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Why the Ability-to-Repay Rule Is Vital to Financial Stability

Patricia A. McCoy

Boston College Law School, patricia.mccoy@bc.edu

Susan M. Wachter

University of Pennsylvania, wachter@wharton.upenn.edu

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Why the Ability-to-Repay Rule Is Vital to Financial Stability

PATRICIA A. MCCOY* & SUSAN M. WACHTER**

Following the 2008 financial crisis, Congress required residential mortgage lenders to make a reasonable determination of borrowers' ability to repay before extending credit. Most regard this ability-to-repay rule as a consumer-protection provision. Less well-appreciated is the rule's importance in protecting financial stability.

We respond to a landmark 2015 critique in the University of Pennsylvania Law Review, which argued that the rule will fail to limit bubbles because mortgage lenders will underestimate their liability exposure when home prices are rapidly appreciating and ignore the rule as a consequence. On the contrary, we argue that the ability-to-repay rule acts as a circuit breaker that will help prevent poorly underwritten loans from fueling a future bubble in housing prices that creates the risk of financial collapse.

Without the ability-to-pay rule, loan-to-value limits are not enough to curb property bubbles. Although loan-to-value limits are important to constraining risk, the denominator—the value—will become artificially elevated during a bubble and will only fall after the bust is underway, shrouding the elevated default risk at origination and giving false confidence that mortgage risk is contained. Moreover, we know from the crisis that the inability to repay exacerbates default risk, along with the resulting further depression in housing prices. The ability-to-repay rule is a collective-action solution to this source of systemic risk and a vital mainstay of financial stability.

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* Liberty Mutual Insurance Professor, Boston College Law School; patricia.mccoy@bc.edu. © 2020, Patricia A. McCoy & Susan M. Wachter.

** Albert Sussman Professor of Real Estate, The Wharton School of the University of Pennsylvania; wachter@wharton.upenn.edu. Our thanks to Christine Desan, Itay Goldstein, Paul Rothstein, and the participants in the FinReg@Wharton conference and in workshops at Tulane Law School, Rutgers Law School, Boston College Law School, and the Centre for Commercial Law Studies at Queen Mary University of London for their comments and insights. Susan Wachter also acknowledges financial support from the Zell/Lurie Real Estate Center at The Wharton School of the University of Pennsylvania.

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INTRODUCTION

After the 2008 financial crisis, Congress required residential mortgage lenders, before extending credit, to first make a reasonable determination of applicants' ability to repay.¹ The question is: why? After all, *caveat emptor* had been the traditional common law rule for loans.² And it should have been in lenders' own interests to control defaults.

Tragically, the events of 2008 proved this simple concept wrong. Market forces did *not* quell hazardous mortgage lending practices during the last housing bubble. Instead, we witnessed a repeat of an age-old pattern in which lenders relax credit standards when homes are appreciating on the bet that homes will sell for more than the loan balance if borrowers default. A vicious cycle is set in motion, as easy credit feeds the demand for homes, further accelerating rising home prices and intensifying the pressure for more loose credit. Ultimately, home prices overshoot market fundamentals and the bubble bursts.

Historically, the worst financial crises have been due to real estate bubbles,³ making the severity of the 2008 financial crisis discouragingly predictable. The events of 2008 precipitated the worst housing price slump in the nation since the

1. See Dodd–Frank Wall Street Reform and Consumer Protection Act §§ 1411–12, 15 U.S.C. § 1639c (2012).

2. John Pottow, *Ability to Pay*, 8 BERKELEY BUS. L.J. 175, 177 (2011). Before 2011, Congress, some state legislatures, and some regulators had adopted limited ability-to-repay rules for mortgages, but Dodd–Frank was the first time that Congress mandated such a rule for all residential mortgage lenders nationwide. See *id.* at 179–80, 182.

3. See *infra* note 22 and accompanying text.

Great Depression and brought the global financial system to its knees.⁴ During the ensuing recession, 8.7 million U.S. workers lost their jobs,⁵ an estimated 5.8 million homes were lost to foreclosure,⁶ and the net worth of the median household fell almost 40%.⁷

To avoid a repeat of that catastrophe, Congress enacted the ability-to-repay/qualified mortgage rule (ability-to-repay or ATR/QM rule).⁸ Traditionally, the ability-to-repay rule has been viewed narrowly as a consumer-protection measure, protecting borrowers from loans that are likely to put their homes at risk.⁹ Less-appreciated is the key role that the ATR/QM rule plays in regulating housing bubbles and avoiding financial crises.

In an acclaimed article in the *University of Pennsylvania Law Review*, law professors Ryan Bubb and Prasad Krishnamurthy were the first to explore the significance of the ability-to-repay rule to financial stability in depth.¹⁰ They placed justifiable importance on avoiding future housing bubbles and regulating systemic risk.¹¹ They concluded, however, that the ATR/QM rule is incapable of constraining bubbles because lenders will succumb to over-optimism when market mania sets in and the rule will fail to dampen the over-lending.¹² In their view, creditors will disregard the rule because they will dismiss the liability exposure as negligible during bubbles.¹³ Instead, Professors Bubb and Krishnamurthy advocate leverage limits to regulate housing bubbles.¹⁴

4. See FIN. CRISIS INQUIRY COMM'N, THE FINANCIAL CRISIS INQUIRY REPORT: FINAL REPORT OF THE NATIONAL COMMISSION ON THE CAUSES OF THE FINANCIAL AND ECONOMIC CRISIS IN THE UNITED STATES xvi (2011) [hereinafter FINANCIAL CRISIS INQUIRY REPORT], http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/fcic_final_report_full.pdf [<https://perma.cc/W2C6-7LD8>] (“[I]t was the collapse of the housing bubble—fueled by low interest rates, easy and available credit, scant regulation, and toxic mortgages—that was the spark that ignited a string of events, which led to a full-blown crisis in the fall of 2008.”).

5. *Chart Book: The Legacy of the Great Recession*, CTR. ON BUDGET & POLICY PRIORITIES (June 6, 2019), <https://www.cbpp.org/research/economy/chart-book-the-legacy-of-the-great-recession> [<https://perma.cc/4VCA-F7KU>].

6. Jonathan Spader & Christopher Herbert, *Waiting for Homeownership: Assessing the Future of Homeownership, 2015–2035*, 37 B.C. J.L. & SOC. JUST. 267, 277 (2017).

7. Jesse Bricker et al., *Changes in U.S. Family Finances from 2007 to 2010: Evidence from the Survey of Consumer Finances*, 98 FED. RES. BULL. 1, 16–17 (2012), <https://www.federalreserve.gov/pubs/bulletin/2012/pdf/scf12.pdf> [<https://perma.cc/BCQ6-8NDF>].

8. See Dodd–Frank Wall Street Reform and Consumer Protection Act §§ 1411–12, 15 U.S.C. § 1639c (2012).

9. See, e.g., Ability-to-Repay and Qualified Mortgage Standards Under the Truth in Lending Act (Regulation Z), 78 Fed. Reg. 6408, 6415 (Jan. 30, 2013) (codified at 12 C.F.R. pt. 1026) (describing ability-to-repay requirements as “consumer protections for mortgages” and the Qualified Mortgage provisions as “protecting consumers from unaffordable loans”).

10. See Ryan Bubb & Prasad Krishnamurthy, *Regulating Against Bubbles: How Mortgage Regulation Can Keep Main Street and Wall Street Safe—From Themselves*, 163 U. PA. L. REV. 1539 (2015).

11. See *id.* at 1545.

12. See *id.* at 1628, 1630.

13. See *id.* at 1548.

14. See *id.* at 1610–22. Leverage limits cap the size of the total mortgage indebtedness on a home to a set percentage of home equity. The traditional leverage limit (also known as a loan-to-value or LTV limit) was 80%.

In this Article, we agree with Professors Bubb and Krishnamurthy about the importance of preventing bubbles but depart in other key respects. Specifically, we argue that the ability-to-repay rule can be effective in limiting bubbles. Our analysis benefits from a landmark new empirical assessment of the ATR/QM rule's effectiveness by its implementing agency, the Consumer Financial Protection Bureau (CFPB or Bureau). This CFPB assessment was not available to Professors Bubb and Krishnamurthy at the time of their article. We deploy this study, plus additional research findings, to conclude that lenders *do* comply with ability-to-repay requirements, even when the housing market may be overly optimistic. We also conclude that far from easily overlooking or minimizing liability exposure (as Professors Bubb and Krishnamurthy posit), lenders are acutely aware of liability risk. Plus, the ability-to-repay law is specifically designed to discourage lenders from ignoring this risk or from falling into untoward complacency. Furthermore, ability-to-repay requirements result in a reduction in mortgage default rates under stressed economic conditions, redounding not only to the welfare of consumers, but also to financial stability writ large.

Contrary to previous assertions, lenders do comply with ability-to-repay requirements, partly because, as we show, the ATR/QM rule is packed with objective requirements. These objective requirements force lenders to generate more hard data about their mortgage originations, which, in turn, facilitates oversight by investors and regulators.¹⁵

Lenders also comply with the ATR/QM rule due to its multiple mechanisms for oversight and enforcement. Professors Bubb and Krishnamurthy focused on one such enforcement mechanism—statutory liability to borrowers for violations of the ability-to-repay provisions—but did not address the numerous other provisions that enforce ATR/QM compliance. In their judgment, the statutory liability creating private exposure materializes too far off in the future to meaningfully deter lax underwriting.¹⁶ Although we take this concern seriously, the very existence of this provision appears to have a chilling impact today.¹⁷

Moreover, numerous other oversight mechanisms ensure compliance with the rule. These include improved internal controls, regular federal examinations for compliance carrying stiff potential sanctions, regulatory circulars publicizing the rare violations, overlapping enforcement by state attorneys general, costly credit enhancements required by rating agencies, post-sale audits by federal investors, and liability to investors and guarantors for violations of representations and warranties associated with the ability to repay.

15. See BEVERLY HIRTLE ET AL., FED. RESERVE BANK OF N.Y., PUB. NO. 768, THE IMPACT OF SUPERVISION ON BANK PERFORMANCE 2 (2019), https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr768.html [https://perma.cc/C53M-4FCK] (concluding that more heavily supervised banks hold less risky loan portfolios).

16. See Bubb & Krishnamurthy, *supra* note 10, at 1548, 1601–06.

17. In recent years, mortgage lenders have mostly limited themselves to conservative loan products due to liability concerns, even as housing prices have risen steadily nationally since 2012. Consequently, the threat of liability does appear to exert deterrent force under current market conditions. See *infra* notes 226–30, 245–49, and accompanying text.

For these reasons, we argue that underestimating the ability-to-repay rule's importance to financial stability would be a serious mistake. To the contrary, the ability-to-repay rule is necessary to prevent a replay of the reckless loans that precipitated the 2008 crisis and to monitor bubble-like pricing behavior going forward. Overturning or neutering the rule would pose a serious threat to financial stability.

This issue has taken on fresh importance with the election of the Administration and its aggressive deregulatory campaign. As memories of the 2008 financial crisis fade, critics have called for the repeal or replacement of the ATR/QM rule.¹⁸ Changes in CFPB leadership raise questions about the future contours of the ATR/QM rule. Meanwhile, the Treasury Department under Secretary Steven Mnuchin has steadily dismantled other important aspects of systemic risk regulation.¹⁹ Particularly in view of these developments and the new empirical evidence that has come to light concerning the rule's efficacy, the time has come for a careful reassessment of the rule and its financial stability implications.

The Article proceeds as follows. In Part I, we describe why market forces will not curb lax loan underwriting during periods of rising home prices and the resulting danger to financial stability. Part II describes the loose credit practices that culminated in the 2008 crisis and that led to the 2010 passage of the ability-to-repay rule. Part III describes the workings of the ability-to-repay rule and its implementation.

In Part IV, we present our central argument: the ability-to-repay rule is essential to financial stability. The empirical record shows that ability-to-repay requirements reduce mortgage defaults while eliciting lender compliance, even during incipient bubbles. Thus, the main behavioral critique of the rule—that lenders will disregard the rule due to myopia when housing prices skyrocket—is demonstrably wrong. Instead, the ATR/QM rule can operate as a circuit breaker during incipient bubbles by preventing excessively risky mortgages from originating and thereby tamping down the rise in demand that fuels runaway home prices. This circuit breaker functions as an important safeguard to financial stability.

Part V responds to criticisms of the rule and argues that proposals to roll back the rule are misguided. Some of those proposals—such as complete repeal and a return to market forces²⁰—exemplify amnesia about the breakdown in market discipline that produced the crisis. As we argue in Part VI, other proposals, such

18. See, e.g., Edward J. Pinto, *Repealing Dodd-Frank's Qualified Mortgage and Qualified Residential Mortgage*, in HERITAGE FOUND., THE CASE AGAINST DODD-FRANK: HOW THE "CONSUMER PROTECTION" LAW ENDANGERS AMERICANS 31, 31 (Norbert J. Michel ed., 2016).

19. For a description of these events, see Jeremy C. Kress, Patricia A. McCoy & Daniel Schwarcz, *Why Dismantling Nonbank SIFI Regulation Is a Serious Mistake*, CLS BLUE SKY BLOG (Dec. 19, 2018), <http://clsbluesky.law.columbia.edu/2018/12/19/why-dismantling-nonbank-sifi-regulation-is-a-serious-mistake/> [https://perma.cc/37WZ-BVYM].

20. See Paul S. Willen, *Evaluating Policies to Prevent Another Crisis: An Economist's View* 2, 4 (Nat'l Bureau of Econ. Research, Working Paper No. 20100, 2014), <https://www.nber.org/papers/w20100.pdf> [https://perma.cc/5ZPU-4DF4].

as dropping the ATR/QM rule in favor of leverage limits alone, would nullify the proven beneficial effects of ability-to-repay requirements.

Although addressing leverage is important, undermining the ATR/QM rule is not the answer. Loan-to-value (LTV) caps cannot stop a bubble because the denominator, value, automatically rises with prices, which blunts a breach of the cap, and can be easily manipulated during a bubble. This can occur through inflated appraisals or by incurring added indebtedness as a home's value soars in the form of second liens.²¹ As a result, LTV ratios can remain deceptively constant even during a bubble, as they did during the subprime bubble in 2008. Instead, we argue that the ATR/QM rule provides crucial safeguards against bubbles that are not susceptible to such manipulation, and does so in a way that helps preserve access to credit.

I. REAL ESTATE BUBBLES AND THEIR SYSTEMIC THREAT

That lenders chronically relax lending standards during real estate booms when left to their own devices is well-known. Lax loan underwriting during property bubbles endangers consumers and jeopardizes financial stability alike. This threat to financial stability is so grave that, historically, the worst financial crises have resulted from real estate bubbles financed through easy credit.²²

Over the centuries, rising home prices have repeatedly gone hand-in-hand with loose credit²³ because rapid home appreciation undermines private incentives to engage in sound mortgage underwriting, absent other constraints.²⁴ In a rising price environment, delinquency rates are low because distressed borrowers can usually avoid default by refinancing their mortgages or retiring their loans through the sale of their homes. These low default rates, in turn, embolden market actors to cut lending standards.

The bottom line is that mortgage lenders and investors are prone to loosen underwriting standards during periods of property value inflation.²⁵ This tendency

21. Second liens were difficult to monitor and remain so, although one of the current co-authors separately argues elsewhere for the importance of new monitoring mechanisms. See Adam J. Levitin & Susan M. Wachter, *Second Liens and the Leverage Option*, 68 VAND. L. REV. 1243 (2015).

22. See MARKUS BRUNNERMEIER ET AL., INT'L CTR. FOR MONETARY & BANKING STUDIES, GENEVA REPORTS ON THE WORLD ECONOMY 11: THE FUNDAMENTAL PRINCIPLES OF FINANCIAL REGULATION 32 (2009), <http://www.princeton.edu/~markus/research/papers/Geneva11.pdf> [<https://perma.cc/7PPA-EWDU>]; RICHARD J. HERRING & SUSAN M. WACHTER, GRP. OF THIRTY, OCCASIONAL PAPER NO. 58, REAL ESTATE BOOMS AND BANKING BUSTS—AN INTERNATIONAL PERSPECTIVE 23–54 (1999); CARMEN M. REINHART & KENNETH S. ROGOFF, THIS TIME IS DIFFERENT: EIGHT CENTURIES OF FINANCIAL FOLLY xlii–xli, 158–62 (2009); Moritz Schularick & Alan M. Taylor, *Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870–2008*, 102 AM. ECON. REV. 1029, 1032 (2012).

23. See sources cited *supra* note 22.

24. See Ben Bernanke & Mark Gertler, *Agency Costs, Net Worth, and Business Fluctuations*, 79 AM. ECON. REV. 14, 15 (1989); HERRING & WACHTER, *supra* note 22, at 11–12.

25. Such deterioration occurred during the run-up to the 2008 financial crisis of 1996. See Yuliya Demyanyk & Otto Van Hemert, *Understanding the Subprime Mortgage Crisis* 2–3 (Fed. Res. Bank of St. Louis Working Paper No. 2007-05, 2008), https://www.stlouisfed.org/~media/files/pdfs/banking/spa_2007_05.pdf?la=en [<https://perma.cc/R46W-AQRF>]. This also occurred in prior bubbles, such as in

may reflect stratagem, myopia, or both.²⁶ Myopia, for instance, can occur when market participants naively believe that the low prevailing default rates will persist, even though price rises caused by unsustainable credit are what keep default rates low.²⁷ Price escalation, resulting from lax lending, provides false confidence to myopic lenders of seemingly reduced collateral risk.²⁸

Other market actors may engage in cognitive dissonance by recognizing underwriting risks while deceiving themselves into thinking that things will turn out for the better. Some lenders who consciously loosen standards may rationalize their actions by assuming that collateral values will rise indefinitely, thereby hiding their underwriting sins.²⁹

Other times, deteriorating lending standards can reflect strategic behavior. A rollback in credit standards offers distinct risks and rewards. The risks include higher eventual losses from elevated defaults.³⁰ The rewards include higher lending volumes and higher commissions because broker and lender compensation is based on dollar volume and not on the eventual performance of the loans.³¹

This prospect of higher compensation may induce strategic behavior. Lenders may resort to shoddy underwriting with eyes wide-open, recognizing the risk while managing it through conscious strategies. Adverse selection against investors in mortgage-backed securities—the subject of recent academic debate³²—is

the Asian Financial Crisis. See Susan Wachter, *The Housing and Credit Bubbles in the United States and Europe: A Comparison*, 47 J. MONEY, CREDIT & BANKING 37, 39 (2015).

26. See Nicholas C. Barberis, *Psychology and the Financial Crisis of 2007–2008*, in FINANCIAL INNOVATION: TOO MUCH OR TOO LITTLE? 15 (Michael Haliassos ed., 2012) (discussing competing behavioral theories of the 2008 financial crisis).

27. *Id.* at 16.

28. *Id.* at 17–18 (explaining how some market participants may extrapolate past price gains too far into the future).

29. *Id.* at 20–21.

30. This risk—known as credit risk or default risk—refers to the risk of nonpayment and can be measured by delinquencies, defaults, or foreclosures. A loan goes delinquent if a scheduled payment is not made by the due date. If a delinquency is not cured within a time period specified in the loan agreement—usually three to six months—the loan goes into default and becomes subject to collection. In the event of default, servicers have a contractual right to foreclose on the home and to recover the loss from the sale proceeds (subject to any loss-mitigation requirements).

31. See Barberis, *supra* note 26, at 19.

32. Compare Benjamin J. Keys et al., *Did Securitization Lead to Lax Screening? Evidence from Subprime Loans*, 125 Q.J. ECON. 307 (2010) (concluding that securitization practices during the period studied adversely affected the screening incentives of lenders) [hereinafter Keys et al., *Did Securitization Lead to Lax Screening?*], and Atif Mian & Amir Sufi, *The Consequences of Mortgage Credit Expansion: Evidence from the U.S. Mortgage Default Crisis*, 124 Q.J. ECON. 1449 (2009) (finding that risky mortgage lending in subprime zip codes was correlated with securitization of subprime loans), with Ryan Bubb & Alex Kaufman, *Securitization and Moral Hazard: Evidence from Credit Score Cutoff Rules*, 63 J. MONETARY ECON. 1 (2014) (disputing Keys et al.’s 2010 study). See also Adam J. Levitin & Susan M. Wachter, *Why Housing?*, 23 HOUSING POL’Y DEBATE 5, 18–19 (2013) (“Why would the securitization desk want to tell the trading desk to stop buying PLS and thereby shut down their own business? . . . The true insiders—the securitization and CDO desks—pulled an inside job not just on outsiders but on their own firms as well.”).

one form of strategic behavior. Another strategy is market timing, in which lenders or their loan officers exit the market before it crashes.³³

Regardless of whether myopia or moral hazard (or both) explain the phenomenon, mortgage underwriting standards historically drop during housing bubbles. Further, when housing prices are rising, other market constraints on lending risk are prone to break down.³⁴ Property appraisals do not curb risk because home appreciation buoys market comparables, which then are used as appraised values.³⁵ Similarly, absent other constraints, lenders may ignore standard recourse clauses in their securitization deals either because (myopically) they perceive no risk of recourse or (strategically) they cause their entities to be thinly capitalized.³⁶

As credit eases, borrowed funds pour into the real estate market, artificially feeding demand and, with it, property values.³⁷ Home values are then prone to inflate because lenders and investors cannot observe how much total credit risk has accumulated in the system.³⁸

At some point, the cycle heads down after credit constraints ease to such a degree that further easing no longer stimulates demand at the same pace. Then, housing prices decelerate, and the capitalization of expected price gains into house prices reverses. Lending based on existing collateral values comes into question, and lenders stop extending credit based on the expectation of constant or increasing price rises. The price and credit bubble is followed by a price and credit bust.

