
FROM THE GREAT DEPRESSION TO THE GREAT RECESSION: ON THE FAILURE OF REGULATION IN THE MORTGAGE MARKET

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People tend to attribute the outbreak of the 2008 financial crisis to deregulation. This article challenges this view and presents a unique perspective of the crisis as in fact rooted in the way the residential mortgage market is regulated. Focusing on non-recourse mortgage legislation, which is a unique feature of the US mortgage market dating back to the period following the Great Depression, the article analyzes the contribution of this legislation to the onset of the Great Recession. The discussion shows how regulation that was enacted in response to a major economic crisis not only failed to prevent a large-scale future crisis but also created the conditions for its eventual emergence.

Non-recourse laws prevent lenders from seeking a deficiency judgment after foreclosure and impose no personal liability on borrowers in the event of default. They distort risk allocation in the mortgage market as they allow borrowers to externalize the risk of default to third parties. These laws thus create incentives for excessive borrowing, which ultimately resulted in the housing boom and bust of the 2000s. The analysis in this article has important implications for current reforms in leading foreclosure states, such as California and Nevada, where regulators recently expanded the scope of the existing mandatory non-recourse legislation. The insights from the article regarding non-recourse mortgages should serve as a warning to regulators against adopting such legislation.

I. INTRODUCTION

The 2008 global financial crisis, triggered by the mortgage meltdown in the United States, offers surprising insight into the regulation of the mortgage market. Contrary to the common view that the crisis was rooted in deregulation,¹ this article

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1. For example, President Obama blamed deregulation for causing the 2008 financial crisis. THE WHITE HOUSE, REMARKS BY THE PRESIDENT ON THE ECONOMY, <https://www.whitehouse.gov/the-press-office/2012/06/14/remarks-president-economy-cleveland-oh> (last updated June 14, 2012):

Without strong enough regulations, families were enticed, and sometimes tricked, into buying homes they couldn't afford. Banks and investors were allowed to package and sell risky mortgages. Huge, reckless bets were made with other people's money on the line. And too many from Wall Street to Washington simply looked the other way.

argues that it was in fact the way the market was regulated in response to the Great Depression that created the conditions for the Great Recession. The article expands on this historical perspective through an in-depth examination of the legislation relating to non-recourse mortgages, which was enacted following the Great Depression. This analysis reveals the central role played by the non-recourse legislation in the housing boom and bust of the 2000s and concludes with some important insights on regulation in general and regulation of the mortgage market in particular.

Non-recourse loans are a unique characteristic of the US mortgage market² and first emerged in state legislation in the 1930s. A decrease in demand for real estate and the ensuing precipitous drop in prices during the Great Depression led to the realization of mortgages at minimal prices, significantly below their outstanding balances. As a result, not only did borrowers lose the roofs over their heads to lenders but also faced lawsuits by the same lenders for the significant remainder of their debt. This harsh reality caused many states to adopt borrower-friendly legislation.³ Specifically, these laws limited the lender's recourse, prohibiting him from suing the borrower personally for the difference between the foreclosure sale price and the outstanding balance of the debt.⁴ The legislation thus essentially imposed a non-recourse arrangement on the parties to the mortgage transaction.⁵ In effect it gave the borrower a put option, allowing her to terminate the remainder of the debt in exchange for transferring the mortgaged property to the lender.⁶

In the 1990s, the effect of this lack of personal liability for borrowers in a non-recourse mortgage was compounded by the relaxation of credit standards. Unlike the traditional requirement for a minimum down payment of 20% of the collateralized property's total value, loan-to-value (LTV) ratios grew in the years preceding the mortgage crisis.⁷ Lenders' willingness to give loans to borrowers without a significant down payment is commonly attributed to the expansion of the securitization market, which allowed lenders to transfer the risks associated with default to third parties.⁸ Furthermore, in many cases, homebuyers could avoid investing personal

See also Catherine Rampell, *Lax Oversight Caused Crisis, Bernanke Says*, N.Y. TIMES (Jan. 4, 2010), available at <http://www.nytimes.com/2010/01/04/business/economy/04fed.html> ("Regulatory failure, not low interest rates, was responsible for the housing bubble and subsequent financial crisis of the last decade.").

2. See *The Economic Stimulus and Sustained Economic Growth: Hearing Before the H. Democratic Steering & Policy Comm.*, 111th Cong. 3 (2009) (statement of Martin Feldstein), available at <http://www.nber.org/feldstein/EconomicStimulusandEconomicGrowthStatement.html> ("[M]ortgages loans are generally non-recourse loans . . . This 'no recourse' character of mortgages is unique to the United States.").

3. See Michael H. Schill, *An Economic Analysis of Mortgagor Protection Laws*, 77 VA. L. REV. 489 (1991) (analyzing borrower-friendly legislation).

4. GRANT S. NELSON & DALE A. WHITMAN, *REAL ESTATE FINANCE LAW* § 8.3 (5th ed. 2007).

5. James B. Hughes, Jr., *Taking Personal Responsibility: A Different View of Mortgage Anti-Deficiency and Redemption Statutes*, 39 ARIZ. L. REV. 117, 124 n.41 (1997).

6. An option is a legal right granted by one party to the other to buy or sell something at a fixed price and within a specified period. An option that grants the right to buy is called a *call* option, while an option that grants the right to sell is called a *put* option.

7. See Joshua Rosner, *Housing in the New Millennium: A Home Without Equity Is Just a Rental with Debt* (2001), available at <http://ssrn.com/abstract=1162456>.

8. See, e.g., *Legislative and Regulatory Options for Minimizing and Mitigating Mortgage Foreclosures: Hearing Before the H. Comm. on Fin. Servs.*, 110th Cong. 74 (2007) (statement of Ben Bernanke, US Federal Reserve Chairman); see also Benjamin J. Keys et al., *Did Securitization Lead to Lax Screening? Evidence from Subprime Loans* (EFA 2008 Athens Meetings Paper, 2008), available at <http://ssrn.com/abstract=1093137>; Luc

funds by taking credit insurance for housing loans with high LTV ratios⁹ or second mortgages.¹⁰ Indeed, data on the US mortgage market show that on the eve of the mortgage crisis, approximately half of all borrowers had not been required to put down any money before receiving their housing loans.¹¹

States that have since adopted non-recourse mortgage legislation, such as California and Arizona, were at the center of the outbreak of the mortgage meltdown.¹² Non-recourse loans combined with no down payment requirement created a distortion of risk allocation in the mortgage market. The lack of an ex-ante requirement to invest personal equity upfront and an ex-post requirement holding the borrower personally responsible for repayment created a moral hazard.¹³ It incentivized borrowers to take out loans regardless of whether they would be able to repay them, fully aware that they were externalizing the risk of default to third parties.¹⁴ Thus, the availability of full financing alongside no personal obligation for repayment led to excessive borrowing and the resulting real estate bubble.¹⁵

When the real estate market crashed, however, this bubble burst and the value of the collateralized assets plummeted to below the value of the balance of the mortgages.¹⁶ Since equity in an asset is defined as the surplus of value over debt, this

A. Laeven et al., *Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market* 1 (IMF Working Paper No. 08/106, 2008), available at <http://ssrn.com/abstract=1153728>; Atif R. Mian & Amir Sufi, *The Consequences of Mortgage Credit Expansion: Evidence from the U.S. Mortgage Default Crisis* (2008), available at <http://ssrn.com/abstract=1072304>.

9. Credit insurance policies for housing loans with LTV ratios greater than 80% are supplied both by federal assistance frameworks (for eligible parties) and by the private sector. Insurance will be triggered in the event of foreclosure and protects the lender from losses due to a decline in the value of the collateralized property.

10. Second mortgages are given at higher interest rates since they reflect the risks resulting from allowing financing beyond the traditional threshold of 80% and that the lien in favor of the second lender is subordinate to the first lender. In popular parlance, these second mortgages are known as “piggybacks.”

11. See *infra* notes 96-98 and accompanying text.

12. See *Arizona, California Markets Lead Top Ten List for Home Sales*, UNITED PRESS INTERNATIONAL (Oct. 27, 2009, 10:45 AM), http://www.upi.com/Business_News/Real-Estate/2009/10/27/Arizona-California-Markets-Lead-Top-Ten-List-for-Home-Sales/3731256654866/.

13. Situations in which the party that creates the risk stands to gain but does not bear the potential loss are referred to as a moral hazard. See generally Tom Baker, *On the Genealogy of Moral Hazard*, 75 TEX. L. REV. 237 (1996); CAROL A. HEIMER, REACTIVE RISK AND RATIONAL ACTION, MANAGING MORAL HAZARD IN INSURANCE CONTRACTS (1985).

14. John Harding, Thomas J. Micelli & C.F. Sirmans, *Do Owners Take Better Care of Their Housing Than Renters?*, 28 REAL ESTATE ECON. 663 (2000); Ankoor Jain & Cally Jordan, *Diversity and Resilience: Lessons from the Financial Crisis*, 32 U.N.S.W.L.J. 416, 440 (2009); Schill, *supra* note 3, at 534.

15. See Christopher J. Mayer et al., *The Rise in Mortgage Defaults* 23 (Fed. Reserve Bd., Fin. & Econ. Discussion Series, Paper No. 2008-59, 2008), available at <http://www.federalreserve.gov/pubs/FEDS/2008/200859/200859pap.pdf> (arguing that as the standards for granting loans relaxed, the availability of loans for housing purchases increased along with the demand for housing and housing prices); Andrey D. Pavlov & Susan M. Wachter, *Underpriced Lending and Real Estate Markets* (2006), available at <http://ssrn.com/abstract=980298> (arguing that the accessibility of loans to borrowers increased the demand for housing and that this caused housing prices to rise more steeply than the real value of the assets).

16. Housing prices rose at a yearly average of 11% between 2000 and 2005. Following a brief period of stability, the prices began to drop at an average rate of 10% from mid-2006 to mid-2008. Mayer et al., *supra* note 15, at 21.

created a negative equity situation.¹⁷ When the negative equity was significant, rational borrowers preferred to stop repaying their loans, walk away from their homes, and be freed of their debt.¹⁸ This was possible because the loans were non-recourse mortgages. Known as strategic default, this phenomenon characterized the US real estate market during the mortgage meltdown. In March Guiso et al. found that¹⁹ 2009, 26.4% of defaults on mortgages were strategic, and by September 2010, this figure had risen to 35.1%.²⁰ The massive abandonment of property had a snowball effect, leading to rapidly deteriorating prices in the market and further escalating the meltdown.²¹

Analyzing the non-recourse mortgage model and its contribution to the outbreak of the mortgage crisis is crucial for understanding the risks of the recent regulatory reforms in the US mortgage market in leading foreclosure states, such as California and Nevada.²² Following the mortgage meltdown, state regulators in these states expanded the scope of their mandatory non-recourse legislation.²³ The insights from the analysis of the incentive distortions created by non-recourse legislation and its long-term costs should serve to warn state regulators against adopting such legislation.

