life of the loan. Most mortgage loans change hands. Until the 1970s, mortgage lending was straightforward. A borrower went to the bank, applied for a loan, and then the

<sup>90.</sup> Nancy R. Buchan, Eric J. Johnson & Rachel T.A. Croson, Let's Get Personal: An International Examination of the Influence of Communication, Culture, and Social Distance on Other Regarding Preferences, 60 J. ECON. BEHAV. & ORG. 373, 392 (2006).

originating bank held the loan for the duration. By 1998, sixty-four percent of mortgage loans were sold to large financial institutions. In other words, mortgage lending changed from a model of "originate to hold" to one of "originate and distribute." In the originate-to-hold model, originators funded their loans from deposits, since most were depository institutions—e.g., banks and credit unions.<sup>91</sup> In the originate-and-distribute world, loans are funded by capital markets via the securitization process.92 Large financial institutions purchase bundles of mortgages from originators, group them according to characteristics like credit scores and loan-to-value ratios, and then sell them as mortgage-backed securities. 93 The owner of a mortgagebacked security receives the right to the principal and interest payment made by the borrower. 94 The owners of the mortgage-backed securities enter into a contract to service the mortgages in the pool, including handling negotiations with borrowers and dealing with defaults, with the terms of any modifications subject in part to the agreement between the originator and the holders of the securities. 95

It is also worthwhile to at least note that in the modern world of banking, whether or not a bank holds a loan after origination, customers usually deal with different bank employees before and after origination. This is relevant to the psychology of the mortgage contract because the mortgage broker or even the loan officer who handles the mortgage application may develop a kind of intimate relationship with the borrower. The borrower shares reams of highly personal, highly sensitive information and often asks for and receives financial advice (e.g., How much down payment? Should I lock in the rate now?). Typically, this person is involved with the loan until settlement. Once

Residential mortgage securitization transactions are complex and varied, but their core structure is simple. A financial institution (the "sponsor") owns a pool of mortgage loans, which it either made itself ("originated") or bought. Rather than hold these mortgage loans and the credit risk on its own books, it sells them to a shell entity, a special purpose vehicle ("SPV") that is typically structured as a trust. The trust raises the funds to pay for the loans by issuing securities, which are much like bonds whose payments are secured by the loans in the trust.

Id.

<sup>91.</sup> PRELIMINARY STAFF REPORT: THE MORTGAGE CRISIS, supra note 3, at 3.

<sup>92.</sup> *Id*.

<sup>93.</sup> See, e.g., Anna Gelpern & Adam Levitin, Rewriting Frankenstein Contracts: Workout Prohibitions in Residential Mortgage-Backed Securities, 82 S. Cal. L. Rev. 1075, 1081 (2009). Gelpern and Levitin stated:

<sup>94.</sup> Id. at 1083.

<sup>95.</sup> Id. at 1095.

the loan is made, someone else does the servicing. This means that any subtleties of the negotiation, any real shared understanding or meeting of the minds—using the terms "understanding" and "minds" in the literal sense, referring to the parties' cognition—is rendered useless or obsolete once the servicing of the loan is transferred to another party in the bank. There is no shorthand, no sense for the borrower that the person on the other end of the phone understands her financial situation. Even in the original Macaulay studies, the relevance of the promise to the contract was that the individual parties had an essentially personal agreement that they would be ashamed to break. This kind of psychological contract is not possible when the individuals active in the promising are not also involved in the performance monitoring.

Loan transfer may have practical consequences for the borrower, but this Article is concerned primarily with the psychological consequences. In the terms of a typical contract, the original promisor sells the right to the promisee's performance to a third party. My prediction is that assigned contracts are less likely to be conceived of in terms of the *promise* and that the notion of promise is what drives many people to keep making payments on mortgages that are significantly underwater.

# A. Study 2: Moral Obligation of a Transferred Loan

The prediction of the final study is that subjects will think that default on a transferred or sold loan is less immoral, and therefore more desirable, than default on a loan held by the originating bank. In order to test the effects of assignment but to avoid confounding assignment with identifiability, both the originating and the purchasing lender are identified as large, remote institutions.