There are four reasons why housing bubbles are particularly harmful to financial stability. First, most homes are purchased on credit granted by banks or non-bank lenders, which are both vulnerable to financial contagion. Second, there are

33. In one notorious example of successful market timing, Herbert and Marion Sandler—the founders of Golden West Financial Corp. and its negative amortization mortgage lender, World Savings—sold their company to Wachovia Bank for \$24.2 billion in 2006. Carolyn Said, *Why Sandler's Sold Their S&L/Wachovia's Deal for Golden West Called a Good Fit*, SFGATE (May 9, 2006, 4:00 AM), <https://www.sfgate.com/business/article/Why-Sandler-sold-their-S-L-Wachovia-s-deal-for-2497431.php> [<https://perma.cc/3CQ7-JY4B>]. The disastrous World Savings loans that Wachovia acquired contributed to Wachovia's later demise in the fall of 2008. See Floyd Norris, *A Bank Is Survived by Its Loans*, N.Y. TIMES (May 14, 2009), <https://archive.nytimes.com/www.nytimes.com/2009/05/15/business/economy/15norris.html>.

34. See Richard Herring & Susan Wachter, *Bubbles in Real Estate Markets*, in *ASSET PRICE BUBBLES: THE IMPLICATIONS FOR MONETARY, REGULATORY, AND INTERNATIONAL POLICIES* 217, 217–18, 221 (William C. Hunter et al. eds., 1st MIT Press Paperback ed. 2005).

35. See HERRING & WACHTER, *supra* note 22, at 13, 19–20.

36. See Patricia A. McCoy & Susan Wachter, *Representations and Warranties: Why They Did Not Stop the Crisis*, in *EVIDENCE AND INNOVATION IN HOUSING LAW AND POLICY* 289, 302–04, 308 (Lee Anne Fennell & Benjamin J. Keys eds., 2017). We emphasize the words “absent other constraints.” As we discuss below, lenders are now more likely to pay close attention to recourse clauses, having paid large recent settlements and judgments for violating those clauses. This represents a change from before the crisis. See *infra* note 255.

37. See Atif Mian & Amir Sufi, *Fraudulent Income Overstatement on Mortgage Applications During the Credit Expansion of 2002 to 2005*, 30 REV. FIN. STUD. 1831, 1832–34, 1841–43 (2017).

38. See Levitin & Wachter, *supra* note 32, at 18–19; Adam J. Levitin & Susan M. Wachter, *Explaining the Housing Bubble*, 100 GEO. L.J. 1177, 1184, 1189, 1254 (2012).

no effective strategies for restraining housing bubbles by short-selling homes. Third, the debt overhang when prices correct means that households are not just illiquid, but also insolvent. Finally, the main technique for resolving loan defaults involves dumping foreclosed homes onto the sales market, which intensifies the collapse in home values.

Turning to the first reason, most homebuyers lack the wealth to pay for such a large asset in cash and finance the purchase through credit.³⁹ As a result, the financial health of the banks and nonbank firms that extend mortgage credit depends on successful loan repayment. If a housing bubble ensues and bursts, inflicting loan losses, the banks' solvency will hang in the balance.⁴⁰ Because it is difficult to rapidly liquidate these illiquid, long-term assets at full book value, a run on deposits can jeopardize bank solvency.⁴¹ Meanwhile, nonbank lenders either have little capital or rely on banks' capitalization, making these thinly capitalized entities particularly at-risk.⁴² Because the bubble burst affects mortgage lenders across the board, losses are correlated and distributed in unknown ways, making lenders suspect and susceptible to run-inducing fears.⁴³

This phenomenon has systemic implications because bank runs can spread into panics that can topple other banks.⁴⁴ Counterparty exposure is one key channel through which bank panics spread.⁴⁵ In the commercial banking sector, counterparty exposure arises from the web of interbank loans, reciprocal deposit accounts, and the payments system that link banks.⁴⁶ Further, commercial banks are not the only firms that are vulnerable to panics, as the 2008 financial crisis showed. In 2008, shadow banking firms, including investment banks and credit default swap issuers, experienced financial contagion through the counterparty channel as well. For example, numerous shadow banking firms depended on short-term, demand-like financing (such as repurchasing agreements) that exposed those firms to runs while inflicting losses on their counterparties (including commercial banks).⁴⁷ Counterparty exposure also spread through the

39. See Franklin Allen & Elena Carletti, *What Is Systemic Risk?*, 45 J. MONEY, CREDIT & BANKING 121, 123 (2013); Patricia A. McCoy & Susan M. Wachter, *Why Cyclicity Matters to Access to Mortgage Credit*, 37 B.C. J.L. & SOC. JUST. 361, 363 (2017).

40. See McCoy & Wachter, *supra* note 39, at 361–62; see also Allen & Carletti, *supra* note 39, at 125 (discussing “risk of contagion” in the context of bank lending during housing bubbles).

41. See Douglas W. Diamond, *Banks and Liquidity Creation: A Simple Exposition of the Diamond-Dybvig Model*, 93 ECON. Q. 189, 196, 199 (2007).

42. See You Suk Kim et al., *Liquidity Crises in the Mortgage Market*, 2018 BROOKINGS PAPERS ON ECON. ACTIVITY 347, 347–50.

43. See Susan Wachter, *Comment by Susan Wachter*, 2018 BROOKINGS PAPERS ON ECON. ACTIVITY 420, 420–22 (providing Professor Susan Wachter’s commentary on the article).

44. See Kathryn Judge, *Interbank Discipline*, 60 UCLA L. REV. 1262, 1275–77 (2013).

45. See FIN. STABILITY BD., GLOBAL SHADOW BANKING MONITORING REPORT 2012, at 20 (2012).

46. See Judge, *supra* note 44, at 1275–76.

47. See Jeremy C. Kress, Patricia A. McCoy & Daniel Schwarcz, *Regulating Entities and Activities: Complementary Approaches to Nonbank Systemic Risk*, 92 S. CAL. L. REV. 1455 (2019); ZOLTAN POZSAR ET AL., FED. RESERVE BANK OF N.Y., PUB. NO. 458, SHADOW BANKING 11–12 (2012), https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr458.pdf [<https://perma.cc/A9RU-SFHZ>]. The term “repos” refers to repurchase agreements, which are contracts in which the seller of a

proliferation of credit-linked derivatives—notably mortgage-backed securities, collateralized debt obligations, and credit default swaps—because the financial performance of those instruments relied heavily on full and timely repayment of the underlying residential mortgages.⁴⁸

Asset liquidation upon recognition of losses is another transmission channel for financial contagion.⁴⁹ Systemic failures can spread when distressed financial firms liquidate assets for cash to pay their creditors. If fire sales depress the values of those assets, other financial firms holding the same asset classes will sustain losses, with a concomitant hit to capital.⁵⁰ Capital depletion and any bank failures that ensue will cause credit to contract, inflicting serious economic harm in the form of an industrial downturn, job loss, depressed consumer demand, and ultimately a recession.⁵¹ This is particularly the case because the main way to dispose of formerly owned single-family homes is to go through a foreclosure process and sell them unoccupied into an oversold market, as discussed below.

The second reason housing bubbles pose systemic risk is due to the lack of effective short-sale strategies to rein in home prices.⁵² When home prices overshoot economic fundamentals, it is impossible for homeowners to sell their homes with any assurance of buying them back when property prices subside. Similarly, investors cannot sell homes that they do not own.⁵³ Unlike commodities, which are fungible in nature, the unique character of individual homes makes short selling impossible. This is the fundamental incompleteness of the housing market that makes it susceptible to bubbles in ways that other asset markets avoid, as short sellers in other markets make money from balancing myopic and exuberant pricing pressures with selling pressures, recouping gains when

security agrees to repurchase the security from the buyer at a higher price, often on an overnight basis. Repurchase agreements are the functional equivalent of short-term loans to sellers of securities. See *What Is a Repo?*, INT'L CAP. MKT. ASSOC., <https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/repo-and-collateral-markets/icma-ercc-publications/frequently-asked-questions-on-repo/1-what-is-a-repo/> [<https://perma.cc/3DW7-3ZLY>] (last visited Dec. 19, 2019).

48. See KATHLEEN C. ENGEL & PATRICIA A. MCCOY, *THE SUBPRIME VIRUS: RECKLESS CREDIT, REGULATORY FAILURE, AND NEXT STEPS* 43–54, 58–61, 67–68 (2011).

49. Allen & Carletti, *supra* note 39, at 122–25; see also Kress et al., *supra* note 47.

50. See Allen & Carletti, *supra* note 39, at 125; George G. Kaufman & Kenneth E. Scott, *What Is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?*, 7 INDEP. REV. 371, 377 (2003).

51. JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT, INTEREST, AND MONEY* 318–19 (1936).

52. See Susan M. Wachter, *Informed Securitization*, in *PRINCIPLES OF HOUSING FINANCE REFORM* 209, 210–11 (Susan M. Wachter & Joseph Tracy eds., 2016); Barberis, *supra* note 26, at 16. Although some investors devised ways to short mortgage-backed securities and collateralized debt obligations during the run-up to 2008, those deals increased the amount of leveraged lending, and neither caused mortgage-lending-default premia (adjusted for risk) to rise nor prices of mortgage-backed securities, credit default swaps, or the underlying mortgages to fall. See McCoy & Wachter, *supra* note 39, at 366; Levitin & Wachter, *Explaining the Housing Bubble*, *supra* note 38, at 1243–49. In fact, the pricing of the put option adjusted for risk continued to fall throughout the bubble. See *id.* at 1203–06.

53. Wachter, *supra* note 52, at 210–11.

prices inevitably fall. In the case of housing, prices do inevitably fall, but they fall too late, such that no one will be able to gain from selling the bubble short.⁵⁴

Third, even after homes correctly reprice, borrowing by the household sector is suppressed. After a housing bubble bursts and home prices drop, indebted homeowners may not have enough home equity left to satisfy the collateral requirements for additional loans. Tighter credit standards—resulting from the now-decapitalized banks' withdrawal of lending—may likewise preclude those households from refinancing their mortgages to get a lower interest rate. This inability to borrow more money will cause those households to cut back on spending.⁵⁵

Finally, housing bubbles threaten financial stability because the leading method for resolving distressed home loans—eviction through foreclosure—pushes vacant houses on the real estate market.⁵⁶ Each fresh glut of deteriorating properties places more downward pressure on home values and sets a vicious cycle in motion as more and more distressed borrowers fall into negative equity and go into default.⁵⁷

The ATR/QM rule's nexus to this narrative involves the expansion of credit during the inflationary period of the housing cycle. In order to maintain loan volumes and fee revenues as home prices heat up, originators have to expand the pool of eligible borrowers. They do so by qualifying weaker loan applicants through the use of lax underwriting techniques and high-risk, nontraditional loan products.⁵⁸ More of these applicants, when approved, will be unable to repay their mortgage loans. In the process, the growth in high-risk loan features and easy credit increases the demand for homes, buoying property values while ramping up systemic risk. The next Part describes how this dynamic played out in the lead-up to the 2008 financial crisis.

II. THE EVENTS PRECIPITATING PASSAGE OF THE ABILITY-TO-REPAY RULE

The genesis of the ability-to-repay rule dates back to the 2000s, when risky underwriting practices and novel mortgage products proliferated, setting the stage for the later spike in mortgage defaults that triggered the 2008 crisis. From 2002 through 2006, U.S. home prices rose, making it harder for lenders to qualify

54. Of course, it is possible to evade the consequences of the bubble by cash-out refinancing through the default option, but rather than containing the bubble, this just adds more leverage, causing more financial contagion.

55. ATIF MIAN & AMIR SUFI, HOUSE OF DEBT: HOW THEY (AND YOU) CAUSED THE GREAT RECESSION, AND HOW WE CAN PREVENT IT FROM HAPPENING AGAIN 50–51 (2014).

56. Levitin & Wachter, *supra* note 32, at 6, 20.

57. See Bernanke & Gertler, *supra* note 24, at 28; Levitin & Wachter, *supra* note 32, at 6, 20; see also Arthur Acolin, Xudong An, Raphael W. Bostic & Susan M. Wachter, *Homeownership and Nontraditional and Subprime Mortgages*, 27 HOUSING POL'Y DEBATE 393, 406 (2017) (demonstrating the inverse relationship between pre-recession subprime lending and post-recession homeownership).

58. See *infra* Part II. Nontraditional mortgage products include hybrid adjustable-rate mortgages and non-fully amortizing mortgages (most notably interest-only, negative amortization, and balloon loans). Jane K. Dokko et al., *Affordability, Financial Innovation, and the Start of the Housing Boom 2* (Fed. Reserve Bank of Chi., Working Paper No. 2019-01, 2019), <https://www.chicagofed.org/~media/publications/working-papers/2019/wp2019-01-pdf.pdf> [<https://perma.cc/ZA4U-P23H>].

homebuyers for mortgages based on strict, conventional underwriting criteria.⁵⁹ Lenders responded by resorting to questionable practices to expand the group of applicants who were eligible for costlier homes.⁶⁰

One such practice was lender use of low-documentation loans—in which lenders accepted borrowers' income, job, and assets as stated, without verification or documentation.⁶¹ Another was offering borrowers nontraditional mortgage products with less than fully amortizing terms, such as balloon loans, interest-only loans, option-pay loans, and negative amortization mortgages.⁶² These products offered lower initial payments than traditional fixed-rate loans because payments during the first few years of the loan did not fully amortize principal.⁶³ When lenders judged applicants' ability to repay based on the lower initial payments alone—which occurred during the boom—these nontraditional products made it easier to qualify applicants for loans.⁶⁴ During the housing bubble, lenders further

59. See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-78R, INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS FOR HOME MORTGAGES AND ASSOCIATED ECONOMIC AND MARKET DEVELOPMENTS 37 (2007) [hereinafter INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS] (noting an easing of underwriting standards); Dokko et al., *supra* note 58, at 30 fig.1 (depicting national home price appreciation over that period).

60. See FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 104–05; Dokko et al., *supra* note 58, at 4.

61. FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 110–11; INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 5, 42–43; ENGEL & MCCOY, *supra* note 48, at 36–37; see also Michael LaCour-Little & Jing Yang, *Taking the Lie Out of Liar Loans: The Effect of Reduced Documentation on the Performance and Pricing of Alt-A and Subprime Mortgages*, 35 J. REAL EST. RES. 507, 519–20 & ex.2 (2013).

62. See FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 105, 111 (discussing the growth of nontraditional mortgage products leading up to the financial crisis); INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 5, 45 (depicting expansion of nontraditional mortgage products from 2000–2006); Andrew Davidson, Alex Levin, Andrey D. Pavlov & Susan M. Wachter, *Why Are Aggressive Mortgage Products Bad for the Housing Market?*, 84 J. ECON. & BUS. 148, 150 fig.1 (2016) (depicting the growth of non-agency origination volumes from 2000–2007); Dokko et al., *supra* note 58, at 30 fig.1, 33 fig.4 (depicting expansion of nontraditional mortgage products from 2000–2010). Mortgage rates did not adjust to reflect added risk. See Adam J. Levitin, Desen Lin & Susan M. Wachter, *Mortgage Risk Premiums During the Housing Bubble*, 59 J. REAL EST. FIN. & ECON. 1, 14–16 (2019).

63. FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 106, 108; ENGEL & MCCOY, *supra* note 48, at 34–35; Patricia A. McCoy, *Rethinking Disclosure in a World of Risk-Based Pricing*, 44 HARV. J. ON LEGIS. 123, 143–46 (2007). Although option-pay loans offered borrowers the choice of making fully amortizing payments every month, many option-pay borrowers instead made lower payments. FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 106; ENGEL & MCCOY, *supra* note 48, at 35.

Extended-term products such as forty-year mortgages and hybrid ARMs were also used to the same effect. See Dokko et al., *supra* note 58, at 33 fig.4. Many extended-term mortgages and hybrid ARMs did fully amortize principal. But extended-term loans lowered monthly payments by lengthening the loan term from its traditional thirty years, whereas hybrid ARMs did so by offering a low fixed-interest rate for the first two or three years, after which the interest rate would float. See FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 105–06; INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 40; ENGEL & MCCOY, *supra* note 48, at 34–35; see also Kristine M. Young, *The Aging Population and Maturing Mortgage Loans: Ensuring a Secure Financial Lifeline for the Elderly Through Mortgage Lending*, 16 ELDER L.J. 477, 484–85 (2008).

64. See FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 106; ENGEL & MCCOY, *supra* note 48, at 37.

relaxed the maximum debt-to-income (DTI) ratios needed to qualify for mortgage loans.⁶⁵

Originators combined these techniques for expanding the eligible applicant pool for mortgages with other liberal credit practices that ratcheted up credit risk.⁶⁶ They qualified applicants with blemished, weaker credit for higher priced subprime loans.⁶⁷ In some cases, they relaxed combined loan-to-value ratio requirements when approving home loans backed by junior liens, either when extending the first mortgage or later. Doing so reduced homeowners' equity (and any needed down payment) at the inception of the loan or after origination, which was difficult if not impossible to monitor in real time.⁶⁸

As applicants strained to buy higher cost homes, nontraditional mortgages, adjustable-rate loans, and loans with high DTI ratios and scant documentation surged out of control and crowded out safer, traditionally underwritten loans.⁶⁹ By the bubble's height in 2006, low-documentation loans accounted for about two-thirds of prime adjustable-rate mortgages (ARMs), four-fifths of Alt-A ARMs,⁷⁰ and almost half of subprime ARMs.⁷¹ Negative amortization and interest-only loans gained market share at the expense of old-fashioned, fully amortizing loans, growing from less than 5% of nonprime originations in 2001 to

65. FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 105; INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 42–43; *see also* Daniel L. Greenwald, *The Mortgage Credit Channel of Macroeconomic Transmission* 9–12, 10 fig.2, 72 fig.B.5 (2017) (unpublished Ph.D dissertation, New York University), https://bcf.princeton.edu/wp-content/uploads/2017/11/DG-Paper-mortgage_credit_channel_nov_2017.pdf [<https://perma.cc/FA7S-YCNQ>]. DTI limits place a cap on the ratio of an applicant's total monthly debt payments to his or her monthly income. Greenwald refers to DTI ratios as payment-to-income (PTI) ratios. *See id.* at 2 n.1.

66. *See* FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 111; INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 47; ENGEL & MCCOY, *supra* note 48, at 34–37.

67. *See* INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 2; Davidson et al., *supra* note 62, at 150–51 figs.1–2. Subprime mortgages were higher-priced mortgages, ostensibly designed for less creditworthy borrowers. *What Is a Subprime Mortgage?*, CONSUMER FIN. PROT. BUREAU (Feb. 24, 2017), <https://www.consumerfinance.gov/ask-cfpb/what-is-a-subprime-mortgage-en-110/> [<https://perma.cc/ZUK3-LWQM>].

68. *See* FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 105, 109–10; INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 38–39; ENGEL & MCCOY, *supra* note 48, at 35–36; Greenwald, *supra* note 65, at 73 fig.B.6. The loan-to-value (LTV) ratio divides the loan principal by the value of the property. Combined LTV (CLTV) ratios divide the principal size of all outstanding loans secured by the home by the property's value. *See* Levitin & Wachter, *supra* note 21, at 1272–84, for a discussion of why CLTVs are not monitored by first-lien lenders. Despite their interest in the additional risk imposed by second liens, first-lien lenders lack the power to act. *Id.* at 1281. CLTVs did substantially increase in the run-up to the crisis, whereas LTVs did not. Levitin & Wachter, *supra* note 32, at 13 tbl.1.

69. *See* Davidson et al., *supra* note 62, at 150 & fig.1; Dokko et al., *supra* note 58, at 2; INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 40–43; Greenwald, *supra* note 65, at 9–12, 10 fig.2, 72 fig.B.5; Patricia A. McCoy, Andrey D. Pavlov & Susan M. Wachter, *Systemic Risk Through Securitization: The Result of Deregulation and Regulatory Failure*, 41 CONN. L. REV. 1327, 1330–31, 1331 fig.1 (2009).