The discussion proceeds as follows: Part II identifies the inherent flaws of hasty regulatory responses to economic crises. Part III then presents the non-recourse model adopted by certain states in the US following the Great Depression to contend

17. Negative equity situation is often referred to colloquially as being “underwater,” as the level of outstanding debt is conceived of as a kind of “waterline” and the market value of the property as the height it attains.

18. The growing phenomenon of borrowers who leave their homes when the value of the asset is less than the balance of the debt has been the subject of extensive media coverage. See, e.g., Nicole Gelinias, *The Rise of the Mortgage “Walkers,”* WALL ST. J., Feb. 8, 2008, http://online.wsj.com/article/SB120243369715152501.html?mod=rss_Today's_Most_Popular; Barbara Kiviat, *Walking Away From Your Mortgage*, TIME, June 19, 2008, <http://www.time.com/time/magazine/article/0,9171,1816472,00.html>; Ruth Simon & James R. Hagerty, *One in Four Borrowers Is Underwater*, WALL ST. J., Nov. 24, 2009, http://online.wsj.com/article_email/SB125903489722661849-1MyQjAxMDI5NTI5NDAYMzQ0Wj.html; David Streitfeld, *When Debtors Decide to Default*, N.Y. TIMES, July 25, 2009, <http://www.nytimes.com/2009/07/26/weekinreview/26streitfeld.html>.

19. See Brent T. White, *Take This House and Shove It: The Emotional Drivers of Strategic Default*, 63 SMU L. REV. 1279 (2010) (interviewing more than 350 individuals who, by their own admission, have either already strategically defaulted on their mortgages or are considering doing so in an attempt to map the reasons for strategic defaults).

20. Luigi Guiso et al., *The Determinants of Attitudes toward Strategic Default on Mortgages*, 68 J. FIN. 1473, 1490 (2013).

21. It is important to note that the wide scope of default was not necessarily connected solely with subprime mortgages—that is, high-interest-rate loans sold to riskier borrowers—and in fact characterized the entire US mortgage market. See Stan Liebowitz, *New Evidence on the Foreclosure Crisis: Zero Money Down, Not Subprime Loans, Led to the Mortgage Meltdown*, WALL ST. J., July 3, 2009, <http://online.wsj.com/article/SB124657539489189043.html> (“[T]he focus on subprimes ignores the widely available industry facts (reported by the Mortgage Bankers Association) that 51% of all foreclosed homes had prime loans, not subprime, and that the foreclosure rate for prime loans grew by 488% compared to a growth rate of 200% for subprime foreclosures.”).

22. See, e.g., 2012 Cal. Legis. Serv. ch. 64 (S.B. 1069 amending CAL. CODE CIV. PROC. § 580b); NEV. REV. STAT. § 40.455 (2009); NEV. REV. STAT. § 40.458 (2011).

23. Following the mortgage crisis, California, which considered a non-recourse state even before the crisis, expanded the protection to borrowers further, whereas Nevada shifted directly from a recourse regime to a non-recourse regime. See *infra* Part VII.

with the massive home foreclosures during that period. Part IV analyzes the unique risk allocation with non-recourse loans, which is directly impacted by fluctuations in the market price of the asset serving as collateral. This allocation of the risk creates an ex-ante incentive for excessive borrowing and an ex-post incentive for strategic default when there is negative equity in the property. Part V analyzes the trend of lenient down payment requirements for housing loans that characterized the US mortgage market in the years leading up to the mortgage meltdown and considers the central role of securitization in this process. Part VI explains how non-recourse loans combined with no down payment requirements in the mortgage market contributed to the housing boom and bust. In Part VII, recent regulatory reforms broadening the scope of non-recourse mortgages are analyzed. Part VIII concludes the article and points to the lessons that can be learned from its analysis.

II. REGULATION IN THE WAKE OF CRISIS

In times of economic crisis, regulatory agencies tend to respond with swift and extensive reform.²⁴ Their goal is to quell the public outrage and rebuild trust in the regulatory agencies and stability of the markets. This is seen as essential for halting escalation of the crisis at hand and preventing similar crises in the future. A cynical view of this recurring pattern would be that this is directed more at creating the impression of a serious response than at actually yielding such a response. The focus, it could be said, is on the positive short-term impact rather than on positive long-term changes.²⁵

A prominent example of this pattern of rapid regulation was the response to financial scandals exposed in US corporations between the end of the 1990s and beginning of the 2000s. In late 2001, the energy giant Enron, the seventh largest company in the US at the time, suddenly collapsed.²⁶ This was the result of the exposure of complex accounting fraud, misrepresentation of earnings, and deliberate omission of liabilities from the company's balance sheet. When Enron became insolvent, thousands of employees lost their jobs. In addition, investors in the capital markets suffered immense damage from the collapse of Enron and other corporations, such as Worldcom, in which financial irregularities were discovered.²⁷ Regulatory agencies wasted no time in taking action to restore investor confidence. The 2002 Sarbanes-Oxley Act ("SOX") was passed with the aim of strengthening supervision and internal control over financial reporting of public companies.²⁸ President George W. Bush

24. Stuart Banner, *What Causes New Securities Regulation? 300 Years of Evidence*, 75 WASH. U. L.Q. 849, 850 (1997) ("[M]ost of the major instances of new securities regulation in the past three hundred years of English and American history have come right after crashes."); Joseph A. Grundfest, *Punctuated Equilibria in the Evolution of United States Securities Regulation*, 8 STAN. J.L. BUS. & FIN. 1, 1 (2002); Frank Partnoy, *Why Markets Crash and What Law Can Do About It*, 61 U. PITT. L. REV. 741, 743 & n.11 (2000).

25. P.N. Grabosky, *Counterproductive Regulation*, 23 INT'L J. SOC. L. 347, 356 (1995).

26. LOREN FOX, ENRON: THE RISE AND FALL (2003).

27. For a description of the worst financial scandals exposed in the US at the end of the second millennium and beginning of the third, see A. Cunningham, *The Sarbanes-Oxley Yawn: Heavy Rhetoric, Light Reform (And It Just Might Work)*, 35 CONN. L. REV. 915, 923-36 (2003).

28. Sarbanes-Oxley Act of 2002, Pub. L. 107-204, 116 Stat. 745 (codified in scattered sections of 11, 15,

called SOX “the most far-reaching reforms of American business practices since the time of Franklin Delano Roosevelt” and the New Deal.²⁹

A second recent instance of hurried regulatory response was the action taken to contend with the global financial crisis of 2008. This crisis, which had originated in the US mortgage market, snowballed and spread into many other markets, in part because of mortgage securitization and active trade in mortgage-backed securities (MBSs).³⁰ Again, regulatory agencies took rapid steps to calm the public uproar and restore confidence in the stability of the markets. In July 2010, Congress passed the Dodd-Frank Act, designed to enforce comprehensive financial reform in public companies.³¹

This pattern of hasty regulatory activity raises the concern that legislation is passed without sufficient scrutiny. The risk is that there is not enough time to take into account all of the factors that caused the crisis in question and to evaluate alternative possible measures for dealing effectively with them.³² Moreover, following any financial crisis, regulatory agencies face harsh media criticism and intense public pressure to come up with solutions. This could lead to the enactment of legislation whose main purpose is to calm public anger, even though it may not be the most appropriate measure for addressing the economic exigencies.³³ Pressure to pass legislation that will prevent future crises can lead to an overestimation of the benefits and underestimation of the costs of the new measure.³⁴

The legislative initiatives that followed financial crises have been harshly criticized in the academic literature. Roberta Romano, for example, calls the SOX reforms ineffective quack corporate governance.³⁵ She contends that most of the corporate governance rules introduced by SOX were not new initiatives designed to deal

18, 28, 29 U.S.C.).

29. Elisabeth Bumiller, *Bush Signs Bill Aimed at Fraud in Corporations*, N.Y. TIMES, July 31, 2002, at C5, <http://www.nytimes.com/2002/07/31/business/corporate-conduct-the-president-bush-signs-bill-aimed-at-fraud-in-corporations.html>.

30. For the central role played by securitization of mortgages in the financial crisis, see, e.g., John D. Martin, *A Primer on the Role of Securitization in the Credit Market Crisis of 2007*, in LESSONS FROM THE FINANCIAL CRISIS: CAUSES, CONSEQUENCES, AND OUR ECONOMIC FUTURE 199 (Robert W. Kolb ed., 2010); TIMOTHY F. GEITHNER, FIN. STABILITY OVERSIGHT COUNSEL, MACROECONOMIC EFFECTS OF RISK RETENTION REQUIREMENTS 10-14 (2011), available at [http://www.treasury.gov/initiatives/wsr/Documents/Section%20946%20Risk%20Retention%20Study%20%20\(FINAL\).pdf](http://www.treasury.gov/initiatives/wsr/Documents/Section%20946%20Risk%20Retention%20Study%20%20(FINAL).pdf); Gary Gorton & Andrew Metrick, *Securitization*, in 2A THE HANDBOOK OF THE ECONOMICS OF FINANCE 1 (George Constantinides et al. eds., 2012); Dov Solomon, *The Rise of a Giant: Securitization and the Global Financial Crisis*, 49 AM. BUS. L.J. 859 (2012).

31. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

32. Saule T. Omarova & Adam Feibelman, *Risks, Rules, and Institutions: A Process for Reforming Financial Regulation*, 39 U. MEM. L. REV. 881, 884-85 (2009); Roberta Romano, *Regulating in the Dark*, in REGULATORY BREAKDOWN: THE CRISIS OF CONFIDENCE IN U.S. REGULATION 86 (C. Coglianese ed., 2012).

33. Luca Enriques, *Regulators' Response to the Current Crisis and the Upcoming Reregulation of Financial Markets: One Reluctant Regulator's View*, 30 U. PA. J. INT'L L. 1147, 1149-50 (2009); Romano, *supra* note 32, at 88-89.