#### 1. Method

This study was embedded in the same larger survey described in the Method Section of Study 1. The scenario was identical to those in Study 1, putting the subject in the place of a homeowner facing a strategic default decision. In this case, the information being manipulated was whether or not the loan had been sold after origination:

<sup>96.</sup> See, e.g., Buying Your Home: Settlement Costs and Information, U.S. DEP'T HOUS. & URBAN DEV., http://www.hud.gov/offices/hsg/ramh/res/sfhrestc.cfm (last visited Feb. 7, 2011) (describing the steps in the loan application process).

*Hold Condition*: Your loan is held by Citigroup. You negotiated the terms of your loan with a loan officer from Citigroup, and his office continues to service your mortgage.

Transfer Condition: Your loan originated at Citigroup. You negotiated the terms of your mortgage with a loan officer from Citigroup. Your loan has since been sold to Wells Fargo.

Again, as before, subjects saw the questions on their willingness to default and the wrongfulness of default. There was no question about the bank's reasonableness since these scenarios were not meant to test the effect of different behavior, but rather different parties.

## 2. Results

The 153 subjects who participated in Study 1 also participated in this study. In both within- and between-subjects analyses, subjects rated default on a transferred loan as significantly less immoral than default on a loan still held by the originating lender. A given subject rated default on a transferred loan as slightly less morally wrong than default on a held loan. The between-subjects results were somewhat more dramatic. A subject who read only the Transfer question rated the moral wrongness of default as 4.6 on a ten-point scale; subjects who read only the Hold question rated the moral wrongness of default at 5.8 on the scale. Some the scale.

Because loan transfer and securitization opened up new avenues of mortgage funding, they resulted in greater liquidity for banks and a lower cost of credit—in turn, more lending overall. 99 This has had some positive effects, but it has almost certainly weakened the relationship between contract and promise in the mortgage context. The transfer and securitization of mortgages was part of a sea change in mortgage lending, from simple tools to facilitate homeownership to complex financial instruments for investors. This change not only affects the nature of the mortgage obligation, but it also has an effect on how ordinary borrowers think about the home and the mortgage contract.

<sup>97.</sup> Within-subjects mean difference is 0.327 (t=3.052, df=152, p=0.013). Between subjects mean difference is 1.238 (t=2.624, df=149.41, p=0.010).

<sup>98.</sup> Neither the between- nor within-subjects analysis of the WTD difference yielded significant results, though both showed differences in the predicted direction (e.g., an increased willingness to default when the loan had been sold).

<sup>99.</sup> PRELIMINARY STAFF REPORT: THE MORTGAGE CRISIS, supra note 3, at 20–21.

#### V. SOCIAL NORMS

As more people begin to walk away from their homes, or even just do less to resist foreclosures, they may in turn affect a subsequent generation of underwater homeowners simply by bringing about a visibly increased foreclosure rate. When people see that their neighborhood is filled with foreclosure signs, how are their perceptions of community norms affected? And, in turn, how does the perception of the social norm affect the moral norm—if I live in a society in which most people think it is acceptable to default on a loan, how does that affect my personal moral beliefs about default?

Social norms affect decisionmaking, even when people are making ostensibly private decisions. One person in a room is much more likely to litter if there is already paper on the floor. Hikers in a national forest are more likely to steal petrified wood if they see a sign that says, "Many people have stolen petrified wood from this forest, resulting in a drastically changed environment," than if they read a "Do not steal petrified wood" sign. It is not difficult to see a parallel to the mortgage world. Lenders may believe that they are shaming potential defaulters when they put up a foreclosure sign on the front lawn, but neighbors may see the implicit admonition as an update on the local default norms.

The increasing amount and visibility of foreclosure may affect an individual homeowner's decisionmaking in a couple of ways. Most straightforwardly, cooperation and selfishness are catching. 102 Whether or not a given person chooses to contribute to the common good or to free ride on the efforts of others depends on what his friends, colleagues, neighbors, and acquaintances choose. Social contagion effects have been specifically observed in the mortgage context. Economists Luigi Guiso, Paola Sapienza, and Luigi Zingales used survey data to study the effect of social norms and moral

<sup>100.</sup> Robert Cialdini, A Focus Theory of Normative Conduct: Recycling the Concept of Norms to Reduce Littering in Public Places, 58 J. PERSONALITY & SOC. PSYCHOL. 1015, 1016 (1990) (reporting the results of an experiment in which researchers observed participants' choice to litter or not to litter in an empty room that was either clean or covered in paper).