70. The term “Alt-A” referred to mortgages issued to borrowers with stronger credit scores, based on reduced documentation underwriting or on high DTI ratios. *See* Sumit Agarwal & Calvin T. Ho, *Comparing the Prime and Subprime Mortgage Markets*, CHI. FED LETTER, Aug. 2007, at 2.

71. McCoy, Pavlov & Wachter, *supra* note 69, at 1339 fig.3.

over half by the end of 2005.⁷² Together, these classes of loans saddled the financial system with added risk while they increased the demand for homes and pushed housing prices even higher.⁷³ Importantly, lenders and investors did not require greater compensation for this additional risk.⁷⁴

When the housing bubble burst and home values fell nationally starting in the first quarter of 2007,⁷⁵ the dangers of these lending practices became apparent. Most of these practices raised questions about borrowers' ability to repay. Low-documentation loans, for example, disregarded borrowers' actual cash flow and were an open invitation to fraud.⁷⁶ Nontraditional mortgage products and adjustable-rate loans (including negatively amortizing, so-called option-pay ARMs), posed potential payment shock because after the initial introductory period, borrowers' monthly payments could go up.⁷⁷ Borrowers with blemished credit had a track record of not paying their bills. Meanwhile, high DTI ratios raised concerns over whether the affected borrowers' debt service obligations were manageable.

During the halcyon years, rising home values masked the dangers of these loans. While housing prices were climbing, borrowers who had difficulty making their payments could usually avoid default because their home equity had increased.⁷⁸ This housing appreciation, along with the continued availability of loose credit, allowed many to pay off their loans by refinancing their mortgages. If all else failed, the same increase in home values allowed borrowers to sell their homes for enough money to retire their loans.⁷⁹

The sharp decline in home prices starting in early 2007⁸⁰ wiped out equity and took these options off the table for many troubled borrowers. Lenders refused to refinance homeowners whose loans were "underwater" (those who owed more on their mortgages than their houses were worth). Nor could affected homeowners

72. See *id.* at 1331 & fig.1; Yuliya Demyanyk & Yadav K. Gopalan, *Subprime ARMs: Popular Loans, Poor Performance*, BRIDGES, Spring 2007, at 4 fig.1. Numerous interest-only and negative amortization loans had adjustable-rate terms, which accounted for the overlap in the market shares of those categories. See Kelly D. Edmiston & Roger Zalneraitis, *Rising Foreclosures in the United States: A Perfect Storm*, 92 FED. RES. BANK KAN. CITY ECON. REV. 115, 128–29, 129 chart 5 (2007).

73. Davidson et al., *supra* note 62, at 149; Greenwald, *supra* note 65, at 4.

74. Levitin, Lin & Wachter, *supra* note 62, at 2.

75. Dokko et al., *supra* note 58, at 30 fig.1; ENGEL & MCCOY, *supra* note 48, at 70.

76. As one group of economists observed:

Dropping the important verification step from the underwriting process opens the mortgage window to large numbers of borrowers who would not qualify ordinarily. Unobservable borrower quality could drop precipitously and investors would be unaware for months or years before worsening performance became high enough to reveal that a significant change in borrower quality had occurred.

Charles D. Anderson et al., *Deconstructing a Mortgage Meltdown: A Methodology for Decomposing Underwriting Quality*, J. MONEY, CREDIT & BANKING 609, 625–26 (2011).

77. ENGEL & MCCOY, *supra* note 48, at 42; FINANCIAL CRISIS INQUIRY REPORT, *supra* note 4, at 106–09. Payment shock is the risk of being unable to make mortgage payments if the payments do go up. See McCoy, *supra* note 63, at 133–34.

78. INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 32.

79. *Id.*

80. Dokko et al., *supra* note 58, at 30 fig.1.

sell their homes for enough to pay off their loans.⁸¹ As home prices fell, delinquencies soared and increasing numbers of borrowers tipped into default.⁸²

When the dust settled, loans with lax underwriting or nontraditional loan features experienced higher default rates than traditionally underwritten prime fixed-rate loans. A high combined loan-to-value ratio, a non-amortizing or negative amortization term,⁸³ reduced documentation, a low credit score, and the presence of a prepayment penalty each significantly raised the chance that a loan would become seriously delinquent.⁸⁴ Adjustable-rate loans experienced higher default rates than fixed-rate loans.⁸⁵ Mortgages that combined two or more of those risk features posed an even higher risk of delinquency.⁸⁶

81. INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 32.

82. *Mortgage Delinquency Rates (Left Scale) and House Price Appreciation (Right Scale)*, RUSSELL SAGE FOUND., <http://www.russellsage.org/research/chartbook/mortgage-delinquency-rates-left-scale-and-house-price-appreciation-right-scale> [<http://perma.cc/TAL5-2XBE>] (last visited Dec. 23, 2019).

83. Here, we use the term “non-amortizing” to refer to interest-only loans and balloon loans. Both permutations plus negative amortization terms significantly add to default risk. See Ioannis Floros & Joshua T. White, *Qualified Residential Mortgages and Default Risk*, 70 J. BANKING & FIN. 86, 95, 96 tbl.5 (2016).

84. See INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 25–26, 46; see also MARK ZANDI & CRISTIAN DE RITIS, MOODY’S ANALYTICS, *THE SKINNY ON SKIN IN THE GAME* (2011) (non-amortizing mortgages); Anderson et al., *supra* note 76, at 627 (reduced documentation loans); Michelle A. Danis & Anthony Pennington-Cross, *The Delinquency of Subprime Mortgages*, 60 J. ECON. & BUS. 67, 78 (2008) (prepayment penalties); Yuliya S. Demyanyk, *Quick Exits of Subprime Mortgages*, 91 FED. RES. BANK ST. LOUIS REV. 79, 81 (2009) (credit score, CLTV ratio, mortgage interest rate, and house-price appreciation); Floros & White, *supra* note 83, at 95–96 & tbl.5 (interest-only loans and balloon loans); Wei Jiang et al., *Liar’s Loan? Effects of Loan Origination Channel and Information Falsification on Mortgage Delinquency*, 96 REV. ECON. & STAT. 1, 7 (2014) (reduced documentation loans); LaCour-Little & Yang, *supra* note 61, at 519–20 & exh.2, 529 (reduced documentation loans); Christopher Mayer et al., *The Rise in Mortgage Defaults*, 23 J. ECON. PERSP. 27, 37–40, 42–44 (2009) (reduced documentation underwriting); Anthony Pennington-Cross & Giang Ho, *The Termination of Subprime Hybrid and Fixed Rate Mortgages*, 38 REAL EST. ECON. 399, 402 (2010) (hybrid 2/28 ARMs); Roberto G. Quercia et al., *The Impact of Predatory Loan Terms on Subprime Foreclosures: The Special Case of Prepayment Penalties and Balloon Payments*, 18 HOUSING POL’Y DEBATE 311, 311 (2007) (balloon loans and prepayment penalties); Morgan J. Rose, *Origination Channel, Prepayment Penalties and Default*, 40 REAL EST. ECON. 662, 662 (2012) (prepayment penalties); Morgan J. Rose, *Predatory Lending Practices and Subprime Foreclosures: Distinguishing Impacts by Loan Category*, 60 J. ECON. & BUS. 13, 15 (2008) (prepayment penalties); John Y. Campbell & João F. Cocco, *A Model of Mortgage Default* 59, fig.6 (Nat’l Bureau of Econ. Research, Working Paper No. 17516, 2011), <https://www.nber.org/papers/w17516.pdf> [<https://perma.cc/X8VF-C238>] (negative amortization and interest-only loans); Yuliya Demyanyk et al., *Determinants and Consequences of Mortgage Default* 11–16 (Fed. Reserve Bank of Cleveland, Working Paper No. 10-19, 2011) (credit scores) (on file with authors); Ronel Elul et al., *What “Triggers” Mortgage Default?* 11, tbl.1 (Fed. Reserve Bank of Phila. Research Dep’t, Working Paper No. 10-13, 2010) (credit scores and non-amortizing mortgages), <http://finance.wharton.upenn.edu/~souleles/research/papers/PhilaFedwp10-13.pdf> [<https://perma.cc/X5TD-959B>]; Shane M. Sherlund, *The Past, Present, and Future of Subprime Mortgages* 10 & tbl.5 (Divs. of Research and Statistics & Monetary Affairs, Fed. Reserve Bd., Working Paper No. 2008-63, 2008), <http://www.federalreserve.gov/pubs/feds/2008/200863/200863pap.pdf> [<https://perma.cc/L2YC-72R3>] (non-amortizing mortgages).

85. INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 26; Brent W. Ambrose et al., *A Note on Hybrid Mortgages*, 33 REAL EST. ECON. 765, 768 (2005).

86. See INFORMATION ON RECENT DEFAULT AND FORECLOSURE TRENDS, *supra* note 59, at 47; Kristopher S. Gerardi et al., *Making Sense of the Subprime Crisis, in LESSONS FROM THE FINANCIAL CRISIS: CAUSES, CONSEQUENCES, AND OUR ECONOMIC FUTURE* 109, 112 & exh.15.2 (Robert W. Kolb

The high default rates that these nonconforming loan features and practices presented raised obvious consumer-protection concerns. Beyond that, those high default rates spawned grave systemic risk.⁸⁷ The unraveling of lending standards in the mid-2000s epitomized exactly the type of credit-fueled real estate bubbles that have accounted for the worst financial crises for centuries.

III. THE ENACTMENT AND IMPLEMENTATION OF THE ABILITY-TO-REPAY RULE

In 2010, Congress acted to prevent a repeat of the lending excesses of the housing bubble by mandating the ability-to-repay rule in section 1411 of the Dodd–Frank Act.⁸⁸ Under that provision, creditors may not extend residential mortgage loans unless they make a reasonable and good faith determination of the borrowers’ ability to repay:

In accordance with regulations prescribed by the Bureau, no creditor may make a residential mortgage loan unless the creditor makes a reasonable and good faith determination based on verified and documented information that, at the time the loan is consummated, the consumer has a reasonable ability to repay the loan, according to its terms, and all applicable taxes, insurance (including mortgage guarantee insurance), and assessments.⁸⁹

Federally insured depository institutions must also meet the minimum residential lending standards imposed by their federal prudential regulators.⁹⁰

Originally, the ATR/QM rule gave the Board of Governors of the Federal Reserve System authority to adopt the implementing regulations.⁹¹ On July 21,

ed., 2010); CLIFFORD V. ROSSI, RESEARCH INST. FOR HOUSING AM., ANATOMY OF RISK MANAGEMENT PRACTICES IN THE MORTGAGE INDUSTRY: LESSONS FOR THE FUTURE 34 (2010) (noting that in an option-pay ARM, “[t]he combination of reduced FICO together with a simultaneous second lien, a higher loan amount and stated income, stated asset documentation presents incremental default risk beyond the individual risk factors”); Shirish Chinchalkar & Roger M. Stein, *Comparing Loan-Level and Pool-Level Mortgage Portfolio Analysis* 20 (Moody’s Research Labs, Working Paper No. 2010-11-1, 2010) (“In the mortgage setting, research suggests that the relationship between, e.g., default probability and loan factors is non-linear, and in some cases highly so”); Shane M. Sherlund, *Mortgage Defaults 2–3 & fig.2* (Mar. 8, 2010) (unpublished manuscript) (on file with authors) (noting that a report prepared by Amherst Securities for the Securities & Exchange Commission concluded that “[n]egative equity and the layering of risk are the largest components of default across mortgage products”).

87. Although it may seem obvious, the serious systemic risk posed by these high-risk, private-label mortgage products and underwriting practices is not universally acknowledged. The GSEs mostly insured conforming loans and these loans defaulted at far lower rates than nonconforming, private-label securitized mortgages. But this fact has not prevented the widespread narrative that the GSE lending practices were responsible for the housing bubble. See *Fannie Mae and Freddie Mac: How Government Housing Policy Failed Homeowners and Taxpayers and Led to the Financial Crisis: Hearing Before the Subcomm. on Capital Mkts. and Gov’t Sponsored Enters. of the H. Comm. on Fin. Servs.*, 113th Cong. 74, 77 (2013) (written testimony of Susan M. Wachter).

88. Dodd–Frank Wall Street Reform and Consumer Protection Act § 1411, 15 U.S.C. § 1639c(a) (2012); see also *id.* § 1639(b) (the qualified mortgage (QM) provision).

89. *Id.* § 1639c(a)(1).

90. See *id.* § 1639c rule of construction.

91. See Dodd–Frank Wall Street Reform and Consumer Protection Act §§ 1061(b)(1), 1400(c); Amendments Relating to Small Creditors and Rural or Underserved Areas Under the Truth in Lending Act (Regulation Z), 80 Fed. Reg. 59,944, 59,945 (Oct. 2, 2015) (codified at 12 C.F.R. pt. 1026).

2011, however, the Board's jurisdiction over the rule transferred to the Consumer Financial Protection Bureau (CFPB or Bureau).⁹² In January 2013, the Bureau promulgated a final regulation implementing the ATR/QM provisions and the regulation took effect on January 10, 2014.⁹³

The ATR/QM rule has two parts, one mandatory and one discretionary in nature.⁹⁴ The mandatory part of the rule establishes threshold standards governing virtually all home mortgages.⁹⁵ These standards apply to home loans regardless of regulator, location, or charter and require, among other things, full documentation underwriting and consideration of potential payment shock. We refer to these standards as the "ability-to-repay requirements" in their narrow sense. Lenders who violate these standards (plus certain assignees) can be liable to borrowers and may face government enforcement.⁹⁶

In the second part of the rule, Congress gave lenders an option of making loans containing even stronger safety features.⁹⁷ Loans that meet these safety requirements are known as "qualified mortgages" (QMs).⁹⁸ All other mortgages are classified as nonqualified mortgages (non-QMs).

QM and non-QM loans alike require lenders to ascertain the borrowers' repayment capacity.⁹⁹ In addition, QM loans must avoid certain risky loan terms.¹⁰⁰ As the quid pro quo, lenders receive a presumption of compliance with the ability-to-repay requirements for the QM loans that they make.¹⁰¹ In contrast, Congress permitted non-QM loans to have nontraditional loan terms, including negative amortization, interest-only payments, or balloon clauses, in order to preserve consumer choice.¹⁰² But because non-QM loans pose higher default risk on average, those loans offer no presumption of compliance with the ability-to-repay requirements in private rights of action for violation of the ability-to-repay rule.¹⁰³

A. THE ABILITY-TO-REPAY REQUIREMENTS

The ability-to-repay rule has one overarching command: that lenders must make a reasonable and good faith determination of loan applicants' ability to

92. See Dodd–Frank Wall Street Reform and Consumer Protection Act §§ 1061(b)(1), 1400(c).

93. Ability-to-Repay and Qualified Mortgage Standards Under the Truth in Lending Act (Regulation Z), 78 Fed. Reg. 6408 (Jan. 30, 2013) (codified at 12 C.F.R. pt. 1026).

94. See 15 U.S.C. § 1639c(a), (b).

95. *Id.* § 1639c(a).

96. *Id.* §§ 1640–41; CONSUMER FIN. PROT. BUREAU, ABILITY-TO-REPAY AND QUALIFIED MORTGAGE RULE ASSESSMENT REPORT 36–37 (2019) [hereinafter CFPB ATR ASSESSMENT], https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/cfpb_ability-to-repay-qualified-mortgage_assessment-report.pdf [<https://perma.cc/TN8B-8YEA>].

97. See 15 U.S.C. § 1639c(b).

98. *Id.* § 1639c(b)(2)(A).

99. See *id.* § 1639c.

100. See *id.* § 1639c(b).

101. See *id.*

102. See CFPB ATR ASSESSMENT, *supra* note 96, at 44.

103. See *infra* Section III.B.

repay before they can extend home mortgage credit.¹⁰⁴ This text is couched as a standard, prompting some to criticize the rule as easy to evade because it seemingly gives originators wide discretion when determining applicants' repayment capacity.¹⁰⁵

This criticism ignores that Congress operationalized the meaning of the term "reasonable and good faith determination" of ability to repay by placing multiple objective constraints on originators' latitude. These constraints did not come out of nowhere. Congress mandated these constraints to prevent the underwriting lapses that culminated in the 2008 financial crisis.¹⁰⁶

Mapping the constraints embedded in the ability-to-repay requirements onto the abuses that preceded the crisis illuminates how carefully Congress tailored the rule to prevent a repeat of the last mortgage lending bubble. The ability-to-repay requirements place bright-line restrictions on mortgage underwriting practices, most notably by banning reduced documentation underwriting and qualifying borrowers without regard to payment shock.

1. Determinations Must Be Based on Documented and Verified Information

In one of its most powerful provisions, the ability-to-repay rule states that all repayment determinations must be "based on verified and documented information."¹⁰⁷ Specifically, creditors "shall verify" the "amounts of income or assets" being relied on to determine repayment ability, "including expected income or assets."¹⁰⁸ Furthermore, the rule specifies exactly what that documentation and verification must contain. To verify, a lender must review "third-party documents that provide reasonably reliable evidence of the consumer's income or assets,"

104. 15 U.S.C. § 1639c(a)(1). The ability-to-repay requirements only apply to first- or second-lien closed-end residential mortgage loans that are made for consumer purposes and are secured by a dwelling. 12 C.F.R. § 1026.43(a) (2019); *id.* § 1026.43(a)-1 cmt. They do not apply to reverse mortgages, construction loans, home-equity lines of credit, temporary bridge loans, or time-share arrangements. *See id.* § 1026.43(a); LAURENCE E. PLATT ET AL., BLOOMBERG LAW, THE STATE OF PLAY OF QUALIFIED AND NON-QUALIFIED MORTGAGES 2 (2018), <https://www.mayerbrown.com/-/media/files/perspectives-events/publications/2018/05/the-state-of-play-of-qualified-and-nonqualified-mo/files/download-document/fileattachment/the-state-of-play-180514.pdf> [<https://perma.cc/KG27-PKCM>].

105. *See, e.g.*, Bubb & Krishnamurthy, *supra* note 10, at 1594 & n.204.

106. *See supra* Part II.

107. 15 U.S.C. § 1639c(a)(1)-(2); *see also* 12 C.F.R. § 1026.43(c)(3)(i), (c)(4).

108. 15 U.S.C. § 1639c(a)(4); 12 C.F.R. § 1026.43(c)(4) (listing additional types of acceptable third-party records). Contrary to an erroneous assertion made by the U.S. Department of Treasury, the CFPB allows creditors to base their ability-to-repay determinations on an applicant's verified assets alone, and not on income, where the assets are sufficient to repay the loan. *Compare* U.S. DEP'T OF THE TREASURY, A FINANCIAL SYSTEM THAT CREATES ECONOMIC OPPORTUNITIES: BANKS AND CREDIT UNIONS 94 (2017) (stating that Appendix Q "ignores borrower assets, which restricts lending to borrowers whose income is low and fixed"), *with* Consumer Fin. Prot. Bureau, SUPERVISORY HIGHLIGHTS, Spring 2017, at 6-7 [hereinafter CFPB SUPERVISORY HIGHLIGHTS Spring 2017], https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/201704_cfpb_Supervisory-Highlights_Issue-15.pdf [<https://perma.cc/EUT9-U5LJ>] (noting that ability to repay can be based on assets other than the dwelling).

such as an “Internal Revenue Service Form W–2, tax returns, payroll receipts, [or] financial institution records.”¹⁰⁹

The ability-to-repay rule flatly prohibits reduced documentation underwriting going forward. It comes as no surprise that low-documentation loans were one of the biggest default drivers because, under the “double-trigger” theory of default, low home equity is not enough to result in default for non-strategic borrowers.¹¹⁰ Instead, defaulting homeowners must normally also suffer an economic shock—such as job loss, illness, or divorce—that makes it impossible to repay a loan.¹¹¹ A loan that disregards a borrower’s actual ability to pay puts the borrower in a precarious position and increases his or her chance of default as a result of an economic shock.¹¹² Accordingly, the ATR/QM rule’s documentation and verification provisions place a serious bright-line constraint on one of the most important causes of the loan defaults resulting in the 2008 crisis.

These documentation and verification requirements further give teeth to other provisions in the ATR/QM rule requiring mortgage lenders to take DTI ratios into account¹¹³ and capping DTI ratios at 43% for General Qualified Mortgages.¹¹⁴ Before the rule’s adoption, it was easy to falsify DTI ratios by inflating the borrower’s income. Today’s documentation and verification requirements prevent that practice, making DTI ratios a meaningful constraint on overheated demand for houses.