34. Enriques, *supra* note 33, at 1152-53; Larry E. Ribstein, *Bubble Laws*, 40 HOUS. L. REV. 77, 79-80 (2003).

35. Roberta Romano, *The Sarbanes-Oxley Act and the Making of Quack Corporate Governance*, 114 YALE L.J. 1521 (2005).

with the failures of the Enron and Worldcom affairs but merely recycled and repackaged “off the shelf” ideas with no clear connection to the financial crisis at hand.³⁶ Congress’s desire to do something to contend with the public outrage led lawmakers to throw together an assortment of controversial ideas and pass them into law. Sufficient consideration was not given to the contents of the proposed legislation, its connection to the causes of the financial predicaments, and its potential long-term impact on the financial environment.³⁷

Similar criticism was leveled against the reforms in the 2010 Dodd-Frank Act, and the analogy to “quack remedies” resurfaced. Stephen Bainbridge identifies a number of different features of this type of hasty regulatory measure, including the following: the regulation is passed in response to a financial crisis; its central purpose is to defuse public criticism of corporations and/or the markets; it is generally not based on new proposals but on longstanding policy that is being advanced by powerful interest groups; and the empirical evidence cited in support of the regulation is, at best, mixed.³⁸

The incentive to swiftly enact legislation following a financial crisis is clear: it is essential for signaling to the public that the regulatory authorities are taking the severity of the crisis seriously and are acting promptly and decisively to remedy the situation. The importance of restoring investor confidence in the stability of financial markets should not be underestimated. The short-term benefit of immediate action—i.e., restoration of investor confidence—is likely to be more significant than the long-term damage that could be caused by ill-advised legislation. Theoretically, the short-term advantages of positive signaling through swift legislation outweigh the potential long-term disadvantages, which can be mitigated by more measured and prudent legislation in the future.

Given this potential for long-term damage, Romano suggests that a sunset provision be included in the legislation to limit its force to a certain time period unless Congress decides to extend it.³⁹ The reauthorization process would allow time for gathering relevant information that might not have originally been available, for careful examination of the causes of the crisis and the implications of the legislation, and for a retroactive evaluation of the legislation’s efficacy. This would make it easier for Congress to correct any defects in the legislation and prevent long-term damage from laws enacted quickly and under pressure. The automatic expiration of the law after a

36. *Id.* at 1523. See also Stephen M. Bainbridge, *Sarbanes-Oxley: Legislating in Haste, Repenting in Leisure*, 2 CORP. GOVERNANCE L. REV. 69, 70 (2006) (arguing that the SOX reforms were a compilation of ideas thrown together by regulators and hastily enacted by Congress in order to divert the anger of investors in the wake of the financial scandals).

37. Romano, *supra* note 35, at 1525-29. But see Robert A. Prentice & David B. Spence, *Sarbanes-Oxley as Quack Corporate Governance: How Wise Is the Received Wisdom?*, 95 GEO. L.J. 1843 (2007) (defending the SOX reforms and rejecting Romano’s criticism).

38. Stephen M. Bainbridge, *Dodd-Frank: Quack Federal Corporate Governance Part II*, 95 MINN. L. REV. 1779, 1795-96 (2011).

39. Romano, *supra* note 32, at 95-103; Romano, *supra* note 35, at 1599-1602. The biggest critic of the proposal to include a sunset provision is John Coffee. John C. Coffee, *The Political Economy of Dodd-Frank: Why Financial Reform Tends to Be Frustrated and Systemic Risk Perpetuated*, 97 CORNELL L. REV. 1019 (2012). For Romano’s response to this criticism, see Roberta Romano, *Regulating in the Dark and a Postscript Assessment of the Iron Law of Financial Regulation*, 43 HOFSTRA L. REV. 25 (2014).

certain period should ease the burden of repealing flawed legislation and counteract the natural tendency to reaffirm the status quo. The main disadvantage of Romano's proposal, however, is that such a provision would also dilute the signaling power of the law as to the seriousness of the regulatory response to the crisis.⁴⁰ The knowledge that the legislation will expire unless reapproved will raise doubts as to the authorities' long-term commitment to the regulatory process; it could be perceived as an attempt to mislead the public in the short-term and simply "wait out the storm." Such a clause would thus undermine the goal of restoring investor confidence and reduce the short-term benefits of the legislation.⁴¹

Some scholars have also observed that regulation following a crisis is often actually an attempt to address the problems of the past,⁴² focusing on past failures rather than preparing for the challenges of the future. This article takes one step further by arguing that not only does such regulation fail to meet future needs, it can even sow the seeds of future crises. It looks back at how, historically, regulation that was adopted pursuant to a major economic crisis not only failed to prevent a large-scale crisis in the future but also created the conditions for its emergence. The discussion analyzes legislation relating to non-recourse mortgages that was enacted in response to the housing crisis of the Great Depression, pointing to its central contribution to bringing on the mortgage crisis of the Great Recession.

III. NON-RECOURSE LEGISLATION

Housing purchases tend to be one of the biggest transactions of a person's life. The high purchase price of a home usually means that the buyer must obtain external credit to finance the transaction. To secure the repayment of the loan, the buyer-borrower uses the house she intends to buy as collateral in favor of the financier-lender. The mortgage is meant to ensure that if the borrower cannot repay the loan, the lender can foreclose on the property, turn the borrower out, and sell the property. The amount collected from the sale of the house will then be used to recover the outstanding balance of the debt.

Non-recourse mortgages are secured only by the mortgaged property, with the borrower bearing no personal liability for repayment of the loan. Though personal liability was a fundamental component of classic common law mortgages,⁴³ modern legal systems allow for the option of mortgages with no personal liability for borrowers.⁴⁴ In the absence of such liability, the lender's only remedy in the event of default

40. Romano herself identifies two other flaws in the proposal to include a sunset provision: the lack of flexibility in determining the timetable for evaluating and reapproving the legislation and the increasing of the burden on Congress. Romano, *supra* note 35, at 1600.

41. Luca Enriques & Dirk Zetsche, *Quack Corporate Governance, Round III? Bank Board Regulation Under the New European Capital Requirement Directive*, 16 THEORETICAL INQUIRIES L. 211, 242 (2015).

42. See, e.g., JOHN G. FRANCIS, *THE POLITICS OF REGULATION: A COMPARATIVE PERSPECTIVE* 182 (1993) (comparing the actions of the regulator to the actions of a military commander after losing a battle, in that both focus on past failures rather than preparing for future challenges); Ribstein, *supra* note 34, at 78; Romano, *supra* note 32, at 87.

43. GEORGE E. OSBORNE, *HANDBOOK ON THE LAW OF MORTGAGES* 156-57 (2d ed. 1970).

44. See, e.g., RESTATEMENT (THIRD) OF PROP.: MORTGAGES § 1.1 (1997) ("A mortgage is enforceable whether or not any person is personally liable for that performance."); Nelson & Whitman, *supra* note 4, § 2.1.

is foreclosure. Even if the foreclosure sale price returns only a portion of the unpaid debt, the lender is not able to seek a deficiency judgment against the borrower to recover the outstanding balance from unsecured assets or future income. Moreover, this lack of personal liability holds regardless of whether the borrower has the financial wherewithal to continue her monthly mortgage payments.

State legislation from the 1930s intended to protect borrowers is the historical source of non-recourse mortgages. During the Great Depression, many borrowers were unable to keep to the monthly repayment schedule on their mortgages. This caused lenders to foreclose on the mortgaged properties and evict the borrowers from their homes. The problem, however, was that in many cases, the foreclosure yielded a significantly lower return than the outstanding balance of the debt, for three principal reasons. First, by its very nature as a forced sell at a given point in time, a foreclosure commonly fails to garner the fair market value for the foreclosed real estate.⁴⁵ Second, during the Great Depression, housing prices fell dramatically even in regular, non-foreclosure sales on the free market. And third, the shrinking housing financing market during the Great Depression severely restricted the availability of credit, which, in turn, significantly reduced the number of housing purchases and led to a further decline in real estate prices.⁴⁶

In the majority of cases, the lenders themselves would purchase the mortgaged property at a minimal price during the foreclosure process.⁴⁷ They would then imme-

45. *BFP v. Resolution Trust Corp.*, 511 U.S. 531, 539 (1994). See also Grant S. Nelson & Dale A. Whitman, *Reforming Foreclosure: The Uniform Nonjudicial Foreclosure Act*, 53 DUKE L.J. 1399, 1417-18 (2004).

46. Hughes, *supra* note 5, at 125-26.

47. In many cases, the lender is the only party offering to buy the property in foreclosure. Moreover, even in cases where there are other offers, the lender enjoys distinct advantages over other bidders. See Grant S. Nelson, *The Impact of Mortgagor Bankruptcy on the Real Estate Mortgage: Current Problems and Some Suggested Solutions*, 50 MO. L. REV. 217 (1985):

Frequently, the mortgagee is not only the foreclosure sale purchaser, but the only bidder attending the sale. There are several reasons for this phenomenon. First, because the mortgagee can bid up to the amount of the mortgage debt without putting up new cash, he has a distinct bidding advantage over a third party bidder, who will have out-of-pocket expense from the first dollar bid. Second, while foreclosure statutes require notice by publication to potential third party bidders, the notice, especially in urban areas, is published in legal newspapers of limited circulation. Moreover, because the publication is technical in nature, a potential third party purchaser has little idea what real estate is being sold. Third, many potential third party purchasers are reluctant to buy land at a foreclosure sale because of the difficulty of ascertaining if a purchaser will receive good and marketable title. Fourth, when a mortgagee forecloses on improved real estate, potential bidders often find it difficult to inspect the premises prior to sale. While it may be in the self-interest of the mortgagor to allow third party inspection of the premises, mortgagors who are about to lose their real estate through a foreclosure sale understandably are reluctant to cooperate.