<sup>101.</sup> Robert Cialdini, Crafting Normative Messages to Protect the Environment, 12 CURRENT DIRECTIONS PSYCHOL. Sci. 105, 105 (2003) ("Within the statement 'Many people are doing this undesirable thing' lurks the powerful and undercutting normative message 'Many people are doing this.'").

<sup>102.</sup> See James Fowler & Nicolas Christakis, Cooperative Behavior Cascades in Human Social Networks, 107 PROC. NAT'L ACAD. SCI. 5334, 5334 (2010) (reviewing evidence on the contagion-like spread of choices in a cooperative game).

intuitions on strategic default.<sup>103</sup> They found that the most important variables in predicting strategic default were moral and social considerations. People who knew someone else who had defaulted were eighty-two percent more likely to report that they would default themselves, and the authors speculated that they observed a social contagion effect.

Social contagion theory explains this pattern by positing a causal relationship between my friend's behavior and my own. That is, I observe my friend's behavior and I copy it, either because I understand her behavior to represent a norm to which I wish to adhere or because I feel some kind of more basic instinct for mimicry. <sup>104</sup> Social contagion research does not specify a mechanism for transmission, but it offers evidence that the phenomenon of interpersonal transmission of behaviors exists across a range of domains. The mechanism of social contagion in strategic default is unclear. One possibility is that the social stigma itself decreases when foreclosures become more common. Stigma depends, to some extent, on rarity. If a neighborhood is filled with foreclosure signs, then the stigma is diffused. When the incidence is high, too, it becomes more difficult to blame foreclosure on specific deviant traits in the individual families and easier to attribute the phenomenon to broader social factors like unemployment. It could also be that people begin to wonder whether the promise-keeping norm exists at all; when they look around and see foreclosure signs everywhere, they may think that their previous understanding of the community norm was simply mistaken.

The other way we might conceptualize the shifting norm is not so much that the norm of honoring the mortgage contract erodes, but that the norm of acting in one's own self-interest grows stronger when one sees others defaulting all around. In *New York Times* coverage of defaulters, a reporter wrote that walking away is "no cause for embarrassment. Rather the opposite: it shows savviness." Psychologists refer to this phenomenon—the social approval of self-interested behavior—as the "norm of self-interest." People fear not only that they will be vulnerable to economic exploitation but that by behaving nonselfishly, others will think them foolish and naïve. Psychologists Dale Miller and Rebecca Ratner have argued that self-

<sup>103.</sup> Luigi Guiso, Paola Sapienza & Luigi Zingales, Moral and Social Constraints to Strategic Default on Mortgages 1 (Nat'l Bureau of Econ. Research, Working Paper No. 15,145, 2009).

<sup>104.</sup> Fowler & Christakis, supra note 102, at 5335.

<sup>105.</sup> David Streitfeld, When Debtors Decide to Default, N.Y. TIMES, July 25, 2009, at WK6.

<sup>106.</sup> See Dale Miller, The Norm of Self-Interest, 54 Am. PSYCHOLOGIST 1053, 1053 (1999).

interest is not only powerful in and of itself, but it is also an important motive because of the normative expectations attached to it. 107 Western cultures in particular appear to espouse the view that self-interest *ought* to matter. Americans, for example, volunteer and contribute to charity at very high rates. When asked why, though, they almost always cite a self-interested reason, even one as lame as "[i]t gave me something to do." 108

The norm of self-interest argues that it is embarrassing to cooperate only to find out that you are the only person toeing the line. If a homeowner thinks that default is morally wrong, but realizes that others are profiting from default, then he may be unwilling to play the sucker, contributing to the public good while others walk away scotfree. When enough people start to default on their loans, the people holding their mortgages, dutifully paying while their neighbors and their banks make money, start to feel like dupes. Even people who believe that it is morally wrong to default may begin to feel stupid as others around them walk away.