2. Originators Must Consider Enumerated Factors When Determining Ability to Repay

Just as lenders must now use full documentation underwriting, they must also take specific statutory factors into account when evaluating repayment ability. Dodd–Frank enumerated a long list of factors that lenders must consider in

109. 15 U.S.C. § 1639c(a)(4); *see also* 12 C.F.R. § 1026.43(c)(3)–(c)(4) (noting that creditors must verify information using third-party records); *id.* § 1026.43(c)(3)-1 cmt. (adding that records must be specific to the individual).

110. *See* Davidson et al., *supra* note 62, at 158; Floros & White, *supra* note 83, at 95, 96 tbl.5; LaCour-Little & Yang, *supra* note 61, at 528; Mian & Sufi, *supra* note 37, at 1834, 1847; Pennington-Cross & Ho, *supra* note 84, at 399. Low-documentation loans were ones for which lenders did not adequately document income, employment, or assets. *See* Mian & Sufi, *supra* note 37, at 1835, 1847 & n.14.

111. Borrowers with loan amounts due that exceeded the value of their home often did not go into default. *See, e.g.*, Chester Foster & Robert Van Order, *An Option-Based Model of Mortgage Default*, 3 HOUSING FIN. REV. 351, 351 (1984); Kerry D. Vandell, *How Ruthless Is Mortgage Default? A Review and Synthesis of the Evidence*, 6 J. HOUSING RES. 245, 245 (1995); Elul et al., *supra* note 84, at 2. The experience of 2008 demonstrated that the rate of strategic default was low and that negative equity was not enough alone for most homeowners to stop making their loan payments. *See* Neil Bhutta et al., *The Depth of Negative Equity and Mortgage Default Decisions 2–3* (Divs. of Research & Statistics & Monetary Affairs, Fed. Reserve Bd., Working Paper No. 2010-35, 2010), <https://www.federalreserve.gov/pubs/feds/2010/201035/201035pap.pdf> [<https://perma.cc/S6PF-CEJT>].

112. *See supra* notes 76–77, 84, and accompanying text.

113. *See* 15 U.S.C. § 1639c(a)(3); 12 C.F.R. § 1026.43(c)(2)(vii), (c)(7).

114. 12 C.F.R. § 1026.43(e)(2)(vi).

making that determination.¹¹⁵ These mandatory factors limit the ability of lenders to omit relevant factors from the algorithms that they use to evaluate repayment capacity.

a. Lenders Must Take All Monthly Mortgage Expenses into Account.

During the last bubble in 2008, some lenders qualified risky borrowers for mortgages based on principal and interest alone, without taking account of the added taxes and homeowner's insurance.¹¹⁶ Dodd–Frank put a stop to that. Now, lenders must evaluate ability to repay not only based on the monthly principal and interest payments¹¹⁷ but also on “all applicable taxes, insurance (including mortgage guarantee insurance), and assessments.”¹¹⁸

b. All Other Expected Mortgage Indebtedness on the Property Must Be Taken into Account.

Under Dodd–Frank, when a creditor “knows, or has reason to know” that the home will secure other residential mortgage loans or home equity lines of credit (HELOCs) made to the same consumer, the creditor must make a reasonable determination of the consumer's ability to repay *all* of those loans, plus all applicable taxes, insurance (including mortgage guarantee insurance), and assessments.¹¹⁹ The same verification and documentation requirements apply when

115. The CFPB's implementing regulation requires creditors to consider these eight underwriting factors when determining ability to repay:

- (i) Current or reasonably expected income or assets, other than the value of the dwelling that secures the loan;
- (ii) Current employment status, if the creditor relies on employment income to determine repayment ability;
- (iii) The monthly payment on the loan being applied for;
- (iv) The monthly payment on any simultaneous loan(s) that the creditor knows or has reason to know will be made;
- (v) The monthly payment for mortgage-related obligations;
- (vi) Current debt obligations, alimony, and child support;
- (vii) The monthly debt-to-income ratio or residual income; and
- (viii) Credit history.

Id. § 1026.43(c)(2); *see also id.* § 1026.43(c)(3) cmt. (detailing ways in which creditors should obtain and assess underwriting factor information).

116. ENGEL & MCCOY, *supra* note 48, at 37.

117. 12 C.F.R. § 1026.43(c)(2)(iii).

118. 15 U.S.C. § 1639c(a)(1). The regulation encapsulates this requirement by requiring the ability-to-repay calculation to include the monthly payment for all “mortgage-related obligations,” including property taxes, premiums, and similar charges that are required by the creditor, any fees and special assessments imposed by a condominium, cooperative, or homeowner's association, ground rent, and leasehold payments. 12 C.F.R. § 1026.43(b)(8), (c)(2)(v). Mortgage-related obligations also include a variety of insurance or insurance-like premiums and charges required by the creditor, including: homeowners' insurance; private mortgage insurance; credit life, accident, health, or loss-of-income insurance; and debt cancellation or debt suspension coverage. *Id.* § 1026.4(b)(5), (7)–(8), (10).

119. 15 U.S.C. § 1639c(a)(2).

evaluating the repayment capacity for these additional loans.¹²⁰

This treatment of multiple loans rules out the practice during the last housing bubble of pairing first-lien loans with so-called “piggyback seconds” (that is, a second lien layered on the first) without first ascertaining borrowers’ ability to service the added debt. The piggyback second phenomenon increased credit risk by circumventing down payment requirements and producing combined loan-to-value ratios of up to or in excess of 100%.¹²¹

c. Additional Mandatory Factors.

In addition to monthly payments for taxes, insurance, and other liens on the property, creditors must consider a lengthy list of other factors concerning the loan applicant’s ability and willingness to repay.¹²² These include credit history, current income, any expected income the applicant is reasonably assured of receiving, current obligations,¹²³ the DTI ratio,¹²⁴ employment status, and other financial resources apart from the person’s equity in the property securing repayment of the loan.¹²⁵ This directive requires lenders’ underwriting algorithms to consider all of these factors.

3. Lenders Must Take Potential Payment Shock into Account

Dodd–Frank outlawed another technique used to artificially qualify borrowers with modest incomes. As discussed above, lenders during the bubble qualified numerous borrowers for adjustable-rate loans, interest-only loans, and option-pay loans based on the lower initial monthly payments alone instead of the higher

120. *Id.*; 12 C.F.R. § 1026.43(b)(12), (c)(2)(iv), (c)(6) (referring to these loans as “simultaneous loan[s]”).

121. Piggyback seconds also allowed borrowers with low or no down payments to dispense with costly private mortgage insurance. ENGEL & MCCOY, *supra* note 48, at 35–36.

122. *See* 15 U.S.C. § 1639c(a)(3).

123. *Id.* Importantly, these current obligations include pre-existing and outstanding mortgage indebtedness, including other mortgage debt outstanding on the home that will secure the mortgage loan being applied for. *See id.*

124. *Id.* Alternatively, the lender may consider the consumer’s remaining residual income after paying non-mortgage debt and mortgage-related obligations. Most lenders use the monthly DTI ratio calculation instead of residual income. The monthly DTI calculation must divide the consumer’s total monthly debt obligations by his or her total monthly income (defined as the sum of the consumer’s current or reasonably expected income, including any income from assets). Total monthly debt obligations are the sum of the payment on the loan being applied for, payments on simultaneous loans on the same property, mortgage-related obligations, and current debt obligations, alimony, and child support. 12 C.F.R. § 1026.43(c)(7)(i)(A).

For transactions where the lender uses a residual income calculation instead, the lender must consider the consumer’s remaining income after subtracting the consumer’s total monthly debt obligations from the consumer’s total monthly income. *Id.* § 1026.43(c)(7)(ii)(B).

For discussions of residual income, see, for example, Laurie S. Goodman et al., *VA Loans Outperform FHA Loans—Why? And What Can We Learn?*, 24 J. FIXED INCOME 39 (2015), Michael E. Stone et al., *The Residual Income Approach to Housing Affordability: The Theory and the Practice* (Austl. Hous. & Urban Research Inst., Working Paper No. 139, 2011), https://scholarworks.umb.edu/cgi/viewcontent.cgi?article=1002&context=communitystudies_faculty_pubs [<https://perma.cc/PXX3-Q9LZ>], and Pinto, *supra* note 18, at 35.

125. 15 U.S.C. § 1639c(a)(3).

eventual payments that borrowers could face.¹²⁶ This risk of future rising payments is referred to as “payment shock” and exists in all loans except for fully amortizing, fixed-rate loans.

Lenders employed several variations on the practice of qualifying borrowers based solely on low initial payments before 2008, and in doing so, they effectively circumvented the qualification process.¹²⁷ For adjustable-rate loans offering low initial interest rates, lenders underwrote to this so-called “teaser rate” alone. Interest-only loans gave lenders an opportunity to base repayment determinations solely on the small size of the interest-only payments without taking the substantial added cost of principal payments into account. Option-pay mortgages, the riskiest products of all, gave borrowers the option of making a fully amortizing payment, an interest-only payment, or an even lower payment (essentially a negative amortization option which would cause the principal to grow) every month. Some lenders evaluated repayment capacity based only on the negative amortization option, which produced the lowest monthly payment. Adding to the risk, lenders often made interest-only and option-pay mortgages with adjustable-rate features, which allowed them to further reduce the size of the monthly mortgage payment they relied on to qualify the borrower.¹²⁸

For a sense of the magnitude of the potential payment shock, between 2004 and 2006, many subprime hybrid adjustable-rate mortgages had initial rate resets of 3% (300 basis points) after the introductory rate expired, resulting in increases in monthly payments that could exceed 50%.¹²⁹ Two leading researchers reported that “a one-standard-deviation increase in the size of the payment shock [was] associated with . . . a 300% increase in the probability of defaulting” during that period.¹³⁰ According to those researchers, that was the interest rate environment that borrowers faced from 2004 through 2006.¹³¹ Dodd–Frank banned most of these techniques, as we now explain.

a. Qualifying Based on a Less-than-Fully Amortizing Loan Schedule.

To begin with, Dodd–Frank outlawed the dangerous practice of qualifying borrowers based on less-than-fully amortizing payments. As of 2014, Dodd–Frank required mortgage creditors to determine an applicant’s ability to repay “using a

126. See *supra* Part II.

127. See ENGEL & MCCOY, *supra* note 48, at 35–37.

128. See Anya Martin, *Interest-Only Loans Set the Bar High*, WALL ST. J. (Jan. 6, 2015, 1:07 PM), <https://www.wsj.com/articles/interest-only-loans-set-the-bar-high-1420567670>; McCoy, *supra* note 63, at 143–47.

129. See JAY BRINKMANN, MORTG. BANKERS ASS’N, AN EXAMINATION OF MORTGAGE FORECLOSURES, MODIFICATIONS, REPAYMENT PLANS AND OTHER LOSS MITIGATION ACTIVITIES IN THE THIRD QUARTER OF 2007, at 4 (2008), http://www.diamondlawmembers.com/wp-content/uploads/2010/05/59454_LoanModificationsSurvey%20mortgage%20bankers%20association.pdf [<https://perma.cc/75VR-G25G>]; *America’s Housing Market: Cracks in the Façade*, ECONOMIST (Mar. 22, 2007), <https://www.economist.com/briefing/2007/03/22/cracks-in-the-facade>.

130. Pennington-Cross & Ho, *supra* note 84, at 423.

131. See *id.*

payment schedule that fully amortizes the loan over the term of the loan.”¹³² In the Act, Congress specified in painstaking detail how this was to be calculated for variable-rate loans, interest-only loans, and negative amortization loans.¹³³ This means, in effect, that applicants must now qualify based on their ability to retire their mortgage loans, unlike before 2008, when many lenders qualified borrowers only based on initial monthly payments calculated on an interest-only or negatively amortizing schedule.

b. Underwriting to the Fully Indexed Rate or Other Higher Monthly Payment.

The Dodd–Frank Act also prohibits the prior practice of underwriting to a low teaser rate alone for variable-rate (adjustable-rate) loans. Instead, lenders must now underwrite ARMs to “a fixed rate equal to the fully indexed rate at the time of the loan closing.”¹³⁴ This provision is one more measure designed to prevent the added credit risk posed by payment shock to borrowers.

132. Dodd–Frank Wall Street Reform and Consumer Protection Act § 1411(a)(2), 15 U.S.C. § 1639c(a)(3) (2012); *see also id.* § 1639c(a)(6)(D)(ii); 12 C.F.R. § 1026.43(c)(5)(i)(B) (2019). The regulation defines a “[f]ully amortizing payment” as “a periodic payment of principal and interest that will fully repay the loan amount over the loan term.” 12 C.F.R. § 1026.43(b)(2). Furthermore, the computation must use “[m]onthly, fully amortizing payments that are substantially equal.” *Id.* § 1026.43(c)(5)(i)(B).

133. *See* 15 U.S.C. § 1639c(a)(6); 12 C.F.R. § 1026.43(c)(5). These metrics apply to balloon loans, interest-only loans, option-pay loans, and negative amortization loans and embody the general rule that the mortgage payments must be calculated assuming substantially equal monthly payments over the life of the loan. *Id.* § 1026.43(c)(5)(ii); CFPB ATR ASSESSMENT, *supra* note 96, at 43.

Balloon Loans: For balloon loans, lenders must calculate ability to repay based on the maximum scheduled payment during the first five years of the loan (or the maximum payment *ever* in the payment schedule, including any balloon payment, for “higher priced” home mortgages). 12 C.F.R. § 1026.43(c)(5)(ii)(A). A “higher priced” home mortgage is one in which the annual percentage rate (APR) exceeds the average prime offer rate (APOR) for a comparable transaction as of the date the interest rate is set by 1.5 or more percentage points for first-lien loans or by 3.5 or more percentage points for subordinate-lien loans. *Id.* § 1026.43(b)(4). For rural or underserved small-creditor balloon payment QM loans, however, the rule defines the term “higher priced” loan as one where the APR exceeds the APOR by 3.5 percentage points or more for first-lien loans. *Id.* § 1026.43(b)(4), (e)(5), (f).

Interest-Only Loans: The determination must be based on “[s]ubstantially equal, monthly payments of principal and interest that will repay the loan amount over the term of the loan remaining as of the date the loan is recast.” *Id.* § 1026.43(c)(5)(ii)(B)(2).

Negative Amortization Loans: The lender must base its calculation on “[s]ubstantially equal, monthly payments of principal and interest that will repay the maximum loan amount over the term of the loan remaining as of the date the loan is recast.” *Id.* § 1026.43(c)(5)(ii)(C)(2).

134. 15 U.S.C. § 1639c(a)(6)(D)(iii); *see also* 12 C.F.R. § 1026.43(c)(5)(i)(A), (c)(5)(ii)(B)–(C) (requiring that the creditor underwrite to the “fully indexed rate or any introductory interest rate, whichever is greater”).

The Act defines the “fully indexed rate” as “the index rate prevailing on a residential mortgage loan at the time the loan is made plus the margin that will apply after the expiration of any introductory interest rates.” 15 U.S.C. § 1639c(a)(7). The regulation defines the “fully indexed rate” as “the interest rate calculated using the index or formula that will apply after recast, as determined at the time of consummation, and the maximum margin that can apply at any time during the loan term.” 12 C.F.R. § 1026.43(b)(3). “Recast” means the date when: (1) an introductory fixed interest rate expires for an adjustable-rate mortgage; (2) interest-only payments are no longer permitted for an interest-only loan; and (3) negatively amortizing payments are no longer permitted for a negative amortization loan. *Id.* § 1026.43(b)(11); *see also id.* § 1026.18(s)(7)(i), (s)(7)(iv)–(v) (providing the definitions of adjustable-rate mortgage, interest-only, and negative amortization).

To summarize, Dodd–Frank’s directive to conduct a reasonable determination of an applicant’s ability to repay is not just some vague injunction. To the contrary, the statute and the implementing regulations impose numerous objective restrictions on lenders’ discretion when making that determination. These include documenting and verifying income and assets; taking total monthly mortgage obligations plus a long list of other factors into account; and underwriting to the fully indexed rate (for ARMs) and a fully amortizing schedule. Together, these bright-line rules cabin lenders’ ability to relax loan underwriting in multiple and significant ways.

B. THE QUALIFIED MORTGAGE PROVISION

In the debate leading up to passage of the Dodd–Frank Act, Congress had to decide whether to ban the riskiest loan products outright. To preserve consumer choice, Congress decided against a ban. Instead, Dodd–Frank allows lenders to extend the riskiest types of nontraditional mortgages, but only if they internalize harm to borrowers from ability-to-repay violations.¹³⁵

The Qualified Mortgage provision gives lenders an option: they may offer either higher-risk loans with full liability exposure to borrowers or traditional loans, subject to restrictions on product features, that give lenders a presumption of compliance with the ability-to-repay requirements. We open this discussion by defining a QM and describing the avenues for attaining QM status. Next, we turn to a discussion of the mechanics of the QM presumption of compliance.

1. Qualified Mortgages Defined

In Dodd–Frank, Congress created two categories of home mortgages: qualified mortgages and nonqualified mortgages. QM loans, like non-QM loans, must meet the ability-to-repay requirements just discussed.¹³⁶ But unlike non-QM loans, QMs cannot have negative amortization, interest-only schedules, balloon payments, or terms exceeding thirty years.¹³⁷ QMs also restrict prepayment penalties¹³⁸ and typically cap total points and fees at 3%.¹³⁹ These restrictions are intended to limit default rates.

In a related vein, to qualify for General QM status, a lender must underwrite a loan to the highest interest rate allowed during the first five years of repayment. *Id.* § 1026.43(e)(2)(iv)(A); *see also infra* Section III.B.1 (discussing the requirements for QM status).

135. Thus, it is incorrect to assert that the ATR/QM rule operates as a product ban. *See* Jason Scott Johnston, *Do Product Bans Help Consumers?: Questioning the Economic Foundations of Dodd–Frank Mortgage Regulation*, 23 *GEO. MASON L. REV.* 617, 637 (2016) (arguing that the severity of the penalties acts as a de facto restriction, but acknowledging that these risky lending practices may still occur).

136. *See supra* Section III.A. However, some types of QM loans allow alternative ways of satisfying those requirements, as this section discusses.

137. *See* 12 C.F.R. § 1026.43(e)(2)(i)–(ii); CFPB ATR ASSESSMENT, *supra* note 96, at 45. The one firm exception is for rural or underserved small-creditor balloon payment QM loans. *See infra* notes 155–64 and accompanying text.

138. 12 C.F.R. § 1026.43(g).

139. *Id.* § 1026.43(e)(2)(iv), (e)(3); CFPB ATR ASSESSMENT, *supra* note 96, at 45. For small loans, the regulation provides for higher fee caps of up to 8%, set according to a sliding scale based on the amount of the loan. *See* 12 C.F.R. § 1026.43(e)(2)(iv), (e)(3).

Loans that are eligible for QM status offer two advantages. First, QMs give lenders a presumption of compliance with the ability-to-repay requirements.¹⁴⁰ Second, all loans satisfying the QM requirements are deemed to be Qualified Residential Mortgages (QRMs) and thus escape the Dodd–Frank Act’s risk retention requirements.¹⁴¹

In contrast, non-QMs can have nontraditional terms and features, but they require risk retention and expose originators to liability for violations of the ability-to-repay requirements. Any mortgage loan that does not meet the QM requirements is automatically a non-QM. Importantly, single-family home mortgages guaranteed or insured by the Federal Housing Administration (FHA), the U.S. Department of Veterans Affairs (VA), and the Rural Housing Service (RHS) can also gain QM status under separate rules of their respective agencies.¹⁴²

Currently, there are five ways to qualify for QM status. The CFPB defined four of those paths in its regulations implementing the ATR/QM rule. In those regulations, the CFPB first defined a general qualified mortgage and then offered three alternatives to the General QM definition: one for mortgages securitized by Fannie Mae or Freddie Mac, one for rural balloon portfolio loans by small creditors, and one for mortgages held in portfolio by small creditors. Later, in 2018, Congress enacted legislation creating a fifth path to QM protection for portfolio loans by small banks, thrifts, and credit unions.

a. General QM Loans.

The General QM option is the starting point for any QM discussion. General QMs are limited to fully amortizing loans, with terms of up to thirty years and total points and fees not exceeding 3%.¹⁴³ For a General QM, the creditor must make a reasonable determination of the applicant’s ability to repay the loan. As part of that analysis, the creditor must consider and verify at or before

140. Dodd–Frank Wall Street Reform and Consumer Protection Act § 1412, 15 U.S.C. § 1639c(b)(1) (2012).

141. *See* 12 C.F.R. §§ 373.3–10 (risk retention rule). The risk retention provision requires sponsors of securitizations to hold a specified “economic interest in the credit risk of the securitized assets” *Id.* § 373.3(a). Specifically, securitizers must have “skin in the game” in the form of a 5% equity interest in the aggregate credit risk of the assets they securitize. *See id.* § 373.4(a). Securitizations backed solely by QRMs, however, are exempt from the risk retention requirement. *Id.* § 373.13(a)–(b). The Government Accountability Office concluded that the risk retention rule’s incentives to make QM loans “might set a floor to the loosening of credit.” U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-15-185, MORTGAGE REFORMS: ACTIONS NEEDED TO HELP ASSESS EFFECTS OF NEW REGULATIONS 39 (2015) [hereinafter MORTGAGE REFORMS].