See also Prentiss Cox, *Foreclosure Reform Amid Mortgage Lending Turmoil: A Public Purpose Approach*, 45 HOUS. L. REV. 683, 701 (2008). Empirical research shows that in many cases, the lender in fact acquires the property in foreclosure. See, e.g., Debra Pogrud Stark, *Facing the Facts: An Empirical Study of the Fairness and Efficiency of Foreclosures and a Proposal for Reform*, 30 U. MICH. J.L. REFORM 639, 663 (1997) ("In most cases, the only people present at the foreclosure sale are the lender, the borrower, and the party conducting the foreclosure sale. Third parties successfully bid in only 11.2% of the 1993 judicial sales cases and only 9.6% of the 1994 judicial sales cases."); Steven Wechsler, *Through the Looking Glass: Foreclosure by Sale as De Facto Strict Foreclosure: An Empirical Study of Mortgage Foreclosure and Subsequent Resale*, 70 CORNELL L. REV. 850, 875 (1985) ("In the sample of 118 foreclosure sales, the mortgagee bid successfully in 91 cases, or seventy-seven percent of the total, and third parties bought in 27 cases, or twenty-three percent

diately seek deficiency judgments against the borrowers for the large difference between the low foreclosure proceeds and the outstanding balance of the debt.⁴⁸ If the lender then sold the property for more than the foreclosure price, he realized windfall profits. This situation benefited lenders since they obtained the mortgaged assets at a minimal price and could continue to pursue claims against borrowers for the balance of the debt and even profit. Borrowers, in contrast, not only lost their homes but were also sued for the full amount of the debt.⁴⁹ These dismal conditions for borrowers prompted states to enact borrower-friendly legislation that would prevent lenders from continuing to pursue borrowers for the remainder of the debt after foreclosure.⁵⁰ The legislation prevented lenders from pursuing borrowers' non-collateralized property and future incomes. It limited the scope of the lender's remedy to the borrower's collateralized assets and precluded suing the borrower personally for the full amount of the debt.⁵¹ This anti-deficiency judgment legislation effectively forced the parties to the transaction into non-recourse mortgages.

Given the complexity of the anti-deficiency judgment legislation and the divergences between the various state laws, there is no consensus as to just how many US states have adopted non-recourse legislation. The accepted estimate, however, is around fifteen states,⁵² and a number of Canadian provinces have similarly adopted non-recourse legislation.⁵³ Despite the many variances, state anti-deficiency judgment laws can nonetheless be divided into four main categories:⁵⁴ (1) laws prohibiting any deficiency under a loan secured by residential real estate; (2) laws prohibiting any deficiency when the mortgage or deed of trust is "purchase money;" (3) laws

of the total.").

48. The value of the secured claim includes the principle, interest earned, and the foreclosure expenses. 11 U.S.C. § 506(b) (2006) ("To the extent that an allowed secured claim is secured by property the value of which, after any recovery under subsection (c) of this section, is greater than the amount of such claim, there shall be allowed to the holder of such claim, interest on such claim, and any reasonable fees, costs, or charges provided for under the agreement or State statute under which such claim arose."); 11 U.S.C. § 506(c) (2006) ("The trustee may recover from property securing an allowed secured claim the reasonable, necessary costs and expenses of preserving, or disposing of, such property to the extent of any benefit to the holder of such claim, including the payment of all ad valorem property taxes with respect to the property.").

49. Hughes, *supra* note 5, at 126.

50. Nelson & Whitman, *supra* note 4.

51. Todd J. Zywicki & Joseph D. Adamson, *The Law and Economics of Subprime Lending*, 80 U. COLO. L. REV. 1, 30-31 (2009).

52. *Id.* at 30 n.134 (estimating that around 15-20 states adopted non-recourse legislation, including some of the largest states); Andra C. Ghent & Marianna Kudlyak, *Recourse and Residential Mortgage Default: Evidence from US States*, 24 REV. OF FIN. STUD. 3139, 3143 (2011) (categorizing eleven states as having adopted non-recourse legislation); Ron Harris & Asher Meir, *Non-Recourse Mortgages—A Fresh Start*, 21 AM. BANKR. INST. L. REV. 119, 120 (2013) (estimating that between ten to fifteen states have adopted non-recourse legislation); Oren Bar-Gill, *The Law, Economics and Psychology of Subprime Mortgage Contracts*, 94 CORNELL L. REV. 1073, 1113 (2009); CONG. OVERSIGHT PANEL, OCTOBER OVERSIGHT REPORT: AN ASSESSMENT OF FORECLOSURE MITIGATION EFFORTS AFTER SIX MONTHS 157-58 (2009), available at <http://cybercemetery.unt.edu/archive/cop/20110402043235/http://cop.senate.gov/documents/cop-100909-report.pdf> [hereinafter OCTOBER OVERSIGHT REPORT]. For a compilation of state laws related to foreclosure, see *United States Foreclosure Laws*, <http://www.foreclosurelaw.org/>.

53. Lawrence D. Jones, *Deficiency Judgments and the Exercise of the Default Option in Home Mortgage Loans*, 36 J.L. & ECON. 115, 117 (1993).

54. See 2 MICHAEL T. MADISON ET AL., *THE LAW OF REAL ESTATE FINANCING* §§ 12:69-12:73 (rev. ed. 2015). A number of states have adopted more than one type of anti-deficiency judgment laws.

prohibiting the recovery of any deficiency following a nonjudicial foreclosure by power of sale;⁵⁵ and (4) laws limiting the deficiency to the difference between the loan balance owing and either the foreclosure sale price or the fair market value of the property, whichever is greater. The last category of laws effectively denies recourse when the fair market value of the property is higher than the balance of the debt, even if the amount received upon foreclosure is less than the loan balance.⁵⁶

In *Honeyman v. Jacobs*⁵⁷ and *Gelfert v. National City Bank*,⁵⁸ the Supreme Court confirmed state authority to interfere in mortgages through non-recourse legislation. Many scholars and policymakers, however, have criticized the implications of such legislation,⁵⁹ arguing that it passes on high costs to borrowers, without them deriving any significant benefit from this.⁶⁰

IV. RISK ALLOCATION IN NON-RECOURSE MORTGAGES

The risk allocation between the parties in a non-recourse mortgage is directly affected by fluctuations in the market price of the collateralized asset. When real estate prices rise and the value of the property becomes greater than the balance of the mortgage, it is in the borrower's interest to continue payment on the loan. However, when real estate prices drop and the value of the property falls below the balance of the debt, it is in the borrower's interest to stop payment, walk away from the house and rent another one,⁶¹ send the keys to the collateralized property to the lender, and force the conclusion of the debt. In such cases of negative equity, strategic default is an attractive option for a borrower, even if she is able to afford the monthly mortgage

55. The rationale for not allowing the lender recovery of any deficiency following a nonjudicial foreclosure is that the lender's choice of a nonjudicial process denied the borrower certain protections, such as redemption rights, that accompany judicial foreclosure.

56. Hughes, *supra* note 5, at 125.

57. 306 U.S. 539, 543 (1939).

58. 313 U.S. 221, 231 (1941).

59. See, for example, the remarks of Congressman Jeb Hensarling, OCTOBER OVERSIGHT REPORT, *supra* note 52, at 157: "[H]omeowners have become aware of the economic implications arising from applicable 'anti-deficiency' and 'single-action' laws and other rules adopted in many states that permit, if not indirectly encourage, homeowners to avoid their contractual mortgage obligations."

60. See, e.g., Mark Meador, *The Effects of Mortgage Laws on Home Mortgage Rates*, 34 J. ECON. & BUS. 143, 146 (1982) (finding that anti-deficiency judgment laws raise interest rates on loans backed by newly built homes by 13.87 basis points and for existing homes by 22.65 basis points); SUSAN E. WOODWARD, U.S. DEP'T OF HOUS. & URBAN DEV. A STUDY OF CLOSING COSTS FOR FHA MORTGAGES 50-52 (2008), available at http://www.huduser.org/Publications/pdf/FHA_closing_cost.pdf (finding that anti-deficiency judgment laws raise costs to borrowers by \$550 per \$100,000 of loan amount); Brent W. Ambrose & Anthony B. Sanders, *Legal Restrictions in Personal Loan Markets*, 30 J. REAL ESTATE FIN. & ECON. 133, 149 (2005) (finding that borrowers in states with non-recourse legislation pay higher credit costs on high LTV mortgages by about 33 basis points). But see Schill, *supra* note 3.

61. Theoretically, a borrower may prefer to buy a new house rather than rent. However, walking away from her current home and defaulting on the mortgage payments will affect her credit score, and it will be difficult for her to obtain a new loan. If the borrower wants to buy a new house, she must get a new mortgage before defaulting on the current mortgage and damaging her credit score. Therefore, in most cases, the borrower will be inclined to rent a different house rather than buy a new one. See Adam J. Levitin, *Resolving the Foreclosure Crisis: Modification of Mortgages in Bankruptcy*, 2009 WIS. L. REV. 565, 640, 655 n.265.

payments.⁶²

This risk allocation between the parties can be described as a put option the lender gives to the borrower. The option allows the borrower to stop repayment of the mortgage and eliminate the outstanding debt in exchange for transferring the collateralized property to the lender.⁶³ By exercising this option, the borrower essentially sells the property to the lender for the price of the balance of the debt. Applying the model of options to non-recourse mortgages predicts that strategic default by the borrower will occur when the option is “in the money,” i.e., when there is negative equity in the property.⁶⁴

Although negative equity creates a strong incentive for strategic default, other factors, economic and otherwise, can influence a borrower’s decision.⁶⁵ When the property is the borrower’s place of residence, she will incur transitional costs, including the difficulties of renting or buying a new home, moving expenses, the costs of changing schools, and loss of communal and social ties (assuming the new home is not in the same vicinity as the former home).⁶⁶ Defaulting on a loan will also become part of the borrower’s credit history, which will hurt her credit rating⁶⁷ and make it difficult for her to obtain credit in the future.⁶⁸ In addition, moral considerations might influence the borrower’s decision.⁶⁹ Defaulting on a loan is perceived by some as immoral and irresponsible⁷⁰ and to be avoided even if doing so incurs significant

62. See, e.g., John M. Quigley & Robert Van Order, *Explicit Tests of Contingent Claims Models of Mortgage Default*, 11 J. REAL ESTATE FIN. & ECON. 99, 106 (1995) (indicating that negative equity is strongly associated with higher default rates); Levitin, *supra* note 61, at 639–40 (arguing that in the case of non-recourse mortgages, walking away is an attractive option for a homeowner with negative equity who can find a better rental deal elsewhere).