# A. Study 3: Shifting Moral Norms

In the study presented here, I explored two relationships not fully explicated by the Guiso et al. study. That study used existing data and found strong associations, though not necessarily causal links, between moral and social norms and likelihood to default.

The first hypothesis is that there is a causal relationship between the social norm and the moral norm—that is, that visible increases in the foreclosure rate weaken the moral constraints around default. Guiso et al. found that people who reported that it was immoral to default were seventy-seven percent less likely to report that they would do so. The authors did not, however, observe any relationship between knowing a defaulter and holding a prodefault moral belief. My prediction is that changes in the social and economic context do affect moral values.

This study also tests the causal relationship between observing other foreclosures and increasing one's willingness to enter foreclosure. The broad prediction here is that seeing others walk away

<sup>107.</sup> See id.; see also Dale Miller & Rebecca Ratner, The Disparity Between the Actual and Assumed Power of Self-Interest, 74 J. PERS. & Soc. PSYCHOL. 53, 53 (1998) (reporting results of experiments showing that people overestimate the influence of financial reward on peers' decisionmaking).

<sup>108.</sup> Miller, *supra* note 106, at 1057.

from their homes or enter foreclosure makes foreclosure less morally problematic and, in turn, more attractive.

#### 1. Method

Participants read the facts of a hypothetical strategic default decision and were asked to indicate their moral beliefs about default and their willingness to default. As in Studies 1 and 2, online participants read an underwater mortgage scenario in one of two conditions, Rare Foreclosure or Frequent Foreclosure. They read first that their local newspaper recently carried a story about the housing market, including the following passage:

Rare Foreclosure Condition: The state Department of Housing has released a report on state of in home foreclosures in our area. In this county, only 1 in 200 homes is currently in foreclosure proceedings. The sight of foreclosure signs on lawns is still very rare.

Frequent Foreclosure Condition: The state Department of Housing has released a report on the recent increase in home foreclosures in our area. In this county 1 in 10 homes is currently in foreclosure proceedings. In some neighborhoods, nearly half of the homes have foreclosure signs on the lawn."

Both Conditions: Now please imagine yourself in the following situation. You bought your home in 2005 for \$400,000 on an interest-only, non-recourse loan. A non-recourse loan means that if you stop making mortgage payments, the bank will take back your house, but it will not be able to come after you for the balance of what you owe. The consequences of defaulting on your mortgage would be that the bank takes your house, and your credit rating would take a hit. Right now you owe the bank \$400,000, but you know that it is worth much less in the current housing market. You are employed and you are able to make your monthly payments. You know that you would save money if you walk away from your home and voluntarily enter foreclosure proceedings.

As in the previous studies, subjects then answered the WTD question and a question about the morality of default. Using the same data collection method outlined in Study 1 (though not using precisely the same group of respondents), I collected responses from one hundred subjects, including sixty-six women. Ages ranged from twenty-one to seventy, with a median age of forty. Subjects were paid two dollars for their participation.

#### 2. Results

There was no within-subjects difference on the morality response, meaning that subjects did not report an explicit belief that

<sup>109.</sup> The study is available at MORTGAGES & FLOORS (MORT1), http://finzi.psych.upenn.edu/~baron/ex/tess/mort1.htm. The data file is also publicly available at http://finzi.psych.upenn.edu/~baron/R/tess/mort1.data.

the social facts would change their moral views. <sup>110</sup> However, there was a substantial between-subjects difference. Subjects in the Rare Foreclosures condition rated default as 6.6 on a ten-point scale, while those who saw the Frequent Foreclosure condition rated default at 5.3 on the scale. <sup>111</sup> This result tests the difference between one half of the subjects who read the Rare condition first and the other half of the subjects who read the Frequent condition first. This finding suggests that even though most subjects did not think that the frequency of foreclosures would matter to their moral views, they were actually quite influenced by the condition that they saw first.