142. *See* 7 C.F.R. § 3555.109 (2018) (RHS final QM rule); 12 C.F.R. § 1026.43(e)(4)(ii)(B)–(C), (e)(4)(ii)(E); 24 C.F.R. §§ 201.7, 203.19, 1005.120, 1007.80 (2018) (FHA final QM Rule); Loan Guaranty: Ability-to-Repay Standards and Qualified Mortgage Definition Under the Truth-in-Lending Act, 83 Fed. Reg. 50,506 (Oct. 9, 2018) (codified at 38 C.F.R. pt. 36) (announcing Department of Veterans Affairs plans for a future QM rulemaking); Loan Guaranty: Ability-to-Repay Standards and Qualified Mortgage Definition Under the Truth in Lending Act, 79 Fed. Reg. 26,620 (proposed May 9, 2014) (codified in parts at 38 C.F.R. pt. 36) (VA interim QM rule); CFPB ATR ASSESSMENT, *supra* note 96, at 46–47.

143. 12 C.F.R. § 1026.43(e)(2)–(3). Small mortgages may exceed the 3% cap. *See supra* note 139 and accompanying text.

consummation the applicant's current or reasonably expected income or assets (other than the value of the dwelling securing the home), current debt obligations, alimony, and child support obligations, in compliance with the CFPB's Appendix Q, which specifies how to determine the terms "income" and "debt."¹⁴⁴ In addition, creditors must underwrite ARMs to the maximum interest rate applicable during the first five years of the loan.¹⁴⁵ Finally, to claim General QM status, creditors must cap the ratio of the consumer's total monthly debt to total monthly income at consummation at 43%.¹⁴⁶ Fixed-rate QMs (except higher cost QMs) may charge prepayment penalties, but only during the first three years after origination and only if the creditor also offers the applicant a loan without a penalty.¹⁴⁷ Prepayment penalties are otherwise banned.¹⁴⁸

b. The "GSE Patch" QM.

The most important QM alternative is the so-called "GSE patch." This exception applies to loans eligible for purchase by Fannie Mae or Freddie Mac (known as the Government-Sponsored Enterprises or GSEs), which receive QM status if they meet certain conditions.¹⁴⁹ To gain QM status, a GSE loan must be fully amortizing, have a term of thirty years or less, and satisfy the points and fee cap for General QMs.¹⁵⁰ The lender must also make a reasonable determination of the borrower's ability to repay. Unlike General QMs, however, GSE QMs do not have to satisfy the 43% DTI cap or comply with the exact methods for

144. 12 C.F.R. § 1026.43(e)(2)(v); *id.* pt. 1026, app. Q; CONSUMER FIN. PROT. BUREAU, GENERAL COMPARISON OF ABILITY-TO-REPAY REQUIREMENTS WITH QUALIFIED MORTGAGES 1 (2016), https://files.consumerfinance.gov/f/201603_cfpb_atr-and-qm-comparison-chart.pdf [<https://perma.cc/B493-BK7M>] [hereinafter GENERAL COMPARISON]; CFPB ATR ASSESSMENT, *supra* note 96, at 45–46. In addition, originators claiming General QM status must consider and verify employment status, simultaneous loans, and the DTI ratio when underwriting income and DTI. Originators making General QM loans routinely consider and verify credit histories and credit scores as well. *See* GENERAL COMPARISON, *supra*, at 2.

There are currently debates about whether Appendix Q requires updating. *See, e.g.*, Kate Berry, *New Villain in Battle over CFPB Mortgage Rule: Appendix Q*, AM. BANKER (Aug. 12, 2019, 9:00 PM), <https://www.americanbanker.com/news/new-villain-in-battle-over-cfpb-mortgage-rule-appendix-q>.

145. 12 C.F.R. § 1026.43(e)(2)(iv)(A); CFPB ATR ASSESSMENT, *supra* note 96, at 45. For General QMs, creditors must also underwrite the loan using a payment schedule that will fully retire the loan balance by the end of the loan term. 12 C.F.R. § 1026.43(e)(2)(iv)(B); CFPB ATR ASSESSMENT, *supra* note 96, at 45.

146. 12 C.F.R. § 1026.43(e)(2)(vi). This ratio must be calculated in accordance with Appendix Q. *See id.* pt. 1026, app. Q.

147. *Id.* § 1026.43(g)(2)–(3). Such penalties may not exceed 2% in the first two years or 1% in the third year of the loan and thereafter cannot be charged. *Id.* § 1026.43(g)(2)(ii)(A)–(B). This prepayment penalty provision applies to General QM loans as well as to alternative QM loans. *Id.* § 1026.43(g)(1)(ii)(B).

148. *See* Dodd–Frank Wall Street Reform and Consumer Protection Act § 1412, 15 U.S.C. § 1639c(c)(1) (2012); 12 C.F.R. § 1026.43(g)(2).

149. 12 C.F.R. § 1026.43(e)(4)(ii)(A). Jumbo loans do not qualify for the GSE patch because they do not meet the GSEs' loan limit requirements. PLATT ET AL., *supra* note 104, at 2.

150. 12 C.F.R. § 1026.43(e)(4)(i)(A).

determining monthly debt and income set forth in the CFPB's Appendix Q.¹⁵¹ As a result, for GSE-patch loans, originators may (and do) use the GSEs' requirements in lieu of those in Appendix Q for considering, documenting, and verifying mortgage-related obligations, income, assets, employment status, simultaneous loans, and debt.¹⁵²

Today, about a third of new originations are GSE loans,¹⁵³ so a substantial number of QM loans take advantage of the GSE patch. However, the future of the GSE patch is up for debate because the patch is temporary and due to sunset on January 10, 2021 or to expire whenever the GSEs leave conservatorship—whichever comes first.¹⁵⁴

c. The Rural/Underserved Small Creditor Balloon Payment QM.

The second QM alternative is relatively narrow and only applies to fixed-rate balloon loans, including higher priced loans, originated by rural creditors for terms of five years or more.¹⁵⁵ Rural creditors are small creditors¹⁵⁶ who make at least one first-lien home mortgage in a rural or underserved area annually.¹⁵⁷

151. *See id.* § 1026.43(e)(4)(i); *id.* pt. 1026, app. Q. According to the CFPB, “Fannie Mae and Freddie Mac provide a high degree of specific detail for the method to be used to calculate income and debt.” CFPB ATR ASSESSMENT, *supra* note 96, at 193.

In addition, GSE ARMs need not be underwritten to the maximum rate in the first five years of the loan in order to receive QM status under the GSE patch. 12 C.F.R. § 1026.43(e)(4)(i)(A); GENERAL COMPARISON, *supra* note 144, at 1. However, the GSEs impose their own rules for considering the payment shock on ARMs when determining ability to repay. FANNIE MAE, SELLING GUIDE: FANNIE MAE SINGLE FAMILY 216 (2018), <https://www.fanniemae.com/content/guide/sel120418.pdf> [<https://perma.cc/K6EZ-4VXW>].

Fannie Mae and Freddie Mac have their own, higher DTI limits of 50% for GSE loans that undergo automated underwriting. *See* OFFICE OF INSPECTOR GEN., FED. HOUS. FIN. AGENCY, AN OVERVIEW OF ENTERPRISE DEBT-TO-INCOME RATIOS 11 (2019) [hereinafter IG Report], <https://www.fhfaog.gov/sites/default/files/WPR-2019-002.pdf> [<https://perma.cc/8YYL-UQKQ>]; Damian Paletta, *Federal Government Has Dramatically Expanded Exposure to Risky Mortgages*, WASH. POST (Oct. 2, 2019, 2:34 PM), https://www.washingtonpost.com/business/economy/federal-government-has-dramatically-expanded-exposure-to-risky-mortgages/2019/10/02/d862ab40-ce79-11e9-87fa-8501a456c003_story.html.

152. GENERAL COMPARISON, *supra* note 144, at 1.

153. In first quarter 2019, GSE-securitized mortgage originations accounted for 37.3% of all residential mortgage originations in the United States. HOUS. FIN. POLICY CTR., HOUSING FINANCE AT A GLANCE: A MONTHLY CHARTBOOK 8 (2019), https://www.urban.org/sites/default/files/publication/100723/july_chartbook_2019_1.pdf [<https://perma.cc/AJG6-2DCL>] [hereinafter HOUSING CHARTBOOK]. In contrast, Federal Housing Administration loans and Department of Veterans Affairs (VA) loans together accounted for 20.2% of originations that quarter. *Id.*

154. *See* 12 C.F.R. § 1026.43(e)(4)(iii)(B). In contrast, the QM exceptions for FHA, VA, and RHS loans are permanent. *See id.*

155. *Id.* §§ 1026.43(f)(1)(i), (iv).

156. Small creditors are mortgage lenders who originate up to 2000 covered first-lien mortgages annually (excluding portfolio loans) and who, together with their mortgage-lending affiliates, have total year-end assets of less than \$2 billion (adjusted for inflation). *Id.* §§ 1026.35(b)(2)(iii)(A)–(C); *id.* § 1026.43(f)(2)(ii) cmt. 1; *id.* § 1026.43(e)(5) cmt. 4.

157. *Id.* §§ 1026.35(b)(2)(iii)(A), (b)(2)(iv)(A)(2), 1026.43(f)(1)(vi); Amendments to the 2013 Mortgage Rules Under the Equal Credit Opportunity Act (Regulation B), Real Estate Settlement Procedures Act (Regulation X), and the Truth in Lending Act (Regulation Z), 78 Fed. Reg. 60,382, 60,415 (Oct. 1, 2013) (codified in scattered sections of 12 C.F.R.).

Rural creditors must hold eligible balloon loans in portfolio for at least three years, with limited exceptions, to receive QM protection.¹⁵⁸ These loans are an exception to the general rule that balloon loans cannot receive QM status.¹⁵⁹ The justification for this alternative was that small lenders had lower default rates during the crisis and have greater incentives to exercise care when originating mortgages held in portfolio.¹⁶⁰

Under the rural balloon QM alternative, the principal balance may not increase over the life of the loan.¹⁶¹ The originator must also satisfy the General QM cap on points and fees.¹⁶² It must consider and verify the borrower's ability to pay the scheduled monthly payments, but need not follow the exact documentation requirements in Appendix Q.¹⁶³ Unlike General QM loans, there is no DTI cap. But lenders seeking to make a rural fixed-rate balloon QM loan must still consider an applicant's DTI ratio or residual income when determining ability to repay and must verify the debt obligations and income used when determining that ratio.¹⁶⁴

d. Small-Creditor Portfolio QM.

A third alternative, the small-creditor portfolio QM, provides QM status to certain mortgage loans originated by small creditors and held in portfolio. The rule adopts the same definition of the term "small creditors" as the rural, underserved small-creditor balloon payment QM.¹⁶⁵ To obtain QM protection, small creditors must hold the mortgage loans in portfolio for at least three years, with limited exceptions.¹⁶⁶ And like General QM loans, small-creditor portfolio QMs must be fully amortizing, have terms not exceeding thirty years, and have total points and fees normally not exceeding 3%.¹⁶⁷ In addition, the lender must underwrite the applicant's ability to repay based on the maximum interest rate in the first five years of the loan.¹⁶⁸

158. 12 C.F.R. § 1026.43(f)(1)(v), (f)(2).

159. CFPB ATR ASSESSMENT, *supra* note 96, at 47. Originally, the CFPB adopted a temporary, small-creditor balloon payment QM alternative for small creditors that did not operate predominantly in rural or underserved areas. This alternative expired on April 1, 2016, after the Bureau liberalized the threshold for operating in a rural or underserved area. *See* 12 C.F.R. § 1026.43(e)(6); Operations in Rural Areas Under the Truth in Lending Act (Regulation Z); Interim Final Rule, 81 Fed. Reg. 16,074, 16,075 (Mar. 25, 2016) (codified at 12 C.F.R. pt. 1026).

160. PLATT ET AL., *supra* note 104, at 3.

161. 12 C.F.R. § 1026.43(f)(1)(i), (f)(1)(iv)(B). Essentially, this precludes interest-only or negative amortization terms during the period of the scheduled payments. The rule contains other requirements designed to keep the monthly scheduled payments flat and ensure some amortization of principal. *See id.*

162. *Id.* § 1026.43(e)(3)(i)(A); *see supra* note 143 and accompanying text.

163. 12 C.F.R. § 1026.43(f)(1)(i)–(ii). The lender does not have to determine the applicant's ability to repay the balloon payment. *Id.*

164. *Id.* § 1026.43(f)(1)(iii).

165. *Id.* §§ 1026.35(b)(2)(iii)(B)–(C), 1026.43(e)(5)(i)(D); *see supra* note 156 and accompanying text. Covered first-lien loans held in portfolio are excluded in calculating the annual loan origination limit. 12 C.F.R. § 1026.35(b)(2)(iii)(B).

166. *Id.* § 1026.43(e)(5)(i)(C), (e)(5)(ii).

167. *Id.* § 1026.43(e)(5)(i); *see supra* note 143 and accompanying text.

168. 12 C.F.R. § 1026.43(e)(5)(i)(B).

The CFPB relaxed certain requirements for small creditor portfolio QM loans, as compared to General QM loans. Lenders making small creditor portfolio QMs have no DTI cap.¹⁶⁹ Although they must document and verify income and assets as part of making a reasonable determination of the applicant's ability to repay, they are exempt from the CFPB's exact documentation and verification standards in Appendix Q.¹⁷⁰

e. Small Bank Portfolio QM.

In the Economic Growth, Regulatory Relief, and Consumer Protection Act in 2018,¹⁷¹ Congress enacted a last QM alternative, this one for portfolio loans by small banks, thrifts, and credit unions.¹⁷² The small bank portfolio QM applies to insured depository institutions and credit unions that, together with their affiliates, have less than \$10 billion in total consolidated assets. To qualify for this alternative, an eligible institution must originate and hold the mortgage in portfolio indefinitely, with limited opportunities for resale.¹⁷³ This alternative is broader than the CFPB's small creditor portfolio QM in that it applies to institutions with somewhat larger asset sizes but narrower in that it excludes nonbank mortgage lenders and places greater restrictions on resale.

Under this alternative, negative amortization and interest-only features are prohibited¹⁷⁴ and total points and fees are normally capped at 3%. Similarly, prepayment penalties are prohibited, except on fixed-rate loans that are not higher cost, in which case those penalties are subject to a three-year phase-out.¹⁷⁵

Like the other QM alternatives, the new small-bank portfolio QM dispenses with some General QM requirements. Most importantly, small-bank portfolio QMs are free from any DTI cap.¹⁷⁶ In addition, to document an applicant's debt, income, and financial resources, lenders may use methods other than those specified in Appendix Q when determining ability to repay.

To summarize, although the General QM and the four QM alternatives have their differences, they all require the same core safety features. They all prohibit

169. That does not mean that the lender can ignore the DTI ratio. In order to claim a small-creditor portfolio QM exception for a loan, a lender must consider at or before consummation the applicant's monthly DTI ratio or residual income and verify the debt obligations and income it uses to determine that ratio. *Id.* § 1026.43(e)(5)(i)(B).

170. *Id.* § 1026.43(e)(5)(i)(A).

171. Economic Growth, Regulatory Relief, and Consumer Protection Act, Pub. L. No. 115-174, 132 Stat. 1296 (2018).

172. *See id.* § 101, 132 Stat. at 1297-98 (to be codified at 15 U.S.C. § 1639c(b)(2)(F)).

173. *Id.* § 101, 132 Stat. at 1298. To retain safe harbor status, an eligible portfolio loan may only be transferred: (1) to someone else by reason of the institution's bankruptcy or failure; (2) to another small depository institution or credit union that holds it in portfolio; (3) through a merger, so long as the acquirer holds it in portfolio; or (4) to a wholly-owned subsidiary of the small institution, so long as the loan is treated as an asset of the small institution for regulatory accounting purposes. *Id.*

174. *Id.* The legislation leaves it unclear whether balloon loans are allowed under this alternative.

175. *Id.*

176. *See supra* note 169 and accompanying text.

negative amortization and interest-only terms,¹⁷⁷ restrict prepayment penalties, and limit loan terms to thirty years. In addition, all QMs must satisfy the points and fee cap. As part of a reasonable determination of an applicant's ability to repay, all QMs must further document and verify income and assets and take payment shock into account, although the precise methods for doing so vary depending on the type of QM. That leaves one outstanding difference among the five types of QMs—the 43% DTI cap—which the General QM imposes but the alternative QMs do not. The bottom line is that, however QM status is achieved, QM loans all enjoy a presumption of compliance with the ability-to-repay requirements.

2. Liability Exposure for QM and Non-QM Loans

Residential mortgages have posed new liability concerns ever since Congress gave borrowers recourse against originators and assignees for violations of the federal ability-to-repay requirements in 2010. Under the Dodd–Frank Act, aggrieved borrowers may initiate actions for such violations within three years of the violation.¹⁷⁸ In addition, borrowers who undergo foreclosure or are sued for collection of residential mortgage loans may raise ability-to-repay violations as a matter of defense by way of recoupment or set off with no time limit.¹⁷⁹ To establish liability, borrowers may either prove a failure to observe the general ability-to-repay standard (that is, that the lender failed to make a reasonable determination of the borrower's ability to repay) or a per se violation of one of the rule's bright-line requirements (such as income verification and documentation).¹⁸⁰

From the lenders' viewpoint, the main attraction of QM loans is the protection they provide from legal exposure to ability-to-repay violations. Of course, a mortgage must actually have QM status in order for the presumption to apply. Unless all of the QM requirements are met, defendants cannot raise the presumption. Accordingly, borrowers who wish to litigate ability-to-repay violations may proceed if their loans did not qualify for QM status.¹⁸¹

177. See *supra* note 137 and accompanying text. The General QM, the GSE Patch, the small-creditor portfolio QM, and possibly the small-bank portfolio QM also prohibit balloon payment terms. See *id.*

178. 15 U.S.C. § 1640(e) (2012). Under the provisions of the Truth in Lending Act governing ability-to-repay violations, creditors and assignees face potential monetary liability for actual damages, statutory damages of \$4,000 per loan (subject to a cap for class actions), special statutory damages equaling all finance charges and fees paid by the consumer for up to three years, refunds of certain finance charges, and attorneys' fees and costs. *Id.* § 1640(a); CFPB ATR ASSESSMENT, *supra* note 96, at 36–37. Special statutory damages cannot be awarded if the creditor proves that the failure to comply was immaterial. 15 U.S.C. § 1640(a)(4).

179. 15 U.S.C. § 1640(k)(1).

180. See NAT'L CONSUMER LAW CTR., MORTGAGE LENDING § 6.2.3.3.4.2 (3d ed. 2019) (noting that “in order to rebut the presumption . . . , a borrower would need to show that the creditor's determination of ability to repay was not made in good faith based on information in the lender's possession”); *id.* § 6.2.3.3.2 (listing bright-line requirements that lenders must meet to satisfy the minimum ability-to-repay standards).

181. PLATT ET AL., *supra* note 104, at 4; NAT'L CONSUMER LAW CTR., *supra* note 180, § 6.2.3.3.4.1 (“Unless all the qualified mortgage standards are met, the presumption does not arise.”).

Assuming that a loan does have QM status, the nature of the presumption depends on the loan price. QM loans that are not higher priced offer a conclusive presumption (that is, a safe harbor) against liability for ability-to-repay violations.¹⁸² Higher priced QM loans,¹⁸³ in contrast, only offer a rebuttable presumption.¹⁸⁴ Borrowers with higher priced QM loans can rebut the presumption by showing that the originator failed to make a reasonable, good-faith determination that the borrower would have had sufficient residual income or assets to meet living expenses after taking into account the household's monthly obligations.¹⁸⁵

In sum, Congress's decision to enact the ATR/QM provisions took a landmark step toward sound underwriting of home mortgages throughout the business cycle. Today, virtually all residential mortgage lenders must make a reasonable and good faith determination of borrowers' ability to repay before extending credit. Of crucial importance, the ability-to-repay requirement is not some vague command: to the contrary, it requires lenders to meet a series of demanding objective requirements when determining repayment capacity. These bright-line requirements significantly limit lenders' ability to loosen underwriting standards.

The qualified mortgage provisions build on the baseline repayment determination while allowing lenders to offer a wide variety of loan products depending on their appetite for liability exposure for ability-to-repay violations. Lenders who want the assurance of a safe harbor from legal exposure will offer safer loan products in the form of prime-rate QMs, and lenders willing to settle for a rebuttable presumption of compliance with the ATR requirements can expand into higher priced QM loans. Loan products with higher default propensities—most notably negative amortization, interest-only, and balloon payment loans—remain an option, but require lenders and assignees to internalize the cost of any ability-to-repay violations.