63. A different way of terminating the mortgage early is by prepayment, i.e., when the loan is paid in full prior to maturity. This can be viewed as a call option that allows the borrower to buy back the remaining mortgage payments from the lender at the prevailing mortgage rate. For a review of the literature on mortgage termination risk, see Michael LaCour-Little, *Review Articles: Mortgage Termination Risk: A Review of the Recent Literature*, 16 J. REAL ESTATE LITERATURE 297 (2008).

64. Yongheng Deng et al., *Mortgage Terminations, Heterogeneity and the Exercise of Mortgage Options*, 68 ECONOMETRICA 275, 284 (2000).

65. Levitin, *supra* note 61, at 638.

66. In addition to these costs, there are the unique qualities of the current home. Many people remodel their homes to fit their needs. Therefore, walking away from one’s home also involves the loss of the specific compatibility of that house with one’s needs. See Guiso et al., *supra* note 20, at 1480.

67. Foreclosure can cause an immediate drop in the borrower’s credit rating by 140–150 points on the Vantage scale and appear as a mark in the credit bureau records for up to seven years. Kenneth R. Harney, *The Nation’s Housing: Credit Score Conundrums*, WASH. POST, Sept. 12, 2009, available at <http://www.washingtonpost.com/wp-dyn/content/article/2009/09/10/AR2009091004532.html>.

68. However, White estimates that the larger the scale of the negative equity, the more significant the borrower’s savings in strategic default relative to the damage to her credit rating. Brent T. White, *Underwater and Not Walking Away: Shame, Fear and the Social Management of the Housing Crisis*, 45 WAKE FOREST L. REV. 971, 983–85 (2010). Furthermore, given the high incidence of insolvency during the financial crisis, future lenders may attribute less significance to default during the crisis than they would to default in a period of prosperity. See Zywicki & Adamson, *supra* note 51, at 32.

69. For a broad discussion of the morality of strategic default, see White, *supra* note 19; White, *supra* note 68; Curtis Bridgeman, *The Morality of Jingle Mail: Moral Myths About Strategic Default*, 46 WAKE FOREST L. REV. 123 (2011); Tess Wilkinson-Ryan, *Breaching the Mortgage Contract: The Behavioral Economics of Strategic Default*, 64 VAND. L. REV. 1547 (2011).

70. See, for example, Henry M. Paulson Jr., U.S. Sec’y of the Treasury, U.S. Housing and Mortgage Market Update, Address Before the National Association of Business Economists (Mar. 3 2008), available at

costs.⁷¹ Moreover, there is the negative social stigma attached to strategic default; thus even borrowers with no particular moral qualms may be willing to put aside their own economic interests and continue payment to avoid the social costs.⁷²

Given these mitigating factors, the likelihood of strategic default is lower when there is a low level of negative equity in the asset, and vice versa: the greater the negative equity in the property, the greater the incentive to default on the mortgage. This is supported by the empirical evidence of a strong correlation between the level of negative equity and the propensity of borrowers to default. Guiso et al. found that when negative equity in the property was 10% of the value of the house, only 7.4% of borrowers wanted to stop repayment of the mortgage, whereas when negative equity increased to 40%-50%, the willingness to default rose to 12.4%.⁷³ Moreover, not only did the relative value matter, but the absolute value of the negative equity was significant as well. Per given relative value of an equity shortfall, roughly 7% more households were willing to default when the shortfall was \$100,000 as opposed to \$50,000.⁷⁴ Tirupattur et al. also found that at low levels of negative equity, strategic default rates are also relatively low, but pick up steadily as the level of negative equity rises.⁷⁵ In conclusion, the propensity for default clearly increases as the proportion of negative equity in the property and its absolute value grow.

Risk allocation is significantly different in cases where recourse is an option.⁷⁶ With recourse mortgage, a lender who wants to be repaid is not limited to the collat-

<https://www.treasury.gov/press-center/press-releases/Pages/hp856.aspx>. (“[L]et me emphasize, any homeowner who can afford his mortgage payment but chooses to walk away from an underwater property is simply a speculator—and one who is not honoring his obligations.”). See also *Fox Business: Some Homeowners Who Can't Pay Choosing to Just Walk Away* (Fox Business television broadcast Feb. 19, 2009), available at <http://www.foxbusiness.com/video/index.html?playerId=videolandingpage&streamingFormat=FLASH&referralObject=3644995&referralPlaylistId=1292d14d0e3afdcf0b31500afeb92724c08f046>.

Seems obscene. Everyone else in the country is trying to pay their mortgages and trying to get things done. They realize in many cases they are underwater that their mortgage is worth more than their home. If you have obnoxious kids, walk away from your kids. Seems weird. Doesn't it? . . . I know you are not looking at the ethics of this; you are a good and savvy businessman. Do you find it even a tinge offensive that we are moving away from personal responsibility? If we can't hack it we bail out of it . . . And you know when you enter into an agreement and everyone just throws up the keys and says you know it's really tough this month, it's gonna be tough next month, declining real estate values, we are just going to quit. Can you imagine if we all did that going into World War II? The Japanese just kicked our butts at Pearl Harbor, the odds are overwhelming, the Germans have just taken over Europe, and we just quit. What would happen if we all quit? Let's just cease and desist.

In contrast, White argues that strategic default should not be portrayed in a negative light, because mortgage arrangement allows the borrower to stop payment on the debt and send the keys to the lender. White, *supra* note 68.

71. Guiso et al., *supra* note 20, at 1481.

72. *Id.*

73. *Id.* at 1483.

74. *Id.* at 1483-84.

75. Vishwanath Tirupattur et al., *ABS Market Insights: Understanding Strategic Defaults*, MORGAN STANLEY 5 (Apr. 29, 2010), available at http://www.transunion.com/docs/rev/business/financialservices/FS_MorganStanleyStrategicDefaultResearch.pdf.

76. Most countries in the world allow lenders a right of recourse to the borrower. See Harris & Meir, *supra* note 52, at 128-29 (arguing that recourse loans are common practice in most countries, including Japan, Australia, Israel, and European countries); see references in *id.* n.49.

eralized property; he may also pursue repayment from any of the borrower's uncollateralized property or future incomes.⁷⁷ Since the borrower bears personal liability for repayment of the debt, walking away from the mortgaged property is not a useful strategy even if its value drops below the balance of the debt. This would not terminate the debt, as the borrower would be liable to repay the entire balance from her other assets and future incomes.

Empirical studies confirm the premise that default rates in "recourse" states are significantly lower than the rates in "non-recourse" states. Demiroglu et al. compared default rates in states with and without anti-deficiency laws and found that borrowers with negative equity are significantly more likely to default in non-recourse states.⁷⁸ Ghent & Kudlyak found that on average, borrowers in non-recourse states are 32% more likely to default than borrowers in recourse states.⁷⁹ Tirupattur et al. similarly found that the strategic default rate in California, a non-recourse state, is much higher than the strategic default rate in Florida, a recourse state.⁸⁰ The difference between recourse and non-recourse jurisdictions has been examined in Canada as well. Jones analyzed data from the Canadian provinces of Alberta, which does not allow for recourse, and British Columbia, which does, and found that strategic defaults are more likely to occur in Alberta.⁸¹

A possible explanation for the lower default rates in recourse states is the deterrent effect of the lender's ability to seek a deficiency judgment against the borrower to recover the outstanding balance from non-collateralized assets and future incomes. Ghent & Kudlyak analyzed the deterrent effect of recourse on residential mortgage default and found that its magnitude closely correlates with the borrower's wealth: it increases with borrowers who have more assets to protect.⁸² Bhutta et al. also examined the deterrent effect of recourse on borrowers. They found that the median borrower in Nevada and Florida (recourse states) defaults when she is 20 to 30 percentage points more underwater than the median borrower in California and Arizona (non-recourse states).⁸³ These findings suggest that in recourse states, borrowers factor into the costs of default the potential personal liability that comes with foreclosure.

The difference between recourse and non-recourse states, however, is mitigated to some extent by the fact that, even in recourse states, borrowers might not necessarily be exposed to the risk that lenders will seek deficiency judgments against them. Certain government agencies, such as the Federal Housing Administration (FHA), have adopted official or informal policies of refraining from bringing personal claims

77. RESTATEMENT (THIRD) OF PROP.: MORTGAGES § 8.2 (1997).

78. Cem Demiroglu et al., *State Foreclosure Laws and the Incidence of Mortgage Default*, 57 J.L. & ECON. 225 (2014).

79. Ghent & Kudlyak, *supra* note 52, at 3153.

80. Tirupattur et al., *supra* note 75, at 3.

81. Jones, *supra* note 53, at 127-29.

82. Ghent & Kudlyak, *supra* note 52, at 3159-62.

83. Neil Bhutta et al., *The Depth of Negative Equity and Mortgage Default Provisions* 25 (Bd. of Governors of the Fed. Reserve Sys., Working Paper No. 2010-35, 2010), available at <http://www.federalreserve.gov/pubs/feds/2010/201035/201035pap.pdf>.

against borrowers.⁸⁴ In addition, given that suing defaulting borrowers requires a substantial time and money investment, deficiency judgments are rare, even in the private sector.⁸⁵ This is especially apparent in states where lenders are overburdened with foreclosures.⁸⁶ Moreover, the potential of personal claims is further limited by the borrower's resources. Particularly in cases where little or no down payment was made as a result of insufficient assets, borrowers may be judgment-proof and simply lack the property with which to repay their debt.⁸⁷ Therefore, in a cost-benefit analysis, pursuing defaulting borrowers may prove to be not worthwhile, making the mortgages in question de facto non-recourse loans, even in recourse jurisdictions.⁸⁸

V. RELAXING DOWN PAYMENT REQUIREMENTS

Homebuyers were traditionally required to invest a significant amount of their own to obtain a loan for the purchase of a home. Lenders in the US required at least 20% of the total value of the home to be put down by borrowers so as to reduce risks.⁸⁹ This created an "equity cushion" that covered the costs of foreclosure and protected against potential losses from declining real estate prices. Particularly crucial for non-recourse mortgages: down payments reduced the likelihood of reaching a state of negative equity in the property, thereby preventing mortgages from being "in the money" and making strategic default less likely.⁹⁰

In the 1990s, however, there was a significant easing of down payment requirements.⁹¹ Lenders began offering loans with high loan-to-value (LTV) ratios that would allow homebuyers to obtain financing for the full amount of their purchases.⁹²

84. See 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, 39-40 (2008); Jones, *supra* note 53, at 118; Ghent & Kudlyak, *supra* note 52, at 3141.