The WTD difference across conditions was significant withinsubjects, and the trend was in the same direction between-subjects. 112 The correlation between moral wrongness and willingness to default was high and statistically significant at 0.318. 113

These results support the contention that when people perceive foreclosure to be common, they are less sure that default is morally wrong. Walking away goes from clearly in the "wrong" end of the spectrum to hovering over the middle-mark, whether or not the individuals themselves are aware of their changing moral views. These results speak to the bi-directional flow of causation between social and moral norms. The social norm of not defaulting is probably caused in some respects by moral condemnation of foreclosure. But the converse is also true—when the social norm erodes, the moral norm follows suit.

#### VI. NORMATIVE IMPLICATIONS

In this Article, I do not take a strong position on the question of whether or not individual homeowners ought to default on their mortgages. Brent White, however, has argued forcefully that strategic default is not only permissible, but can be a moral good. He argues that homeowners who decide against default, even in the face of huge savings, are essentially transferring wealth from their children (or their parents or any other potential local beneficiary of the savings) to

<sup>110.</sup> Within-subjects results are statistically more sensitive to small differences. However, if subjects do not consciously believe that the social norm ought to affect the moral norm, they should show no within-subjects response to the manipulation.

<sup>111.</sup> t=2.236, df=96.652, p=0.0277.

<sup>112.</sup> A given subject reported willingness to default at a home value 2.8% higher in the common foreclosure condition than in the rare foreclosure condition. t=1.959, df=99, p=0.053.

<sup>113.</sup> t=4.721, df=198, p <0.0001

<sup>114.</sup> White, supra note 44, at 1023.

their lenders. For the individual with an underwater mortgage, default is often the wealth-maximizing choice. On the other hand, mass default will have a negative effect on the American economy. At the very least, it is clear that foreclosures impose externalities at both the local and global levels. Economists have estimated that each foreclosure in a neighborhood brings down nearby property values by as much as nine percent. Abandoned homes also pose annoyances and real dangers to others, in the form of overgrown vegetation; breeding pests; the potential for squatters; open pools and other hazards to children; and the aesthetic harms of houses that are not kept up. 116

The claims I make here about the policy implications of the findings described above assume a fairly modest normative proposition about homeownership: what is good about homeownership is the stability it engenders. Owning a home is not inherently preferable to renting one; from the point of view of the social good, home ownership is valuable if it increases the returns on a family's investments in its property, in its neighborhood, and in its community.

#### A. Securitization

The bundling, trading, selling, and transferring of loans has meant cheaper credit and more homeownership. This has been a positive development for many Americans. On the other hand, a growing body of evidence suggests that securitized loans have higher default rates. 117 The research I have presented here suggests that the assignment of a contract, including securitization, may undermine the promisor's commitment to performance.

Thinking about the role of moral norms and mortgage contracts may help to recast some of the debate over securitization of mortgages. Criticism of securitizing mortgage loans has been aimed at the

<sup>115.</sup> Zhenguo Lin, Eric Rosenblatt & Vincent W. Yao, *Spillover Effects of Foreclosures on Neighborhood Property Values*, 38 J. REAL EST. FIN. & ECON. 387, 389 (2007) (citing results from an economic study suggesting that with a small radius and within five years, foreclosures can depress neighborhood property values by as much as 8.7% per foreclosure).

<sup>116.</sup> See, e.g., David Streitfeld, Blight Moves in After Foreclosures, L.A. TIMES, Aug. 28, 2009, at A1 ("Stagnant swimming pools spawn mosquitos, which carry the potentially deadly West Nile virus. Empty rooms lure squatters and vandals. And brown lawns and dead vegetation are creating eyesores in well-tended neighborhoods.").

<sup>117.</sup> See, e.g., Cem Demiroglu & Christopher James, Works of Friction? Originator-Sponsor Affiliation and Losses on Mortgage-Backed Securities (AFA 2012 Chicago Meetings Paper, Jan. 21, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1787813.

complexity of the various relationships and obligations that ensue. <sup>118</sup> Commentators have argued that we need more regulation in this area because markets cannot deal efficiently with such byzantine contracts being bought and sold by parties with distorted incentives. <sup>119</sup> My analysis argues for a shift in perspective. The emphasis on complexity relies on the assumption that the mortgage contract market is populated entirely by rational, profit-seeking actors. In most securities contexts, this is sensible—securities are tools for investors, companies, and other commercial actors. Mortgages are a different case, though. Homeowners are moral agents who do not think of the loan contract as an investment tool; they think of it as a promise to repay.