IV. THE ABILITY-TO-REPAY RULE IS KEY TO FINANCIAL STABILITY

Commentators usually treat the ATR/QM rule as a consumer-protection provision.¹⁸⁶ But the rule has larger significance as a bulwark against systemic risk, particularly against the types of credit-induced property bubbles that have historically been catastrophic.¹⁸⁷ Observers disagree about whether a bubble can be distinguished from an increase in market fundamentals.¹⁸⁸ However, regulators can

182. See 12 C.F.R. § 1026.43(e)(1)(i) (2019); CFPB ATR ASSESSMENT, *supra* note 96, at 44.

183. Normally, higher priced QM loans have an APR that exceeds the APOR for a comparable loan by 1.5 or more percentage points for a first-lien loan or by 3.5 or more percentage points for a subordinate-lien loan. See 12 C.F.R. § 1026.43(b)(4). However, for the small-creditor portfolio QM and rural or underserved small-creditor balloon payment QM alternatives, a higher-priced loan is defined as one whose APR exceeds the APOR for a comparable loan by 3.5 percentage points or more. See *id.*

184. See *id.* § 1026.43(e)(1)(ii).

185. *Id.* § 1026.43(e)(1)(ii)(B). For a discussion of residual income tests, see *supra* note 124.

186. See, e.g., Johnston, *supra* note 135.

187. See Greenwald, *supra* note 65, at 4.

188. See Patricia A. McCoy, *Countercyclical Regulation and Its Challenges*, 47 ARIZ. ST. L.J. 1181, 1193–95 (2015).

detect an uptick in the high-risk loan practices that typically fuel bubbles and curb those practices as a preventative measure. The ATR/QM rule is one of a suite of sectoral tools that serve this function.

This and similar ability-to-repay rules¹⁸⁹ have proven to be effective. A growing body of research finds that such rules are associated with reductions in mortgage default risk. Studies of earlier state ability-to-repay rules further conclude that lenders did comply with those rules during the last housing bubble.¹⁹⁰ Because those laws only covered limited types of lenders, they were not enough to counteract the nationwide decline in lending standards triggered by other lenders who escaped the state ATR laws. Nevertheless, pre-2008 experience with the earlier state ATR rules fundamentally calls into question the assumption that myopia will cause lenders to disregard ability-to-repay requirements during bubbles.

A. THE USE OF SECTORAL TOOLS TO CONSTRAIN SYSTEMIC RISK

Systemic risk regulation pays close attention to credit-fueled housing bubbles due to mortgage credit's leading role in financial crises. As is well documented, mortgage credit supports and amplifies housing bubble formation.¹⁹¹ Hence, it is feasible to restrain the lax credit that fuels break-away home price appreciation resulting in bubbles. The ability-to-repay rule is designed to do just that.

Thanks to voluminous research, we can now identify dangerous lending practices. Researchers have identified the key lending practices and terms associated with elevated mortgage defaults in the United States¹⁹² Based on that research, policymakers can pinpoint those practices and terms for potential intervention. Regardless of whether forecasters can predict housing bubbles themselves, it is eminently possible to restrict the hazardous underlying credit practices that have historically propelled those bubbles.¹⁹³ Regulating those terms and practices is key to breaking the vicious cycle of loose mortgage credit culminating in financial crises.

To this end, a growing literature on sectoral tools discusses and evaluates the use of mortgage regulation to curb systemic risk.¹⁹⁴ Sectoral tools seek to curb the growth of excessive risk in systemically important sectors, such as housing. Traditionally, countries that have taken a sectoral approach have used leverage

189. In the decade preceding the 2008 financial crisis, a number of states had adopted their own state ability-to-repay rules. *See infra* note 217 and accompanying text.

190. *See infra* Section IV.B.2.

191. *See, e.g.,* Andrey Pavlov & Susan Wachter, *Mortgage Put Options and Real Estate Markets*, 38 J. REAL EST. FIN. & ECON. 89 (2009) (outlining the Pavlov–Wachter indicator of bubbles, which is based on leverage conditions).

192. *See supra* notes 76–77, 83–86.

193. Former Federal Reserve Chairman Ben Bernanke highlighted this strategy when, in a 2013 press conference, he called for a “tripartite” approach of better monitoring, supervision and regulation, and increased communications with markets to curb incipient bubbles. *See* Catherine Hollander, *What You Need to Know About Ben Bernanke’s Evolving Views on Asset Bubbles*, NAT’L J. (Mar. 20, 2013, 1:45 PM), <http://www.nationaljournal.com/s/82386/what-you-need-know-about-ben-bernankes-evolving-views-asset-bubbles>.

194. *See, e.g.,* McCoy, *supra* note 188, at 1208–13.

(loan-to-value) limits, debt-to-income caps, provisioning rules, and capital-adequacy-risk weights to prevent housing market booms and busts.¹⁹⁵ Each of these techniques targets individual drivers of mortgage defaults with an eye toward reducing default risk.

In the United States, regulators use capital adequacy risk weights and DTI limits (as part of the General QM test), among other measures, to curb aggregate default risk from residential mortgages. But unlike other countries, the United States has rejected adopting across-the-board leverage limits¹⁹⁶ due to concerns about access to credit. The question whether to impose LTV caps on home mortgages was broached during the Obama Administration. In 2013, the CFPB decided against incorporating a leverage limit into the ATR/QM rule on grounds that down payments do not reflect repayment capacity.¹⁹⁷ Meanwhile, fellow federal financial regulators proposed incorporating a stiff LTV cap indirectly by requiring securitizations backed by residential loans with loan-to-value ratios exceeding 70% to hold risk retention of 5%.¹⁹⁸

The risk retention proposal set off a firestorm of controversy due to its feared effect on mortgage availability.¹⁹⁹ That proposal would have had strong negative

195. See *id.* For an inventory of these tools in the United States, see OFFICE OF FIN. RESEARCH, 2013 ANNUAL REPORT 35–38 & fig.27 (2013), <http://financialresearch.gov/annual-reports/files/office-of-financial-research-annual-report-2013.pdf> [<https://perma.cc/2SBT-XQRG>]. In 2016, the Financial Accounting Standards Board issued the new current expected credit losses (CECL) provisioning standard. The CECL standard is designed to increase loan loss reserves by basing them on expected losses, even if those losses are not probable. See BD. OF GOVERNORS OF THE FED. RESERVE SYS. ET AL., FREQUENTLY ASKED QUESTIONS ON THE NEW ACCOUNTING STANDARD ON FINANCIAL INSTRUMENTS—CREDIT LOSSES 1, 5 (2019), <https://www.occ.treas.gov/news-issuances/bulletins/2019/bulletin-2019-17a.pdf> [<https://perma.cc/KFC5-ULGH>].

Meanwhile, under the Basel regime, global risk-weighted capital standards include risk weights for residential mortgages. See McCoy, *supra* note 188, at 1199–1205. In addition, Canada, China, Colombia, the Hong Kong SAR, Malaysia, the Republic of Korea, Singapore, and a number of Eastern European nations cap loan-to-value ratios, whereas Korea and Hong Kong limit debt-to-income ratios. See *id.* at 1210 & n.139, 1212.

196. The GSEs and FHA do cap LTVs, but exercise discretion about where to set those caps—the current limits are generous. Fannie Mae and Freddie Mac impose liberal LTV caps on the loans they securitize. Currently, the GSEs buy home mortgages with LTVs of up to 97%. *97% LTV Options*, FANNIE MAE, <https://www.fanniemae.com/singlefamily/97-ltv-options> [<https://perma.cc/9WCK-28WR>] (last visited December 22, 2019); *Home Possible*, FREDDIE MAC, <http://www.freddiemac.com/homepossible/> [<https://perma.cc/R23Z-8NKD>] (last visited December 22, 2019). FHA limits LTVs on the loans it insures from 90% to 96.5%, depending on the borrower's credit score. See U.S. DEP'T HOUS. & URBAN DEV., HUD HOME STORE FREQUENTLY ASKED QUESTIONS (FAQS): CONSUMERS AND THE GENERAL PUBLIC 2 (2015), <https://www.hud.gov/sites/documents/PUBLICFAQ.PDF> [<https://perma.cc/DFG5-AY6L>]; U.S. DEP'T HOUS. & URBAN DEV., SUMMARY OF FY 2015 FHA ANNUAL REPORT TO CONGRESS ON THE FINANCIAL HEALTH OF THE MUTUAL MORTGAGE INSURANCE FUND 9 (2015), <https://archives.hud.gov/news/2015/pr15-146-FHAAnnRptDeck111315.pdf> [<https://perma.cc/8723-N2L4>].

197. See Ability-to-Repay and Qualified Mortgage Standards Under the Truth in Lending Act (Regulation Z), 78 Fed. Reg. 6408, 6458 (Jan. 30, 2013) (codified at 12 C.F.R. pt. 1026).

198. See Credit Risk Retention, 78 Fed. Reg. 57,928, 57,928, 57,994 (Sept. 20, 2013) (codified at scattered parts of 12 C.F.R., 17 C.F.R., and 24 C.F.R.).

199. See, e.g., Kevin Wack, *Frank Toughens Criticism of Risk-Retention Opponents*, AM. BANKER (Sept. 20, 2011, 11:48 AM), <https://www.americanbanker.com/news/frank-toughens-criticism-of-risk-retention-opponents>.

distributional consequences because lower income and minority borrowers can rarely raise a down payment of 20%, let alone 30%.²⁰⁰ A 2012 study concluded, for instance, that 75% of African-American borrowers and 70% of Latino borrowers with performing loans could not have afforded a 20% down payment requirement when they first obtained their mortgages.²⁰¹ Due to these concerns, the final risk retention rule scrapped the 70% leverage limit test and replaced it with a risk retention exemption for securitizations backed solely by qualified mortgages.²⁰²

As a result of these events, the United States turned to other sectoral tools to constrain the default risk from residential mortgages that would have less of an effect on credit access. Key among those tools was the ability-to-repay rule.

Like leverage limits, the ATR/QM rule seeks to constrain the default risk from residential mortgages, but it does so in different ways. Leverage limits restrict high combined loan-to-value ratios (CLTVs) to ensure that homeowners have enough equity in their homes to protect them from declining property values. In contrast, the ATR/QM rule addresses other determinants of defaults,²⁰³ particularly reduced documentation underwriting, less-than-fully amortizing terms, prepayment penalties, payment shock from adjustable-rate features, high DTI ratios, and loans combining two or more of these risks. Since the early 2000s, a growing body of research has examined whether these and similar restrictions produce better borrower repayment and lower default rates.

B. THE EFFECT OF THE ABILITY-TO-REPAY RULE ON REPAYMENT

Until recently, debates about the effectiveness of the ATR/QM rule primarily remained in the realm of the hypothetical due to the rule's relative newness and the resulting lack of data. In 2019, however, the CFPB produced an empirical assessment of the rule's effectiveness.²⁰⁴ This assessment report and related studies allow us to evaluate whether the ATR/QM rule is having its intended effect.

200. See DARRYL E. GETTER, CONG. RESEARCH SERV., ABILITY TO REPAY, RISK-RETENTION STANDARDS, AND MORTGAGE CREDIT ACCESS 14 (2012), <http://www.fas.org/sgp/crs/misc/R42056.pdf> [<https://perma.cc/YK8F-VXHR>]; ROBERTO G. QUERCIA ET AL., UNC CTR. FOR CMTY. CAPITAL, BALANCING RISK AND ACCESS: UNDERWRITING STANDARDS AND QUALIFIED RESIDENTIAL MORTGAGES 10–11 (2012) [hereinafter BALANCING RISK], <http://www.responsiblelending.org/mortgage-lending/research-analysis/Underwriting-Standards-for-Qualified-Residential-Mortgages.pdf> [<https://perma.cc/E63Z-H86E>]; *Revitalizing the Private Mortgage Market: 'Skin in the Game' and the Consequences for Future Homebuyers*, WHARTON: KNOWLEDGE@WHARTON (May 11, 2011), <http://knowledge.wharton.upenn.edu/article.cfm?articleid=2775> [<https://perma.cc/M4JB-JZB2>].

201. BALANCING RISK, *supra* note 200, at 10–11, 27–28 & fig.8.

202. See Credit Risk Retention, 79 Fed. Reg. 77,602, 77,681–82, 77,684, 77,688, 77,696 (Dec. 24, 2014) (codified in scattered parts at 12 C.F.R., 17 C.F.R., and 24 C.F.R.). Mortgages that qualify for this exemption are known as “qualified residential mortgages,” or QRMs.

203. See *supra* notes 76, 83–86, and accompanying text.

204. See CFPB ATR ASSESSMENT, *supra* note 96. Section 1022(d) of the Dodd–Frank Act requires the Bureau to conduct an empirical assessment of every significant new regulation and publish a report on that assessment within five years of the effective date of the rule. Dodd–Frank Wall Street Reform and Consumer Protection Act § 1022(d), 12 U.S.C. § 5512(d) (2012). The purpose of this assessment is to gauge the rule's effectiveness: “The assessment shall address, among other relevant factors, the

1. Studies Projecting the Effect the Rule Would Have Had on Defaults During the Last Financial Crisis

Starting in 2010, serious delinquencies on residential mortgages declined sharply and dropped by more than half after the ATR/QM rule took effect in 2014.²⁰⁵ However, the ATR/QM rule is not likely the cause of that drop. Other factors, including private credit standards that were already tight when the rule took effect, improved economic conditions, quantitative easing actions taken by the Federal Reserve System to ease mortgage rates and underwrite availability of agency lending, the GSEs' conservatorship, and recovery in the housing market undoubtedly contributed to the decline. Furthermore, the low delinquency rates for recent vintages do not predict whether the rule will produce lower default rates under distressed conditions.

To answer that last question, several studies have identified mortgage loans originated before 2008 that would have met key ability-to-repay and QM provisions if those laws had been in effect and studied the performance of those loans. The CFPB assessment, for instance, examined loans with "restricted features" (that is, features that the ATR/QM rule regulates today) that were originated at the height of the housing bubble and later went into early foreclosure.²⁰⁶ The assessment defined "restricted features" to include interest-only clauses, negative amortization clauses, balloon payments, terms over thirty years, low- or no-documentation underwriting, or an ARM reset in less than five years.²⁰⁷ According to the report, fully 50–60% of early foreclosures for loans originated in 2005 through 2007 involved mortgage loans with restricted features.²⁰⁸ Based on the high default propensity of these loans originated from 2005 through 2007, the Bureau concluded that the ATR/QM rule "would likely have prevented at least some of the early foreclosed loans that had these features from being originated in the first

effectiveness of the rule . . . in meeting the purposes and objectives of [Title X of Dodd–Frank] and the specific goals stated by the Bureau." *Id.* (footnote omitted).

205. See CFPB ATR ASSESSMENT, *supra* note 96, at 9–10; HOUSING CHARTBOOK, *supra* note 153, at 24.

206. See CFPB ATR ASSESSMENT, *supra* note 96, at 84. The report defined the early foreclosure rate as a measurement of whether a borrower was ever in foreclosure in the first two years following origination. See *id.* at 84. The Bureau used the early foreclosure rate as a proxy for inability to repay, reasoning that loans with restricted features are more likely to be unaffordable at their inception and thus to go into early foreclosure. See *id.* at 83–84. By only examining early foreclosures, the study was able to mostly rule out other possible causes for default such as a subsequent job loss or divorce.

207. See *id.* at 85, 86 fig.20.

208. CFPB ATR ASSESSMENT, *supra* note 96, at 86, 87 fig.21; see also MORTGAGE REFORMS, *supra* note 141, at 27–28, 28 n.48 (discussing a Goldman Sachs study that found that the 29% of loans originated between 2005 and 2008 that did not appear to satisfy the QM standards accounted for 47% of the defaults during the period).

These three vintages occurred at the top of the housing bubble and produced the highest average default rates of the years preceding the 2008 crisis. CFPB ATR ASSESSMENT, *supra* note 96, at 86 fig.20; see also Chris Foote et al., *Income Growth, Credit Growth, and Lending Standards: Revisiting the Evidence*, FED. RES. BANK ATL. (Apr. 20, 2015) [<https://perma.cc/LQT7-6GBM>] (noting that "loans made in 2005 did not perform well during the housing crisis, but the performance of loans made in 2006 and 2007 was even worse").

place, potentially eliminating a majority of early foreclosed loans” from the 2005 through 2007 vintages.²⁰⁹

A similar study by Professors Floros and White in 2016 examined the serious delinquency rate²¹⁰ for non-agency securitized mortgages originated between 1997 and 2009. They found that key provisions of the ATR/QM rule would have had a significant marginal effect in reducing that delinquency rate. These provisions included, in decreasing size of effect, the QM prohibitions on negative amortization clauses; the full documentation requirements; and the QM restrictions on prepayment penalties, interest-only terms, and balloon payment clauses.²¹¹ According to the authors, had the ATR/QM rule been in effect for the 1997 through 2009 vintages, those provisions would have reduced the serious delinquency rate for non-agency securitized mortgages by 22.7%.²¹²

In another study, Professors Quercia, Ding, and Reid examined the performance of mortgage loans originated between 2000 and 2008.²¹³ Extrapolating from their results, full-documentation loans originated during the study period that would have met today’s QM requirements had a 24.6% lower cumulative default rate through February 2011 than the same rate for the control group.²¹⁴ This estimate is strikingly similar to that made by Floros and White.

Together, these studies provide support for the conclusion that had the ATR/QM rule been in effect preceding the last financial crisis, it would have produced a substantial reduction in default risk. Moreover, these studies likely understate the beneficial effects of the ATR/QM rule because their results do not account for the added increment of loan defaults that occurred due to excessive LTV ratios after the bubble burst and property values fell. These defaults—which involved loans that had financed home purchases at significantly higher prices than what the homes were later worth post-crisis—resulted from the easing of credit constraints through what would now be ATR violations or the ensuing recession that resulted from the bursting of the bubble. Hence, the significance of the ATR/QM rule for financial stability extends beyond the individual propensity to default on such loans (relative to others) originated in the crisis years, to curbing the loose credit that inflates

209. CFPB ATR ASSESSMENT, *supra* note 96, at 86. Later, after the financial crisis, the percentage of restricted feature loans plummeted and further declined after the ATR/QM rule took effect in 2014. *Id.* at 85–86, 86 fig.20, 88, 89 fig.22, 93–94, 94 fig.25.

210. “Serious delinquency” is defined as a loan that was ever at least ninety days delinquent, foreclosed on, or real estate owned. *See* Floros & White, *supra* note 83, at 91. In the empirical literature, this is a common operational definition of default.

211. *See id.* at 95, 96 tbl.5.

212. *See id.* at 87–88 (presenting this calculation by the authors). The authors did not analyze loans securitized by Fannie Mae or Freddie Mac (the government-sponsored entities or GSEs), which had a significantly lower serious delinquency rate than the non-agency securitized loans in questions. *Id.* at 87, 91, 103 tbl.C-1, 104 app. C (reporting that over 44% of the non-agency loans studied became seriously delinquent, compared to 5.3% of Fannie Mae and Freddie Mac securitized loans).

213. *See* BALANCING RISK, *supra* note 200.

214. *See id.* at 15–16, 16 tbl.1 (presenting this calculation by the authors).

housing bubbles in the first place.²¹⁵ This is of systemic importance because, as the CFPB observed in the assessment, the ATR/QM rule “limits” the reemergence of restricted-feature loans associated with elevated foreclosures “and any consequent consumer harm or macroeconomic disruption.”²¹⁶

2. Effect of Earlier State Anti-Predatory Lending Laws on Default Risk

Another way to predict the effect of the ATR/QM rule on default risk under distressed conditions is to measure the effect of state anti-predatory lending laws (APLs) that were in effect in some states during the housing bubble. Although Congress did not adopt the Dodd–Frank ATR/QM rule until 2010, a number of states adopted state APLs during the years preceding the 2008 financial crisis. Many of these state laws contained early versions of the ability-to-repay requirement plus other restrictions on lax lending.²¹⁷

Professor White and his coauthors reported that states with strong APLs containing ability-to-repay requirements produced compliance.²¹⁸ These states had large reductions in option-pay ARM loans and loans with prepayment penalties, both associated with higher default rates.²¹⁹ As a result, mortgages originated by lenders who were subject to strict state APLs between 2002 and 2006 were 25% less likely to default than loans made by originators who were exempt from those state laws.²²⁰ Professor Keys and his coauthors found that low-documentation loans made in Georgia and New Jersey between 2001 and 2006 had lower delinquency rates when both states were enforcing their strictest state anti-predatory lending law provisions.²²¹ Professor Quercia and his coauthors found reductions in loans with three features regulated by the North Carolina APL—prepayment penalties, balloon payments, and high LTVs—thus evidencing compliance by regulated lenders.²²² Researchers Li and Ernst similarly found that state APLs resulted in a reduction in loans with regulated terms, providing evidence of

215. See Arthur Acolin, Xudong An & Susan M. Wachter, *Lending Competition, Regulation and Non-Traditional Mortgages* 4–5, 22–23 (Jan. 18, 2019) (unpublished manuscript) (on file with authors).