85. Debra Pogrud Stark, *Foreclosing on the American Dream: An Evaluation of State and Federal Foreclosure Laws*, 51 OKLA. L. REV. 229, 244 (1998) ("Lenders brought a deficiency action within one year after the foreclosure sale in approximately six to seven percent of the foreclosure sale cases."); Wechsler, *supra* note 47, at 878 ("[O]f the ninety-four studied cases in which the foreclosure sale left a deficiency amount, the mortgagee obtained a deficiency judgment in only one case, and in that case the judgment was not satisfied"); Vikas Bajaj, *Mortgage Holders Find It Hard to Walk Away from Their Homes*, N.Y. TIMES, May 10, 2008, at C1, available at http://www.nytimes.com/2008/05/10/business/10housing.html?pagewanted=1&_r=1.

86. White, *supra* note 68, at 985.

87. Zywicki & Adamson, *supra* note 51, at 30.

88. Grant S. Nelson & Gabriel D. Serbulea, *Strategic Defaulters Versus the Federal Taxpayer: A Brief for the Preemption of State Anti-Deficiency Law for Residential Mortgages*, 61 ARK. L. REV. 65, 72 (2013); Bar-Gill, *supra* note 52, at 1113; Harris & Meir, *supra* note 52, at 126.

89. Bar-Gill, *supra* note 52, at 1076.

90. White, *supra* note 68, at 1008.

91. See Rosner, *supra* note 7, at 7-8 (describing the relaxation of credit standards in the 1990s, including the drastic reduction of minimum down payment levels from 20% to zero).

92. The relaxing of down payment requirements made homeownership accessible to a population that, in the past, was only able to rent. Indeed, homeownership rates in the US increased as the requirements for getting mortgages eased up. According to the FDIC, homeownership in 2005 stood at 68.9% compared with 63.9% two decades earlier. Greg Griffin et al., *No Money Down: A High-Risk Gamble*, DENVER POST, Sept. 17, 2006, http://www.denverpost.com/ci_4347686. See also U.S. Census Bureau, *Housing Vacancies and Homeownership: Historical Tables*, <http://www.census.gov/hhes/www/housing/hvs/historic/index.html> (compilation of data on homeownership in the US from 1965 to today).

Although studies had indicated a correlation between high LTV ratios and the probability of reaching a state of negative equity and default,⁹³ over the years, lenders increasingly declined to insist on down payments.⁹⁴

No-money-down mortgages became popular in the early 2000s. In many cases, borrowers could avoid putting down any money upfront by taking out credit insurance for housing loans with high LTV ratios or second mortgages.⁹⁵ The median⁹⁶ LTV ratio in the subprime market, including first and second mortgages, rose from 90% in 2003 to 100% during 2005-2007.⁹⁷ Furthermore, between August 2004 and July 2005, more than 40% of first-time homebuyers obtained loans with no down payment requirement.⁹⁸ These data show that in the period leading up to the mortgage meltdown, about half of the housing loans had no down payment requirement.

This relaxation of down payment requirements led to an increase in the number of borrowers, the value of the properties being purchased, and the proportion of monthly income allotted for mortgage repayment. Borrowers who were unable to furnish the traditional 20% down payment were still able to obtain mortgages and purchase homes. Some borrowers were able to purchase homes that were more expensive than those for which they could afford the 20% down payment. As a result of the increase in the value of the houses and the level of financing, monthly mortgage payments accounted for a higher percentage of borrowers' household expenditures.⁹⁹

A number of factors can account for this lowering of credit standards, but most striking was the meteoric development of the securitization market.¹⁰⁰ The use of securitization as a financing tool began in the 1970s, when lenders began to securitize mortgages.¹⁰¹ Over the years, securitization in general and securitization of mort-

93. See, e.g., JOHN P. HERZOG & JAMES S. EARLEY, HOME MORTGAGE DELINQUENCY AND FORECLOSURE (1970); Deng et al., *supra* note 64; Griffin et al., *supra* note 92 (showing that more than half the foreclosures on homes in August 2006 were for loans with no down payment requirements).

94. White, *supra* note 68, at 1008.

95. For data on the rise in second mortgages ("piggybacks") in the years preceding the meltdown, see Mayer et al., *supra* note 15, at 6.

96. The median is the middle numerical value in a distribution set, such that half of the values are less than or equal to it and half are greater than or equal to it.

97. Mayer et al., *supra* note 15, at 6.

98. Tomoeh Murakami Tse, *Down Payments' Downward Trend*, WASH. POST, Jan. 21, 2006, at F1, <http://www.washingtonpost.com/wp-dyn/content/article/2006/01/20/AR2006012000803.html>.

99. For a discussion of the impact of the combination of non-recourse mortgages and lack of down payment requirements, see *infra* Part VI.

100. Another accepted explanation for the relaxation of credit standards is the intense competition in the banking sector. See generally Jacob A. Bikker et al., *Misspecification in the Panzar-Rosse Model: Assessing Competition in the Banking Industry* (De Nederlandsche Bank, Working Paper No. 114, 2006), available at http://www.dnb.nl/binaries/Working%20Paper%20114-2006_tcm46-146771.pdf (exploring competition in the banking sector).

101. For a historical survey of the development of the mortgage securitization market in the US, see Joseph C. Shenker & Anthony J. Colletta, *Asset Securitization: Evolution, Current Issues and New Frontiers*, 69 TEX. L. REV. 1369, 1383-88 (1991); John J. McConnell & Stephen A. Buser, *The Origins and Evolution of the Market for Mortgage-Backed Securities*, 3 ANN. REV. FIN. ECON. 173 (2011).

gages in particular grew, to the point where most subprime mortgages were securitized prior to the outbreak of the mortgage crisis.¹⁰² Securitization has thus become a central financial tool in the modern economy.¹⁰³ It allows banks to take advantage of assets that produce predictable income, such as mortgages, to obtain interim financing for economic activities.¹⁰⁴ To securitize mortgages, banks separate them from the rest of their assets, bundle them together, and sell them to a special purpose vehicle (SPV) that is created for the sole purpose of the securitization. The SPV finances the transaction by issuing securities backed by the securitized mortgages (mortgage-backed securities).¹⁰⁵

The mortgage market is sub-divided into a primary and secondary markets. In the primary market, mortgage agreements are made between homebuyers and banks. Securitization then turns the illiquid mortgage loans that were created in the primary market into mortgage-backed securities that can be bought and sold in a secondary market. The banks that originated the loans backing the securities are not actually party to the trade between the investors in the secondary market. The secondary mortgage market enables the bypassing of the financial institution's mediation process and the formation of a direct link between lenders and borrowers through daily trade on the stock exchange.¹⁰⁶

The main criticism of securitization is that it creates a disconnect between the banks and the mortgages they securitize, thereby lessening the ex-ante incentive for banks to ensure the quality of their mortgages.¹⁰⁷ Banks can relax their criteria for mortgage loans, knowing that they will not bear the risks of the loan.¹⁰⁸ Empirical findings have, in fact, revealed such a propensity on the part of lenders to securitize riskier loans, such as subprime or Alt-A mortgages. In 2006, 75% of subprime loans and 91% of Alt-A loans were securitized, compared to only 46% of jumbo loans, which are regular loans to prime borrowers.¹⁰⁹ Another study found a rise in securitization in areas with high levels of subprime loans.¹¹⁰

102. Kathleen C. Engel & Patricia A. McCoy, *Turning a Blind Eye: Wall Street Finance of Predatory Lending*, 75 *FORDHAM L. REV.* 2039, 2040 (2007).

103. Lynn M. LoPucki, *The Death of Liability*, 106 *YALE L.J.* 1, 24 (1996); Thomas E. Plank, *Bankruptcy Professionals, Debtor Dominance, and the Future of Bankruptcy: A Review and a Rhapsody on a Theme*, 18 *BANKR. DEV. J.* 337, 362 (2002) (reviewing DAVID A. SKEEL, JR., *DEBT'S DOMINION: A HISTORY OF BANKRUPTCY IN AMERICA* (2001)); Edward M. Iacobucci & Ralph A. Winter, *Asset Securitization and Asymmetric Information*, 34 *J. LEGAL STUD.* 161, 162 (2005).

104. Comm. on Bankr. & Corporate Reorganization of The Ass'n of the Bar of the City of N.Y., *Structured Financing Techniques*, 50 *BUS. LAW.* 527, 529-30 (1995); Robert Stark, *Viewing the LTV Steel ABS Opinion in Its Proper Context*, 27 *J. CORP. L.* 211, 213 (2002); Steven L. Schwarcz, *The Alchemy of Asset Securitization*, 1 *STAN. J.L. BUS. & FIN.* 133, 135-36 (1994).

105. Iacobucci & Winter, *supra* note 103, at 164.

106. Andrew R. Berman, "Once a Mortgage, Always a Mortgage"—*The Use (and Misuse of) Mezzanine Loans and Preferred Equity Investments*, 11 *STAN. J.L. BUS. & FIN.* 76, 77-78 (2005).

107. See references *supra* note 8.

108. Engel & McCoy, *supra* note 102, at 2065-68.

109. Adam B. Ashcraft & Til Schuermann, *Understanding the Securitization of Subprime Mortgage Credit* 2 (Federal Reserve Bank of New York Staff Reports No. 318, 2008), http://www.newyorkfed.org/research/staff_reports/sr318.pdf.

110. Mian & Sufi, *supra* note 8.

Because of the information gap between the banks that originate the mortgages and the investors in MBSs, banks can shift the risks in the loans to investors without that shift being completely reflected in the price. The difficulty in assessing the risk and pricing it accordingly can be attributed to financial engineering. When complex derivatives of MBSs are created, any connection to the risks inherent in the original housing loans becomes difficult to see.¹¹¹ The inability of investors to evaluate the risks was a factor in the collapse of the MBS market in late 2007, which triggered the global financial crisis.¹¹²

VI. THE MORTGAGE MELTDOWN

Non-recourse loans allow borrowers to limit their liability in the event of default on their loan payments. A lack of a down payment requirement further reduces borrowers' loss in default. This Part now shows how the combination of these two features of the US mortgage market contributed to the housing boom and bust in the 2000s.¹¹³

During the 2000s, the ability to obtain full financing for real estate purchases without bearing any personal liability incentivized potential homebuyers to take out loans to purchase houses they could not finance themselves and benefit from having a place to live. When housing prices rose, borrowers reaped the profits—profits that were not shared with lenders beyond the interest payments on the loans. If a borrower failed to realize the profits at the right time and the house subsequently decreased in value, she could walk away from her home; this forced the lender to foreclose, and the debt was terminated. As explained, with a non-recourse mortgage, the lender could not seek a deficiency judgment, leaving the borrower with no liability for the

111. Steven L. Schwarcz, *Regulating Complexity in Financial Markets*, 87 WASH. U. L. REV. 211, 229 n.98 (2009); AMERICAN SECURITIZATION FORUM, RESTORING CONFIDENCE IN THE SECURITIZATION MARKETS 5 (2008), <http://www.sifma.org> ("The level of complexity of products developed during the height of the market boom . . . exceeded the analytical and risk management capabilities of even some of the most sophisticated market participants.").