When mortgage contracts are securitized, the act of securitization has a psychological effect. Selling off pieces of the loan to investors affects the value of the loan because it changes how the borrower conceives of her debt obligation. Borrowers move from a trust framework to an economic framework, and with less trust comes more default. Securitization makes homeowners less likely to understand their mortgage contracts (if the complexity has been a problem for investors and regulators, then it is even more intractable for parties without degrees in finance) and less likely to trust their lenders.

# B. Modification

One of the practical consequences of increased securitization is the constrained ability of lenders to modify mortgage loans. Securitizing mortgages means that lenders often have obligations to holders of the securities that make them less flexible when faced with a homeowner in distress. This is troubling because refusal to modify may itself encourage default. Psychology research suggests that people who would otherwise walk away may be more willing to remain in a home with a modified loan, even one that is still more expensive than a comparable rental. People given the option to modify even a bit may be less likely to walk away than people not given the chance at all. When lenders modify, they are signaling a different kind of relationship to their borrowers. Their action makes them seem more reasonable and thus more deserving of trust and of reciprocity than

<sup>118.</sup> Gelpern & Levitin, supra note 93, at 1078-79.

<sup>119.</sup> See, e.g., Steven Schwarcz, *The Future of Securitization*, 41 CONN. L. REV 1313, 1325 (2009) ("Whether securitization will remain vibrant and inventive in the long term . . . will turn our ability to better understand the problems of complexity, which was at the root of many of the failures that gave rise to the subprime crisis.").

one who refuses to negotiate. Refusal to negotiate or modify based on a broad policy means saying to customers that the individual circumstances are irrelevant and denying them an opportunity to be heard. Like the players in an Ultimatum Game, those homeowners have no recourse but to walk away. This analysis supports the approach to modification outlined by Eric Posner and Luigi Zingales in 2009, in which banks would write down principal and receive in return an equity interest in the house. The authors of that plan offer a detailed analysis of the economic and political feasibility of such a regime; I would argue that its appeal to commonsense fairness norms would yield additional benefits for the public trust. This kind of burden- and benefit-sharing plan offers immediate relief to homeowners. It may also offer expressive benefits, a sense of reciprocity, and the opportunity to fulfill their self-identified moral obligations without feeling like chumps.

Different policies may be appropriate for homeowners and speculators. States like California already make distinctions between loans for a primary residence and loans for developers, house-flippers, and vacation property owners. 121 This is sensible insofar as those are cases in which the social benefit of the activity has the same kind of social benefit as any commercial loan. The economic gains from those businesses are not to be discounted, but calibrating the appropriate flow of credit to real estate speculators is arguably a calculation best left to the market. Furthermore, there is reason to think that borrowers in those cases are more likely to make a straightforward cost-benefit determination when they decide whether or not to make payments on a loan rather than engaging in comparisons of moral culpability as between borrower and lender.

#### CONCLUSION

The set of hypotheses tested in the studies presented here address the broad question of how the changes in lending and foreclosing practices have affected the way that homeowners make decisions. Borrowers are sensitive to being punished for their own bad bets while the banks get bailed out, and they feel less morally obligated to a bank that they perceive as greedy or exploitative. When lenders sell mortgage loans to one another, there are substantial efficiency gains, but the transfers also remind homeowners that they

<sup>120.</sup> See supra Part III.A.

<sup>121.</sup> See CAL. CIV. PROC. CODE § 580(a) (West 1980).

are fungible entities rather than trusted counterparties. Borrowers with fewer moral qualms about default are more likely to choose to do so if the economic factors point in that direction. And, in turn, as more homeowners default, strategically or desperately, the moral constraints around default loosen. These kinds of considerations have real implications for how banks structure their lending and interact with their customers, how lenders and homeowners negotiate and draft mortgage contracts, and how the government regulates the mortgage industry.