216. CFPB ATR ASSESSMENT, *supra* note 96, at 87.

217. See Alan White et al., *The Impact of State Anti-Predatory Lending Laws on the Foreclosure Crisis*, 21 CORNELL J.L. & PUB. POL’Y 247, 253 (2011).

218. See *id.* at 265.

219. See *id.*

220. See *id.* at 267, 282 tbl.9; see also *id.* at 269 (“[M]ore general APLs without specific restrictions on repayment ability requirements were not strong enough to counteract the deterioration of underwriting standards that occurred during the latter half of the subprime boom, particularly in high-cost states such as California.”); Lei Ding et al., *The Impact of Federal Preemption of State Antipredatory Lending Laws on the Foreclosure Crisis*, 31 J. POL’Y ANALYSIS & MGMT. 367, 379–383, 380 tbl.3, 381 tbl.4, 382 tbl.5 (2012) (finding that the relative loan performance of lenders who were not subject to APLs due to federal preemption deteriorated more than that of lenders who were subject to those laws). Pre-crisis, federally chartered banks and thrifts were exempt from the state APLs by virtue of federal preemption. See *infra* note 235.

221. See Keys et al., *Did Securitization Lead to Lax Screening?*, *supra* note 32, at 312, 341–44.

222. See Roberto G. Quercia et al., *Assessing the Impact of North Carolina’s Predatory Lending Law*, 15 HOUSING POL’Y DEBATE 573, 577–79, 586–88, 593–97 (2004).

compliance.²²³ Meanwhile, Professor Rose reported that mortgages originated in states with APLs restricting prepayment penalties between 2002 and 2006 were associated with lower average probabilities of default.²²⁴ In addition, Acolin and his coauthors found that default rates were lower in states where and when such laws were in place.²²⁵

Two conclusions flow from these studies. First, states with ability-to-repay requirements as part of their strong state APLs experienced lower default rates, according to a number of measures, than states without those laws. Second, during the last housing bubble, lenders who were subject to state APLs usually complied with those laws. Accordingly, the experience with state APLs before 2008 provides additional evidence of the beneficial potential of the ATR/QM rule.

3. Effect on the Underwriting Quality of Restricted-Feature Loans

Finally, a last line of inquiry examines the underwriting quality of recent restricted-feature loans. Interestingly, and in keeping with Congress's intent, the ATR/QM rule did not eliminate restricted-feature loans altogether. Instead, according to the CFPB assessment, limited numbers of interest-only loans, limited-documentation loans, and loans with ARM resets of under five years continued to be made after the ability-to-repay rule took effect.²²⁶

According to the assessment report, the ability-to-repay rule has had an added beneficial effect of improving the underwriting quality of those loans.²²⁷ Since the rule took effect, loans with one of those three restricted features had the same, or lower, early delinquency rates compared to the market as a whole.²²⁸ Furthermore, borrowers who received interest-only loans or ARMs with rate resets of under five years had better credit scores and much lower LTV ratios and initial interest rates on average.²²⁹ This is consistent with the intent of the rule to strengthen the underwriting of these loans, as the Bureau concluded: "These characteristics suggest that loans with these restricted features may be largely confined to highly creditworthy borrowers."²³⁰

Taken together, these different strands of studies provide empirical evidence that the ATR/QM rule is likely to improve underwriting quality and produce a significant reduction in future default rates. Furthermore, the studies of state APLs that *were* in effect during the housing bubble found evidence that regulated lenders did comply with those laws. These latter studies cast doubt on the central

223. See Wei Li & Keith S. Ernst, *Do State Predatory Lending Laws Work? A Panel Analysis of Market Reforms*, 18 HOUSING POL'Y DEBATE 347, 380–85, 381 tbl.9, 382 tbl.10, 383 tbl.11 (2007); accord Acolin, An & Wachter, *supra* note 215 (manuscript at 23).

224. See Morgan J. Rose, *Origination Channel, Prepayment Penalties and Default*, 40 REAL EST. ECON. 662, 703 (2012).

225. See Acolin, An & Wachter, *supra* note 215 (manuscript at 22–23).

226. CFPB ATR ASSESSMENT, *supra* note 96, at 85–86, 86 fig.20.

227. Due to small sample sizes, the Bureau was not able to perform this analysis for loans with balloon payments, negative amortization, or terms exceeding thirty years. See *id.* at 89.

228. *Id.* at 90–92, 91 fig.23, 92 fig.24, 94–95, 94 fig.26.

229. *Id.* at 92–94, 93 tbl.1.

230. *Id.* at 92.

behavioral critique of the rule—that is, that the rule will lack force when housing bubbles are inflating due to lender myopia.

V. WHY THE BEHAVIORAL CRITIQUE OF THE ABILITY-TO-REPAY RULE DOES NOT SUFFICE TO REJECT THE RULE

Skepticism about the ability-to-repay rule's potential to regulate bubbles rests on a behavioral theory of market participant myopia. According to this theory, lenders will bend the ability-to-repay rule when property values skyrocket because they will underestimate the chance and consequences of getting caught. We do not deny that lenders will have incentives to find ways around the ability-to-repay rule in a bubble. However, this is not a sufficient reason to dismantle that rule. We argue that there are multiple compelling reasons why the rule is still necessary despite the tendency for lenders to attempt to evade the rule during periods of euphoria.

First, although the behavior of lenders is relevant, loan features that would violate the ATR rule today were not illegal at the time, so those risks were not foremost in pre-crisis lenders' minds. Now, the existence of the ATR/QM rule makes it necessary for lenders to either decide to abide by the law or knowingly take the risk of not doing so. The rule now makes the decision to use such features recognizably risky.

Second, the myriad objective requirements in the ATR/QM rule force lenders to produce and disclose more hard information about loan originations to outside monitors, including investors and regulators. The production of that additional hard data is useful for monitoring both the development of bubbles and the source of non-fundamental and unsustainable price increases.

Finally, the ATR/QM rule has a more robust enforcement scheme than it receives credit for. All mortgage lenders undergo regular federal examinations for compliance with the rule and violations are punishable by agency sanctions. The CFPB's ATR/QM regulations are also enforceable by state attorneys general and state regulators. For all of these reasons, the ATR/QM law does matter, both to consumer well-being and to financial stability.

A. THE ABILITY-TO-REPAY RULE AND LOAN RISK

The leading critique of the ability-to-repay rule's effect on financial stability rests on a key behavioral assumption: that lenders will be too myopic during real estate booms to respect the rule.²³¹ Although some lenders may be too myopic to stop lending during a bubble, the existence of the ability-to-repay rule will likely deter lending that violates the rule.²³²

When a property bubble is inflating, default rates are low because distressed borrowers can usually avoid default by refinancing their mortgages or selling their homes to retire their loans. Under these conditions, concern arises that

231. See generally Bubb & Krishnamurthy, *supra* note 10 (discussing this behavioral assumption).

232. See *id.* at 1544, 1554–56.

lenders will underestimate the probability of default and thus the likelihood of exposure. There is additional concern that lenders will further discount the chance of enforcement because the ability-to-repay rule is framed as a standard, which could make violations harder to prove.²³³ For this reason, the critique advocates a shift to bright-line rules, most notably leverage limits, to curb the systemic risk from mortgages.²³⁴

A problem with this reasoning is the bootstrapping nature of the critique. To the extent the argument extrapolates from lenders' behavior during the last housing bubble, it overlooks the markedly different deregulatory climate in which the last housing bubble took hold. Before 2008, most significant mortgage lenders faced no effective ability-to-repay requirement (putting aside the narrow slice of lenders who were subject to state anti-predatory lending laws in certain jurisdictions).²³⁵ Needless to say, one cannot judge the ATR/QM rule's efficacy based on how unregulated lenders behaved. Unlike during the years preceding 2008, today the ability-to-repay rule forces lenders to actively take responsibility for complying with the rule.²³⁶

233. See *id.* at 1596 (“[W]ith the exception of [the] documentation requirement, what constitutes reasonable care is largely left undefined.”); see also *id.* at 1597 (noting the ability-to-repay rule is functionally a standard because “‘reasonable’ is only given context ex post upon default”).

234. See *id.* at 1597, 1598 n.226, 1607–27.

235. During the housing bubble, national banks, federal savings associations, and their operating mortgage lending subsidiaries were exempt from those state laws due to federal preemption rulings. At most, only state banks, state thrifts, and other nonbank mortgage lenders had to comply with those laws. ENGEL & MCCOY, *supra* note 48, at 157–59. Moreover, certain states adopted wild card laws that exempted banks and thrifts chartered in those states (plus their mortgage lending subsidiaries) from complying with their state ability-to-repay requirements. As a result, the latter requirements only applied to independent nonbank mortgage lenders in those states. In part due to the inroads made by federal preemption, independent nonbank lenders lost market share and originated less than half—45.7%—of higher cost mortgages made by 2006. Patricia A. McCoy & Elizabeth Renuart, *The Legal Infrastructure of Subprime and Nontraditional Home Mortgages*, in BORROWING TO LIVE: CONSUMER AND MORTGAGE CREDIT REVISITED 110, 122 (Nicolas P. Retsinas & Eric S. Belsky eds., 2008). In addition, all mortgage lenders—bank and nonbank alike—were exempt from state restrictions on negative amortization and balloon terms under the former provisions of the federal Alternative Mortgage Transaction Parity Act, 12 U.S.C. § 3801 (1982). McCoy & Renuart, *supra*, at 115. For more about state ability-to-repay requirements, see *supra* notes 217–26 and accompanying text.

236. Internal lender controls have also improved since 2011. In recent years, lenders and vendors have instituted sophisticated systems (with many functions automated) to carry out the ability-to-repay rule and verify compliance. See NAVIGANT, *THE QUALIFIED MORTGAGE AND ABILITY TO REPAY RULES 7* (2013), <https://docplayer.net/23364701-The-qualified-mortgage-and-ability-to-repay-rules.html> [<https://perma.cc/G7KS-ZC9H>] (“Navigant has helped a number of firms prepare for and successfully implement strong compliance and reporting frameworks to create a QM and ATR compliance system, as well as strong policies to ensure ongoing compliance and easy access for any regulatory requests.”). These systems are part of the new consumer compliance systems that large depository institutions have erected post-crisis. Although these systems are not fail-safe, their existence makes it harder to flout the rule. Federal examiners and independent outside auditors scrutinize these systems, which adds extra layers of protection. See Consumer Fin. Prot. Bureau, *SUPERVISORY HIGHLIGHTS*, Fall 2016, at 12 [hereinafter CFPB *SUPERVISORY HIGHLIGHTS* Fall 2016] (stating that lenders' overall compliance systems for their mortgage originations operations were “strong,” and summarizing recent mortgage compliance deficiencies detected in examinations); Consumer Fin. Prot. Bureau, *SUPERVISORY HIGHLIGHTS*, Winter 2015, at 13 (summarizing recent mortgage compliance deficiencies detected in examinations).

B. THE ABILITY-TO-REPAY RULE'S EFFECT ON HARD INFORMATION

To some degree, the behavioral critique of the ATR/QM rule is a critique of statutory design. It asks whether the rule is too vague to induce lenders' compliance.²³⁷ As Exhibit A, the critique suggests that the overarching commandment of the rule is couched as a standard (specifically, lenders must "make a reasonable and good faith determination" that a mortgage borrower has "a reasonable ability to repay" a loan).²³⁸ This is another way of saying that the ability-to-repay determination by lenders only results in unobservable, soft data.

If that were the end of the story, the critique might be valid. But it fails to take into account that the ATR/QM statute and regulation implement this standard with a host of objective requirements, including many that generate hard data observable to investors and regulators. We have described those bright-line requirements in detail above.²³⁹ Most critically, lenders must document and verify income, assets, and debts using reputable third-party sources. This process likely reduces the chance that a borrower's resources will be exaggerated or falsified, and thus reduces default risk.²⁴⁰

These documentation and verification requirements are crucial because when lenders evaluate creditworthiness, they look at two types of information: "hard" information and "soft" information. Hard information consists of objective (often numeric) data such as loan-to-value ratios, DTI ratios, and credit scores. Soft information involves factors that are predictive or subjective in nature or harder to report in summary form, such as the applicant's willingness to repay, likely future earnings, joint income status, and income derived from self-employment (which is easier to manipulate).²⁴¹ Hard information is easily described and reported to external parties such as investors and regulators. Soft information is not reported and is therefore not observable to outside monitors.²⁴²

During the run-up to the crisis, low-documentation loans were approved despite scant hard data on income and assets. The paucity of hard data supporting low-documentation loans posed at least three problems. First, lenders extended credit without information on key risk factors for future defaults. Second, low-documentation options encouraged mortgage brokers, loan officers, and borrowers to inflate values for income and assets, knowing that those values would not be verified or documented. Third, lenders had incentives to shunt borrowers

237. See Bubb & Krishnamurthy, *supra* note 10, at 1594–96.

238. Dodd–Frank Wall Street Reform and Consumer Protection Act § 1411(a)(2), 15 U.S.C. § 1639c (2012).

239. See *supra* Section III.A.

240. See Floros & White, *supra* note 83, at 95, 96 tbl.5. Professors Bubb and Krishnamurthy acknowledge the documentation and verification requirements but do not discuss their implications. See Bubb & Krishnamurthy, *supra* note 10, at 1596.

241. Benjamin J. Keys et al., *Lender Screening and the Role of Securitization: Evidence from Prime and Subprime Mortgage Markets*, 25 REV. FIN. STUD. 2071, 2072, 2077, 2080 (2012).

242. *Id.* at 2073, 2077.

with volatile income that was easily overstated into securitized low-documentation loans.²⁴³

Today, in contrast, the ATR rule effectively outlaws low-documentation loans, thus requiring the production of hard data on borrowers' income and assets where before there was none. Through objective requirements such as income documentation and verification, the ATR/QM rule helps to ensure the production of sufficient hard data on a key determinant of mortgage default to allow better monitoring.

C. THE RULE'S ENFORCEMENT MECHANISMS

Finally, the behavioral critique of the ATR/QM rule airs doubts about the effectiveness of the rule's enforcement mechanisms. On this view, the rule's private liability provisions are empty threats because lenders will only regard liability as likely in the event that borrowers default. However, lenders discount the chance of default during housing bubbles. When rising home prices transform into full-blown market mania, originators will regard the chance of default as remote and, with it, the chance of damages exposure. Without the sword of private liability hanging over their heads, originators will revert to the same dangerous course of unsafe loans that we experienced during the last housing bubble.

This account, however, fails to consider a number of important dynamics. First, whatever doubts critics may have about the *in terrorem* effect of the ability-to-repay rule's private right of action and foreclosure defense, the market response has been the opposite of predictions. Housing prices have been rising in the United States since 2012,²⁴⁴ which should have caused lenders to throw liability concerns to the wind if the criticism is right. But that is not what we see. The non-QM market remains small,²⁴⁵ partly due to a lack of capital markets

243. One study found that "lenders relax[ed] screening of low-documentation loans in the subprime market on dimensions that [were] easily manipulated because they [were] unreported to investors." *Id.* at 2075, 2103–04; see also Brent W. Ambrose et al., *Credit Rationing, Income Exaggeration, and Adverse Selection in the Mortgage Market*, 71 J. FIN. 2637, 2638 (2016).

244. *S&P/Case-Shiller U.S. National Home Price Index (CSUSHPINSA)*, FRED ECON. DATA (Nov. 26, 2019), <https://fred.stlouisfed.org/series/CSUSHPINSA> [<https://perma.cc/9TVT-UUDP>].

245. See CFPB ATR ASSESSMENT, *supra* note 96, at 61, 71, 116, 120–21, 127–29. Kaul and Goodman described the non-QM market for 2017 as a "drop in the bucket" compared to total mortgage originations that year. KARAN KAUL & LAURIE GOODMAN, URBAN INST. HOUS. FIN. POLICY CTR., WHAT, IF ANYTHING, SHOULD REPLACE THE QM GSE PATCH 4 (2018), https://www.urban.org/sites/default/files/publication/99268/2018_10_30_qualified_mortgage_rule_update_finalized_4.pdf [<https://perma.cc/384M-MT45>]; accord LAURIE GOODMAN, URBAN INST. HOUS. FIN. POLICY CTR., THE REBIRTH OF SECURITIZATION: WHERE IS THE PRIVATE-LABEL MORTGAGE MARKET? 3 tbl.2, 15 (2015), <https://www.urban.org/sites/default/files/publication/65901/2000375-The-Rebirth-of-Securitization.pdf> [<https://perma.cc/325N-YGVJ>]; NAT'L ASS'N OF REALTORS, SURVEY OF MORTGAGE ORIGINATORS, SECOND QUARTER 2017: HIGHER DTI CAPS AT FANNIE MAE, & THE IMPACT OF FED REINVESTMENT ENDING 2 (2017), https://www.nar.realtor/sites/default/files/documents/2017-q2-survey-of-mortgage-originators-08-22-2017_0.pdf [<https://perma.cc/UZL9-6G4A>].

financing,²⁴⁶ but also reflecting concerns about liability.²⁴⁷ Indeed, liability fears caused community banks to successfully lobby Congress in 2017 and 2018 for the small bank portfolio QM in the bill that eventually was enacted as EGRRCPA.²⁴⁸ To date, although we agree with the CFPB that the real degree of exposure is in fact quite small, industry and investors have treated the liability exposure as real.

We should hasten to add that the safe harbor protection for prime-rate QM loans does not relieve originators from private liability *in toto*. A lender, if challenged, must first make a prima facie case that the loan meets the requirements for a QM loan. Among other things, this requires the lender to show that it performed the ability-to-repay analysis (complete with documentation and verification) that the QM definition requires and that it adhered to the 43% DTI cap (for General QMs) and all other QM definition requirements. Without that proof, the loan is a non-QM loan and comes with full liability for any violations of the rule. Consequently, even an ostensible QM loan carries some marginal ability-to-repay risk for ability-to-repay violations.

In addition, the private cause of action and borrower defense that Dodd–Frank authorized are not the only avenues of enforcement. A host of other mechanisms enforces compliance with the ATR/QM rule. Importantly, many of these mechanisms kick in much sooner than far-off private borrower redress. These alternative forms of oversight increase the likelihood of faster detection and thus deterrent effect.

To start, all mortgage lenders, big and small and regardless of charter type, undergo regular examinations by federal regulators for compliance with the rule.²⁴⁹ This is particularly significant because the Dodd–Frank Act required independent nonbank mortgage lenders to undergo federal consumer compliance examinations for the first time starting in 2011.²⁵⁰ Today, nonbank mortgage lenders comprise the fastest-growing segment of the mortgage market, accounting

246. The private-label mortgage securitization market on Wall Street in which non-QM loans would most likely be securitized collapsed in 2007 and remains on life support today. See KAUL & GOODMAN, *supra* note 245, at 3 tbl.2.

247. See CFPB ATR ASSESSMENT, *supra* note 96, at 11, 116–18, 150, 197 & fig.62, 246–47; KAUL & GOODMAN, *supra* note 245, at 4.

248. See Economic Growth, Regulatory Relief, and Consumer Protection Act, Pub. L. No. 115-174, 132 Stat. 1296 (2018).

249. The CFPB conducts consumer compliance examinations for all independent nonbank mortgage lenders plus depository institution lenders with total assets of \$10 billion or more. Smaller depository institution lenders undergo consumer compliance examinations by their respective federal prudential regulator (the Office of the Comptroller of the Currency (OCC), the Federal Reserve System, or the Federal Deposit Insurance Corporation (FDIC)). 12 U.S.C. §§ 5514–16 (2012). In addition, the federal prudential banking regulators examine insured depository institutions and credit unions for solvency. Those solvency examinations can unearth ability-to-repay violations as well.

250. See *id.* § 5514.

for 66% of mortgage originations in 2019.²⁵¹ As a result, the CFPB now supervises a large swath of the mortgage origination market that escaped federal examinations before 2008.

On top of the federal scrutiny that supervision entails, federal examinations can lead to other knock-on effects exerting discipline over lenders. Following examinations, federal examiners have publicized errors in compliance.²⁵² Violations can trigger federal banking sanctions in the form of cease-and-desist orders or civil money penalties, either by the CFPB or by the lender's prudential regulator.²⁵³ In addition, state attorneys general and state regulators have authority under the Dodd–Frank Act to sue to enforce the ability-to-repay rule and other provisions of the federal Consumer Financial Protection Act.²⁵⁴ Even if federal regulators are guilty of laxity during bubbles, these multiple overlapping centers of enforcement—particularly at the state attorney general level—help ensure that the threat of sanctions has bite.²⁵⁵

251. HOUSING CHARTBOOK, *supra* note 153, at 11. For a more general discussion of nonbank mortgage lending, see McCoy & Wachter, *supra* note 36.