112. See generally Kurt Eggert, *The Great Collapse: How Securitization Caused the Subprime Meltdown*, 41 CONN. L. REV. 1257 (2009) (arguing that securitization of subprime mortgages and the creation of complex derivatives were the main factors behind the financial crisis).

113. Some scholars have analyzed separately each of these features of the US mortgage market and pointed to the independent role each one played in the crisis. On the lack of recourse, see Martin Feldstein, *How to Save an 'Underwater' Mortgage*, WALL ST. J., Aug. 7, 2009, <http://www.wsj.com/articles/SB10001424052970204908604574330883957532854> ("No-recourse mortgages increase foreclosures, resulting in more properties being thrown on the market, and lead to an excess decline in house prices."); Ron Harris, *Recourse and Non-Recourse Mortgages: Foreclosure, Bankruptcy, Policy* 2-3 (2010), available at <http://ssrn.com/abstract=1591524> ("More scholars now realize that this feature plays an important role in the unfolding of the subprime crisis . . . It seems that the prevalence of non-recourse mortgages leads to more foreclosures, a slump in home prices, losses to lenders and holders of mortgage-backed-securities (MBS), and has spurred the economic crisis."); Kris Gerardi et al., *Did Nonrecourse Mortgages Cause the Mortgage Crisis?*, FED. RESERVE BANK OF ATLANTA, Feb. 18, 2010, <http://realestateresearch.frbatlanta.org/rer/2010/02/did-non-recourse-mortgages-cause-the-mortgage-crisis.html>. On the lack of down payment requirements, see Mayer et al., *supra* note 15, at 16 ("The rise in combined loan-to-value ratios suggests that lower down payments and an increased use of second liens could have been important contributors to the mortgage crisis."). The forthcoming discussion in the text above goes a step further and analyzes the negative impacts of the combination of these two features of the US mortgage market.

balance of the loan. The availability of credit with little risk upfront (no down payment) or liability afterward (no recourse to non-collateralized assets) considerably increased the demand for real estate, which caused prices to skyrocket and created a real estate bubble.¹¹⁴

The combination of non-recourse mortgages with the elimination of down payment requirements resulted in a distortion of the risk allocation in the mortgage market.¹¹⁵ A moral hazard was created when borrowers were no longer subject to an ex-ante requirement to invest personal equity or to ex-post personal liability for repayment. They could now externalize the risk of default to third parties, such as investors in mortgage-backed securities and, more broadly, society at large.¹¹⁶

Using the structure of the repayment schedule, lenders exploited borrowers' cognitive biases, such as myopia, to strengthen the incentive to take out a mortgage.¹¹⁷ In many cases, the terms of the mortgage allowed for a significant grace period before the monthly repayments began. In other cases, lenders gave adjustable-rate mortgages (ARMs) with low starting interest rates,¹¹⁸ in line with the macroeconomic policy of the US Federal Reserve in the years leading up to the mortgage meltdown.¹¹⁹ Myopic borrowers focus on the short-term benefits of the initial low payments and undervalue the long-term costs of the future high payments. Low starting interest rates lured borrowers in, raising the demand for these mortgages and bloating the housing finance market. The problems only arose at the end of the grace period or after the variable interest rate went up and borrowers had difficulty making their monthly payments.¹²⁰

As lenders began foreclosure proceedings on collateralized properties, many houses went up for sale in order to repay the debts of the borrowers.¹²¹ The massive wave of foreclosures led to a housing glut on the market and a resulting sharp drop in real estate prices.¹²² When housing prices fell, many borrowers whom had not been

114. Pavlov & Wachter, *supra* note 15.

115. For a comparison of risk allocation in non-recourse mortgages without a down payment requirement and in undercapitalization by shareholders, see Dov Solomon & Odelia Minnes, *Non-Recourse, No Down Payment and the Mortgage Meltdown: Lessons from Undercapitalization*, 16 FORDHAM J. CORP. & FIN. L. 529, 562-65 (2011).

116. Borrowers who are evicted from their homes often seek aid from the welfare state and special assistance programs for victims of the crisis. Thus, the cost of the failure of the mortgage is borne by society as a whole.

117. Bar-Gill, *supra* note 52, at 1119-21.

118. Veena Trehan, *The Mortgage Market: What Happened?*, NPR, Apr. 26, 2007, <http://www.npr.org/templates/story/story.php?storyId=9855669> (reporting that one-third of ARMs originating between 2004 and 2006 began with "teaser" rates below 4%, which increased significantly after two or three years and as much as doubled monthly payments).

119. John B. Taylor, *How Government Created the Financial Crisis*, WALL ST. J., Feb. 9, 2009, at A19 (criticizing the Federal Reserve for its policy of keeping interest rates below known monetary guidelines, which resulted in the housing boom and bust).

120. Feldstein, *supra* note 113.

121. James R. Hagerty, *Defaults Rise on Home Mortgages Insured by FHA*, WALL ST. J., Mar. 31, 2009, <http://www.wsj.com/articles/SB123840821794969275>.

122. For empirical research that studies the effect of foreclosure proceedings on housing prices, see LPS Releases Study That Demonstrates Impact of Foreclosure Sales on Home Prices (Sept. 3, 2009), *available at* <http://www.bkfs.com/CorporateInformation/NewsRoom/Pages/20090903.aspx>. See also CONG. OVERSIGHT

required to make a down payment found themselves with significant negative equity in their properties.¹²³ California, a non-recourse state, was notorious for its high rates of negative equity. The highest national negative equity rates were in three metropolitan areas of California: Merced, El Centro, and Modesto, with 85%, 85%, and 84% underwater mortgaged properties respectively.¹²⁴

Furthermore, their negative equity in their properties greatly reduced borrowers' incentives to invest in maintaining the homes.¹²⁵ Borrowers with significant negative equity understood that any investment in repairing or improving their homes would benefit only the lenders in foreclosure: although this would raise the property's value, that value would go to the lender alone. Thus, a vicious cycle set in, where properties were neglected, their value dropped further, and the negative equity in the asset grew.¹²⁶

The sharp decline in housing prices led to an uptick in both the number of borrowers with negative equity in their properties and the proportion of that negative equity. As a result, strategic default became a rational choice for an increasing number of borrowers.¹²⁷ Even borrowers with the financial means to continue their mortgage payments often found it worthwhile to default.¹²⁸ Foreclosure proceedings flooded the collapsing real estate market, triggering a further deterioration in housing prices.

Thus, non-recourse mortgages with no requirements for down payments had a negative impact both *ex ante* and *ex post*. They created an incentive for borrowers to take out irresponsible loans that did not correlate with their ability to repay them.

PANEL, THE FORECLOSURE CRISIS: WORKING TOWARD A SOLUTION 9 (2009), available at <http://cybercemetery.unt.edu/archive/cop/20110402010739/http://cop.senate.gov/documents/cop-030609-report.pdf> [hereinafter CONG. OVERSIGHT PANEL REPORT] (showing that a foreclosure of one house reduces the value of the eighty adjacent houses by \$5000, and thus when a number of foreclosures occur in the same area, the effect on the value of surrounding houses is exponential).

123. The rate of borrowers in the US with negative equity in their property reached 24% at the end of the fourth quarter of 2009. In absolute numbers, this translates into about 11.3 million homes. Moreover, 2.3 million additional homes were close to having negative equity, that is, equity was less than 5%. In total, nearly 29% of borrowers had or nearly had negative equity in their homes. See Bill McBride, *Q4 Report: 11.3 Million U.S. Properties with Negative Equity*, CALCULATED RISK (Feb. 23, 2010), available at <http://www.calculatedriskblog.com/2010/02/q4-report-113-million-us-properties.html>. See also DEUTSCHE BANK, DROWNING IN DEBT—A LOOK AT “UNDERWATER” HOMEOWNERS 2 (Aug. 5, 2009), available at https://faculty.fuqua.duke.edu/~charvey/DB_August_6_2009.pdf (estimating that 14 million borrowers in the US had negative equity by the end of the first quarter of 2009, approximately 27% of all homeowners with mortgages).

124. White, *supra* note 68, at 974-75.

125. Levitin, *supra* note 61, at 640. Furthermore, in states with non-recourse legislation, borrowers have low incentive to invest in home maintenance, even without negative equity. Since the lender is prevented from pursuing the borrower's personal assets and future incomes, the borrower's potential loss in the event of default is less than in states where lenders are allowed to pursue deficiency judgments. Therefore, the borrower has a weaker incentive to maintain the high value of the property in order to lower the probability that its market value will be less than the balance of the debt. See John P. Harding et al., *Deficiency Judgments and Borrower Maintenance: Theory and Evidence*, 9 J. HOUS. ECON. 267 (2000).

126. See OCTOBER OVERSIGHT REPORT, *supra* note 52, at 11.

127. CONG. OVERSIGHT PANEL REPORT, *supra* note 122, at 23-30 (arguing that negative equity in the property is the best predictor of default on mortgages); Jain & Jordan, *supra* note 14 (“In a time of falling house prices and negative equity, it is only logical for homeowners to walk away from their houses (and their mortgage payments) and send the keys back to the lender.”).

128. For data on borrowers' propensity during the mortgage meltdown to default on mortgages even if they could afford to pay them, see Guiso et al., *supra* note 20.

These loans made the option of strategic default *ex post* more attractive to borrowers with negative equity in the property.¹²⁹

VII. NON-RECOURSE REGULATION IN THE AFTERMATH OF THE MELTDOWN

The analysis above showed how non-recourse mortgages were a significant factor in the 2000s housing boom and bust. One would expect that the lessons of the mortgage crisis would have led state legislators to limit the scope of anti-deficiency laws. However, quite the opposite happened. Following the meltdown, the legislatures in some of the leading foreclosure states, in fact, expanded the scope of mandatory non-recourse mortgage legislation.