252. See CFPB SUPERVISORY HIGHLIGHTS Spring 2017, *supra* note 108, at 3–8; CFPB SUPERVISORY HIGHLIGHTS Fall 2016, *supra* note 236, at 13–14; Catherine Minor, *Mortgage Loans with Balloon Payments*, FED. RES. BANK MINNEAPOLIS (Dec. 7, 2015), <https://minneapolisfed.org/publications/banking-in-the-ninth/mortgage-loans-with-balloon-payments> [https://perma.cc/8J7R-XCJ3]. So far, according to CFPB Supervision, violations of the ATR/QM rule have been rare. CFPB ATR ASSESSMENT, *supra* note 96, at 80–81 (remarking that “[s]upervision has observed that most entities, depository or non-depository, examined by the Bureau are generally complying with the ATR/QM Rule”); *id.* at 241 (noting that mortgage originators “have generally been complying with the ATR Rule”). Although there is evidence of “infrequent” violations of the points-and-fee cap, particularly by mortgage brokers, *id.* at 166–70, such violations have little or no effect on default risk.

253. 12 U.S.C. §§ 1818, 5565.

254. *Id.* § 5552. For lawsuits by state attorneys general and state regulators to enforce the federal Consumer Financial Protection Act, see, for example, Complaint, *New Mexico v. Landau*, No. 14-cv-00663 (D.N.M. July 23, 2014); Complaint, *Lawsy v. Condor Capital Corp.*, No. 14-cv-2863 (S.D.N.Y. Apr. 23, 2014); Complaint, *People v. CMK Invs., Inc.*, No. 2014-ch-04694 (Ill. Cir. Ct. Mar. 18, 2014); Amended Complaint, *New Mexico v. Capital One Bank*, No. 13-cv-00513 (D.N.M. July 2, 2013). For commentary on these lawsuits, see Jennifer M. Keas, *Recent Settlements of Joint UDAAP Enforcement Between State and Federal Regulators*, FOLEY & LARDNER LLP (Mar. 5, 2015), <https://www.foley.com/en/insights/publications/2015/03/recent-settlements-of-joint-udaap-enforcement-betw> [https://perma.cc/RL5S-R9YB]; Barbara S. Mishkin, *Update on State AGs/Regulator Lawsuits Using Dodd–Frank Authority*, BALLARD SPAHR LLP: CONSUMER FIN. MONITOR (Jan. 27, 2015), <https://www.consumerfinancemonitor.com/2015/01/27/update-on-state-agregulator-lawsuits-using-dodd-frank-authority-2/> [https://perma.cc/2LML-UMJ4]; Anna Zarndt et al., *Pennsylvania Suit Against Navient Continues—Commonwealth's Claims Are Not Preempted by Federal Law or Parallel CFPB Action*, TROUTMAN SANDERS: CONSUMER FIN. SERVS. L. MONITOR (Dec. 31, 2018), <https://www.consumerfinancialserviceslawmonitor.com/2018/12/pennsylvania-suit-against-navient-continues-commonwealths-claims-are-not-preempted-by-federal-law-or-parallel-cfpb-action/> [https://perma.cc/9LFN-WEXZ].

255. In addition, investors and rating agencies monitor compliance with the rule. In private-label securitizations, the rating agencies demand higher credit enhancements for non-QM loans carrying ability-to-repay risk. See, e.g., S&P GLOB. RATINGS, REQUEST FOR COMMENT: METHODOLOGY AND ASSUMPTIONS FOR RATING U.S. RMBS ISSUED 2009 AND LATER 49–52 (2017), <https://www.spratings.com/documents/20184/908542/RFCusrmbs42017.pdf/2dbb8521-1ee3-49c2-b7b3-f532279490b8> [https://perma.cc/TRB9-NCSR]. For an example of rating agency and investor oversight of ATR litigation risk, see S&P GLOB. RATINGS, PRESALE: ARROYO MORTGAGE TRUST 2018-1, at 7, 9, 17 (2018),

To recap, the small size of today's non-QM market indicates that Dodd-Frank's private relief for violations of the ability-to-repay provisions has an *in terrorem* effect for now. To boot, that private exposure is only one of a long list of public and private mechanisms for ensuring compliance with the ATR/QM rule. These mechanisms include periodic federal examinations, press releases by regulators about problems with compliance, federal and state sanctions for violations, internal lender controls and external inspections of those controls, private monitoring by rating agencies and investors, and, to some degree, investor flight. Notably, many of these oversight and enforcement tools activate sooner than private liability, enabling quicker detection and greater deterrence. Moreover, the objective nature of many of the ATR/QM requirements and the extra-hard data that the rule makes lenders produce improve the quality of oversight by public and private monitors alike.

The empirical research to date substantiating the benefits of the ability-to-repay rule, the rule's objective requirements and their positive effect in generating hard data, and the multiple oversight mechanisms for enforcing the rule provide strong support for the conclusion that the ATR/QM rule will help to curb default rates if economic conditions go south. It will accomplish this result by preventing mortgage loans with high-risk features—especially negative amortization, interest-only terms, and reduced documentation—from being made to anyone but pristine borrowers. In the process, the rule creates a national legal floor that makes it harder to loosen credit standards in a bubble. By placing a brake on spiraling demand for houses, the rule can work to slow runaway housing prices. For these reasons, the ability-to-repay rule is vital not only to households' welfare but also to financial stability.

VI. THE ISSUE OF LEVERAGE LIMITS

We have shown that the ATR/QM rule contains numerous objective requirements that facilitate outside monitoring and increase lenders' compliance when property values are in ascent. These features make the ability-to-repay rule an important weapon against deterioration in credit standards during incipient bubbles.

This does not resolve the question, of course, of the role leverage limits (LTV caps) should play in quelling bubbles. Excessive LTVs and CLTVs are the

<https://www.spratings.com/documents/20184/769219/ArroyoMortgageTrust20181/528a1b13-2c4d-479c-bdf2-bcb6a992fcdd> [<https://perma.cc/6HP3-C9EC>].

Meanwhile, investors require lenders to confirm their compliance with the ability-to-repay rule through representations and warranties and can demand recourse if those representations and warranties are violated. For an example of recent representations and warranties warranting compliance with the ATR/QM rule, see MOODY'S INV'RS SERVS., SEC RULE 17G-7 REPORT OF R&WS: WELLS FARGO MORTGAGE BACKED SECURITIES 2018-1 TRUST DEAL v1.0 COMPARED TO RMBS v3.0, at 4, 11–14 (2018), https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBS_1088884 [<https://perma.cc/R44U-FPFA>]. For a general discussion, see McCoy & Wachter, *supra* note 36, at 293–97. Properly capitalized lenders paid billions of dollars to settle recourse demands in recent years. *Id.* at 298–99.

biggest driver of mortgage defaults of any single factor.²⁵⁶ Accordingly, there are good reasons why Professors Bubb and Krishnamurthy advocate leverage limits and why other countries rely on this tool to constrain systemic risk. Where we and they depart is in their emphasis on LTV caps *to the exclusion* of the ATR/QM rule in regulating bubbles.

Currently, in the United States, there are no binding national leverage limits on residential mortgages,²⁵⁷ and the only effective caps are those imposed by investors and guarantors. The largest investors and guarantors today—Fannie Mae, Freddie Mac, and FHA—all have LTV limits of their own.²⁵⁸ In contrast, the RHS has no LTV limit²⁵⁹ and the VA sometimes allows zero-down-payment loans.²⁶⁰ In the non-agency space, portfolio lenders and private-label investors can impose whatever leverage limits they want, including none.

Relying on leverage limits instead of the ability-to-repay rule to constrain bubbles would be a mistake. First, LTV ratios have been shown to be unreliable and misleading during bubbles because they are endogenous indicators that mask the reality of unjustifiable price appreciation.²⁶¹ During housing booms, property prices increase and appraisers compare these market prices to determine appraised values.²⁶² Moreover, property appraisers have incentives to inflate their appraisals to accommodate lenders' desire to close loans and thus to assure themselves of

256. See, e.g., U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-10-805, NONPRIME MORTGAGES: ANALYSIS OF LOAN PERFORMANCE, FACTORS ASSOCIATED WITH DEFAULTS, AND DATA SOURCES 22 fig.9 (2010); CHRISTOPHER L. FOOTE ET AL., FED. RESERVE BANK OF BOS., PUB. NO. 08-3, NEGATIVE EQUITY AND FORECLOSURE: THEORY AND EVIDENCE 8 (2008), <https://www.bostonfed.org/-/media/Documents/Workingpapers/PDF/ppdp0803.pdf> [<https://perma.cc/XL2F-Y9K5>]; Campbell & Cocco, *supra* note 84, at 2–3, fig.1; Demyanyk, *supra* note 84, at 80–82, 85–87, 86 tbl.1; Demyanyk et al., *supra* note 84, at 13–15, 13 tbl.3, 15 tbl.4; Elul et al., *supra* note 84, at 6–7, 11 tbl.1; Mayer et al., *supra* note 84, at 42–43; Pennington-Cross & Ho, *supra* note 84, at 413 tbl.3, 415 tbl.5; John M. Quigley & Robert Van Order, *Explicit Tests of Contingent Claims Models of Mortgage Default*, 11 J. REAL EST. FIN. & ECON. 99, 102–03, 103 fig.2 (1995); Julapa Jagtiani & William W. Lang, *Strategic Default on First and Second Lien Mortgages During the Financial Crisis* 16, 21 (Fed. Reserve Bank of Phila., Working Paper No. 11-3, 2010), <https://www.philadelphiafed.org/-/media/research-and-data/publications/working-papers/2011/wp11-3.pdf> [<https://perma.cc/U8CR-JEHF>]; Sherlund, *supra* note 84, at 9–10, 23 tbl.5.

257. The federal prudential banking regulators have an interagency guidance that recommends credit enhancements for certain residential mortgages extended by depository institutions that have LTVs exceeding 90%. See, e.g., 12 C.F.R. pt. 34, subpt. D, app. A § 34.62 (2014) (national banks); *id.* § 160.101 (federal savings associations). However, that guidance is not binding.

258. See *supra* note 196 and accompanying text.

259. U.S. DEP'T OF AGRIC., MAXIMUM LOAN AMOUNT: SINGLE FAMILY HOUSING GUARANTEED LOAN PROGRAM 26, <https://www.rd.usda.gov/files/RD-SFH-MaxLoanAmountNotes.pdf> [<https://perma.cc/B6PV-XC6R>] (last visited Dec. 23, 2019).

260. The VA's leverage limit varies according to the transaction, and some veterans can obtain VA-guaranteed loans for nothing down: "The basic entitlement available to each eligible Veteran is \$36,000. Lenders will generally loan up to 4 times a Veteran's available entitlement without a down payment, provided the Veteran is income and credit qualified and the property appraises for the asking price." *VA Home Loans: Loan Limits*, U.S. DEP'T OF VETERANS AFF., https://www.benefits.va.gov/homeloans/purchaseo_loan_limits.asp [<https://perma.cc/V4FB-XC6R>] (last visited Dec. 23, 2019).

261. See Jose G. Montalvo & Josep Raya, *Constraints on LTV as a Macprudential Tool: A Precautionary Tale* 6–9 (Barcelona Graduate Sch. of Econ., Working Paper No. 1008, 2017), https://www.barcelonagse.eu/sites/default/files/working_paper_pdfs/1008.pdf [<https://perma.cc/GS45-CCMP>].

262. *Id.*

repeat business from lenders.²⁶³ Inflated appraisals create a feedback loop in turn, as comparable sales based on those appraisals artificially boost the appraised property values in future sales, which are then reflected in the denominator of LTVs. Because loan-to-value is by definition a ratio, the numerator and denominator terms covary. Thus, LTV ratios can look deceptively low when property values are rising, presenting a façade of consistency even when prices are out of line with fundamentals and allowing borrowers and lenders to circumvent LTV limits.²⁶⁴ We can see this from the experience with LTV ratios in 2006. At the height of the bubble, these ratios varied little from those in 2014, after credit standards had tightened.²⁶⁵ In contrast, debt-to-income ratios were “extremely loose” during the boom period.²⁶⁶

Consequently, it is important not to depend on leverage limits alone to regulate default risk. Instead, consideration of LTV caps should be part of a comprehensive approach that includes the ATR/QM rule, appraisal rules, and other mortgage safeguards.²⁶⁷ The debt-to-income limit is a particularly critical tool in this arsenal. Again, under the double-trigger theory of mortgage default, households default not due to negative equity alone, but also because they lack sufficient income to make their mortgage payments. Accordingly, using DTI caps to limit mortgage payments to manageable proportions can help reduce defaults. The recent CFPB assessment of the ATR rule concluded as much, reporting: “after controlling for other underwriting criteria, . . . higher DTI . . . independently increase[s] expected early delinquency, regardless of the other factors.”²⁶⁸

263. See Leonard Nakamura, *How Much Is That Home Really Worth?: Appraisal Bias and House-Price Uncertainty*, 2010 BUS. REV. 11, 16; see also Montalvo & Raya, *supra* note 261, at 6 (reviewing literature discussing these incentives).

264. LTV limits can also be gamed during bubbles by incurring added home-secured debt as a home's value soars through junior liens, either in the form of simultaneous piggyback second loans or later through refinance transactions. This allows LTV ratios to stay deceptively flat while home values rise. The ATR/QM rule circumvents this manipulation by requiring repayment ability to be underwritten to the total outstanding indebtedness on the home. See Dodd-Frank Wall Street Reform and Consumer Protection Act § 1411(a)(2), 15 U.S.C. § 1639c(a)(2) (2012); 12 C.F.R. § 1026.43(b)(12), (c)(2)(iv), (c)(6) (2019).

265. Greenwald, *supra* note 65, at 9, 10 fig.2.

266. *Id.* at 11; accord CFPB ATR ASSESSMENT, *supra* note 96, at 97–98.

267. It is worth noting that even though the ability-to-repay rule does not impose leverage limits, it does address high CLTVs indirectly. First, the rule requires lenders to determine ability to repay based on the total indebtedness on the property, which will be larger for higher CLTVs. Second, under the rule, lenders must evaluate ability to repay based on the full monthly mortgage obligation, including taxes and insurance, which puts an added constraint on LTV. Finally, the rule limits borrowers' ability to incur subsequent added debt on their homes unless they are able to pay the new total debt service.

268. CFPB ATR ASSESSMENT, *supra* note 96, at 104–05; see *id.* at 100–05, 112–15. DeFusco and coauthors found similar but smaller effects. See Anthony A. DeFusco et al., *Regulating Household Leverage 5* (May 7, 2019) (working paper), <https://cpb-us-e1.wpmucdn.com/sites.northwestern.edu/dist/a/1657/files/2019/05/DeFuscoJohnsonMondragon2019.pdf> [<https://perma.cc/9BFH-P73K>]. Other studies by Green and by Goodman question the use of DTI caps in the QM test. See Richard Green, *The Trouble with DTI as an Underwriting Variable—and as an Overlay*, RICHARD'S REAL EST. & URB. ECON. BLOG (Dec. 7, 2016), <https://real-estate-and-urban.blogspot.com/2016/12/the-trouble-with-dti-as-underwriting.html> [<https://perma.cc/K47M-XTAW>]; Laurie Goodman, *New Data Confirm the Urgency of Addressing the Expiration of the GSE Patch*, URB. BLOG (Mar. 25, 2019), <https://www>.

DTI limits have a further salutary effect by limiting housing bubbles.²⁶⁹ In a rising price environment, as a home surpasses a set price, the mortgage payments on the house will exceed the DTI limits of buyers who are income-constrained, preventing them from borrowing more no matter how much the house is worth.²⁷⁰ These customers are likely to drop out of the pool of eligible buyers for that particular home, thereby reducing demand and the price pressures that can inflate a bubble.²⁷¹ As a result, DTI limits are “the more effective tool for limiting the size of boom-bust cycles,” compared to LTV caps.²⁷²

The CFPB adopted a 43% DTI limit for General QMs. In a landmark study, Daniel Greenwald modeled the 43% DTI cap and reported that the cap could have reduced the pre-2008 housing bubble by more than a third had it been in effect at the time.²⁷³

Greenwald’s findings have particular relevance for the current debate about what to do with the GSE patch when it expires. Currently, the GSE patch contains no set DTI cap but defaults to the internal DTI limits of the GSEs, which are 50% for loans undergoing automated underwriting.²⁷⁴ Significant segments of the mortgage industry are urging the CFPB to lift DTI caps altogether.²⁷⁵ In our view, that would be a serious mistake. Rather, the CFPB should retain a DTI cap to constrain both default risk and future housing bubbles.²⁷⁶

To conclude, it is a false dichotomy to suggest that the ATR/QM rule is an either-or proposition when it comes to financial stability. The rule serves a vital role in reducing systemic risk, and leverage limits likely do as well. Limitations on LTV, moreover, must be designed countercyclically and buffers put in place when prices exceed fundamentals.

CONCLUSION

It is now well-accepted that housing is particularly susceptible to bubbles and busts, fueled by credit expansions and collapses that undermine financial stability. However, ten years after the crisis, there is still little consensus on the appropriate policy response to systemic instability arising out of the nexus of housing and credit bubbles. Dodd–Frank imposed an ability-to-repay rule often understood as designed for consumer protection. Here, we argue that this rule also helps to prevent credit bubbles and protect financial stability.

urban.org/urban-wire/new-data-confirm-urgency-addressing-expiration-gse-patch [https://perma.cc/9D8A-YWL8].

269. See CFPB ATR ASSESSMENT, *supra* note 96, at 99–100.

270. Greenwald, *supra* note 65, at 7–8, 8 fig.1.

271. David Aikman et al., *Would Macroeprudential Regulation Have Prevented the Last Crisis?*, 33 J. ECON. PERSP. 107, 120–21 (2019).

272. Greenwald, *supra* note 65, at 45; accord Aikman et al., *supra* note 271, at 119–20.

273. See Greenwald, *supra* note 65, at 4.

274. See *supra* note 151.

275. See CFPB ATR ASSESSMENT, *supra* note 96, at 257–59.

276. Our recommendation assumes that the Federal Housing Finance Agency, which is the GSEs’ conservator and regulator, would carefully oversee the DTI limits adopted by the GSEs under the patch.

Answering concerns that the ATR/QM rule is ill-suited to regulating bubbles because lenders will ignore it, we draw on new empirical research showing that lenders *do* observe ability-to-repay requirements, including during housing bubbles. We also address the call to replace the ATR/QM rule with leverage limits in regulating bubbles. In our view, this is a false dichotomy. The ATR/QM rule plays an indispensable role in curbing housing bubbles.

The reason is that, if left to private market forces, constrained borrowers will increase demand for homes whenever DTI ratios are eased in good times. The resulting price increases can be significant and can lead to price expectation formation that fuels further price increases. Beneficially, when DTI ceilings are paired with the full income documentation and verification that the ability-to-repay rule requires, those ceilings can help to limit price spirals.²⁷⁷ In contrast, LTV ceilings do not limit property spirals because housing values—the “V” in the LTV ratio’s denominator—rise with market prices, allowing borrowers to take on more debt and stoke the demand for homes while still facially complying with the LTV ceilings. At the same time, we should not make the mistake of ignoring housing price inflation and focusing solely on the ATR/QM rule. If lending unsustainably expands, even if composed of “safe” ATR/QM-compliant loans, unsafe bubbles can result, which in themselves can cause recessions when they bust. The ensuing recession and lower income can raise post-origination debt-to-income ratios to levels that result in heightened defaults and systemic crises.

However, under the ATR/QM rule with the income verification and DTI caps now in place, even if bubbles were to gain some momentum, the severity of the impact on consumers’ ability to repay would be more contained than otherwise. Moreover, if housing prices fall, pushing a significant fraction of borrowers underwater on their mortgages, after a bubble, in the absence of a general macro-recession, the rule will help contain defaults. Homeowners, wishing to stay in their homes, would continue to repay *because they could*. To this point, in the aftermath of the last crisis, approximately 75% of underwater owners who could pay their mortgages continued to do so and did not engage in strategic default.²⁷⁸ Consequently, maintaining the ATR/QM rule with its income documentation and DTI provisions would go a long way toward preventing the types of foreclosure crises that further depress housing-market pricing and undermine the stability of the financial and household sector.

277. See Greenwald, *supra* note 65 (describing the beneficial effect of DTI caps on property value inflation).

278. Luigi Guiso et al., *The Determinants of Attitudes Toward Strategic Default on Mortgages*, 68 J. FIN. 1473, 1483–84, 84 fig.1, 1490–93 (2013) (finding that approximately 75% of homeowners who were underwater by at least \$100,000, as well as 90% of homeowners who were underwater by at least \$50,000, would continue to pay).