Nevada is an interesting example of a state that shifted from a recourse regime to a non-recourse regime following the mortgage crisis. In Nevada, a lender generally has the right to sue a borrower for a deficiency if the suit is brought within six months of the foreclosure sale.¹³⁰ The borrower is entitled to a deficiency hearing, and the lender must give the borrower notice of the hearing at least fifteen days in advance.¹³¹ After the hearing, the court determines the fair market value of the property at the time of the foreclosure sale and awards a deficiency judgment.¹³² The judgment must be for the lesser of the following two amounts: (a) the difference between the outstanding debt and the fair market value of the property at the time of the foreclosure sale, or (b) the difference between the outstanding debt and the foreclosure sale price.¹³³

Following the mortgage meltdown, however, the Nevada state legislature amended its rule from recourse to non-recourse. Thus, for loans originating on or after October 1, 2009, Nevada law prohibits lenders from suing borrowers for a deficiency after a foreclosure sale if all of the following five conditions are met: (1) the lender is a financial institution; (2) the property securing the mortgage is a single-family dwelling owned by the borrower at the time of the foreclosure sale; (3) the property was the borrower's primary residence continuously from the time the mortgage was executed; (4) the amount of the mortgage loan was used to purchase the

129. Compare Ghent & Kudlyak *supra* note 52 (finding that in non-recourse states, borrowers with property value significantly below the balance of their debt choose strategic default even when they are able to continue repayment), with Christopher L. Foote et al., *Negative Equity and Foreclosure: Theory and Evidence*, 64 J. URB. ECON. 234 (2008) (concluding that negative equity is a necessary but insufficient condition for default). However, the latter study is based on research from Massachusetts, which does allow lenders to seek deficiency judgments against borrowers. The decision to default in a recourse state, such as Massachusetts, is much less sensitive to negative equity than in a non-recourse state.

130. NEV. REV. STAT. § 40.455 (1987).

131. NEV. REV. STAT. § 40.457 (1969).

132. NEV. REV. STAT. §§ 40.457, 40.459 (1969).

133. NEV. REV. STAT. § 40.459 (1969).

property; and (5) the borrower did not refinance the mortgage.¹³⁴ Moreover, deficiency judgments are prohibited after a short sale¹³⁵ or deed in lieu of foreclosure¹³⁶ if all of the following six conditions are met: (1) the lender is a financial institution; (2) the property securing the mortgage is a single-family dwelling owned by the borrower at the time of the sale in lieu of a foreclosure sale; (3) the property was the borrower's primary residence continuously from the time the mortgage was executed; (4) the amount of the mortgage loan was used to purchase the property; (5) the agreement between the borrower and the lender does not state the amount of money still owed to the lender by the borrower and does not authorize the lender to recover that amount from the borrower; and (6) the agreement contains a conspicuous statement that the lender has waived the right to seek a deficiency judgment.¹³⁷

California was considered a non-recourse state long before the mortgage meltdown. A deficiency judgment following a nonjudicial foreclosure is not allowed in California.¹³⁸ California adopted the "one-action" rule, which provides that after default on a mortgage, the lender's sole remedy is a foreclosure action, and any claim for a deficiency must be sought by way of that proceeding.¹³⁹ This means that the lender can opt to pursue a judicial foreclosure and then seek a deficiency judgment,¹⁴⁰ so long as the borrower is not protected by California's anti-deficiency legislation, or else pursue a nonjudicial foreclosure and forego a deficiency judgment.¹⁴¹ Either one of these options, once completed, constitutes one action.¹⁴² In California, almost all residential foreclosures are nonjudicial, making deficiency judgments very uncommon.¹⁴³ A deficiency judgment is also prohibited in judicial foreclosure if the loan was for the purchase money for an owner-occupied dwelling that consists of one to

134. NEV. REV. STAT. § 40.455 (2009).

135. A short sale is a remedy negotiated between a defaulting borrower and a lender. The borrower sells the house for an amount less than the outstanding mortgage debt, and the lender agrees to accept this lesser amount and cancel the foreclosure.

136. Like a short sale, a deed in lieu of foreclosure is also a negotiated remedy between a defaulting borrower and a lender. The borrower transfers title to the property to the lender, and the lender cancels the foreclosure.

137. NEV. REV. STAT. § 40.458 (2011).

138. CAL. CIV. PROC. CODE § 580d.

139. CAL. CIV. PROC. CODE § 726(a) ("There can be but one form of action for the recovery of any debt or the enforcement of any right secured by a mortgage upon real property."). See also RESTATEMENT (THIRD) OF PROP.: MORTGAGES § 8.2 (1997); MADISON ET AL., *supra* note 54, §§ 12:62-12:68.

140. Under the "security-first" policy of the "one-action" rule, the lender is required to first foreclose before attempting to sue the borrower personally to collect the debt.

141. Nonjudicial foreclosure saves the lender substantial time and money compared to judicial foreclosure. See Karen M. Pence, *Foreclosing on Opportunity: State Laws and Mortgage Credit*, 88 REV. ECON. & STAT. 177, 177-78 (2006) (estimating that foreclosing judicially takes 5 months longer on average than the nonjudicial alternative and imposes higher transaction costs by as much as 10% of the loan balance).

142. The purpose of the "one-action" rule is "to limit a secured creditor to a single suit to enforce its security interest and collect its debt and to compel the exhaustion of all security before a monetary deficiency judgment may be obtained against the debtor." *Nat'l Enters., Inc. v. Woods*, 115 Cal. Rptr. 2d 37, 38 (Cal. Ct. App. 2001).

143. Historically, judicial foreclosures have amounted to only 1% of all foreclosures each year. See Insolvency Law Committee of the State Bar of California Business Law Section, Proposal to Extend Anti-Deficiency Protection to Refinanced Mortgage Obligations, BLS-2012-04, at 2 (proposed May 27, 2011), http://www.cal-bar.ca.gov/Portals/0/documents/legislation/proposals/BLS-2012-04-anti-deficiency_protection-ADA.pdf.

four units, or if the loan was financed by the seller.¹⁴⁴ Moreover, a lender is not entitled to a deficiency judgment following a short sale on a residential property that contains no more than four units.¹⁴⁵

Following the mortgage crisis, California expanded the protection to borrowers even further. In 2012, section 580b of the California Code of Civil Procedure was amended to extend purchase money anti-deficiency protection to homeowners who refinanced their home loans on or after January 1, 2013. The amended rule now protects homeowners who refinanced their original home mortgages from deficiency judgments after a judicial foreclosure, but only up to the principal amount of the original purchase loan that remains unpaid at the time of foreclosure.¹⁴⁶

Similar to regulators' response to the housing crisis during the Great Depression, it seems that the regulatory reaction to the Great Recession has also been focused on relieving the dire situation of borrowers. Vast numbers of borrowers lost their homes in foreclosure proceedings that yielded a significantly lower return than the outstanding balance of the debt; they were then exposed to the risk that lenders would sue them personally for the large deficiency. State regulators therefore moved swiftly to widen the scope of anti-deficiency protection to prevent lenders from continuing to pursue borrowers for the remainder of their debt after foreclosure.

Addressing the predicament of borrowers in the aftermath of a crisis is, of course, vital and should be at the top of regulators' agenda. Anti-deficiency laws are intended to alleviate the plight of borrowers who have lost their homes and protect them from deficiency judgments. The focus of this regulation is on the *ex post* borrowers' burden. However, regulators should not only engage in the *ex post* impact of the regulatory measures but also take into account the long-term *ex-ante* consequences. From an *ex ante* perspective, anti-deficiency laws create an incentive for excessive borrowing. Non-recourse mortgages encourage borrowers to take out loans they may not be able to repay. As demonstrated in this article, non-recourse mortgage regulation creates a moral hazard problem and enables borrowers to externalize the risks of default to third parties.

VIII. CONCLUSION

This article has analyzed the role played by non-recourse mortgages in creating the conditions that triggered the recent global financial crisis. The effect of non-recourse mortgages, in conjunction with the elimination of down payment requirements, was a distortion of risk allocation in the US mortgage market. When borrowers are not required to invest anything upfront in order to get a mortgage and bear no personal liability for repayment in the event of default, they are not deterred from taking out loans beyond their means. Quite the contrary: this only incentivized excessive borrowing, increased the demand for real estate assets, and led to the housing boom and bust.

The analysis of the incentive distortions created by non-recourse mortgages has

144. CAL. CIV. PROC. CODE § 580b.

145. CAL. CIV. PROC. CODE § 580e.

146. 2012 Cal. Legis. Serv. Ch. 64 (S.B. 1069) (amending CAL. CIV. PROC. CODE § 580b).

important implications for the recent regulatory reforms in the US mortgage market. The borrower-friendly state legislation enacted in the wake of the mortgage meltdown that expanded the scope of non-recourse mortgages failed to give proper weight to the negative long-term implications of this regulation, such as distorted incentives for excessive borrowing. Regulators should take heed of the insights from the analysis here and beware of overestimating the short-term benefits of the regulation and of underestimating its long-term costs.

From a broader perspective, the discussion in this article illustrates how regulation that was enacted as a reaction to a severe economic crisis (the Great Depression) not only failed to prevent a large-scale future crisis (the Great Recession), but also laid the groundwork for the emergence of the latter. This represents a novel approach in the academic research on the causes of the recent global financial crisis, where the common assumption is that deregulation was to blame for the crisis.

And yet despite the article's criticism of the regulatory practices in the wake of economic crises, it does not object to regulation *per se*. At the base of the article is the premise that regulation is an important tool in modern economies. The intention here has been to point out the risks created by the atmosphere of public fear and distrust that follows a serious financial crisis, which can lead the regulatory authorities to hurriedly push through regulation without sufficiently evaluating its potential impact. The approach advocated in this article is a forward-looking regulatory process that takes into account the full range of possible outcomes of the regulation rather than the need for a quick regulatory response to appease public outrage. To be sure, the risk that regulatory intervention could cause serious damage in the future should not deter regulators from acting. A regulatory process that includes a thorough review and investigation of possible future impacts of the proposed measures should enable regulators to identify the built-in risks of the regulation and either neutralize them in advance or at least minimize their impact as much as possible.