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THE LAW & ECONOMICS OF SUBPRIME LENDING

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ABSTRACT

The collapse of the subprime mortgage market has led to calls for greater regulation to protect homeowners from unwittingly trapping themselves in high-cost loans that lead to foreclosure, bankruptcy, or other financial problems. Weighed against this catastrophe are the benefits that have accrued to millions of American families who have been able to become homeowners who otherwise would not have access to mortgage credit. Although the bust of the subprime mortgage market has resulted in high levels of foreclosures and even problems on Wall Street, the boom generated unprecedented levels of homeownership, especially among young, low-income, and minority borrowers, putting them on a road to economic comfort and stability. Sensible regulation of subprime lending should seek to curb abusive practices while preserving these benefits.

This article reviews the theories and evidence regarding the causes of the turmoil in the subprime market. It then turns to the question of the rising foreclosures in that market in order to understand the causes of rising foreclosures. In particular, we examine the competing models of home foreclosures that have been developed in the economics literature—the "distress" model and the "option" model. Establishing a correct model of the causes of foreclosure in the subprime market is necessary for sensible and effective policy responses to the problem. Finally, we review some of the policy initiatives that have been suggested in response to the crisis in the subprime market. Because new regulatory interventions will have costs as well as benefits, until the causes of the market's problems are better understood it may be that the best policy in the short-term is to do little until well-tailored regulatory approaches are available.

Keywords: Subprime, consumer credit, foreclosure.
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INTRODUCTION

The collapse of the subprime mortgage market has generated calls for greater regulation to protect homeowners from unwittingly trapping themselves in high-cost loans that lead to foreclosure, bankruptcy, or other financial problems.[1] Weighed against this catastrophe are the benefits that have accrued to millions of American families who have been able to become homeowners who otherwise would not have access to mortgage credit. Although the bust of the subprime mortgage market has resulted in high levels of foreclosures and even problems on Wall Street, the boom generated unprecedented levels of homeownership, especially among young, low-income, and minority borrowers[2], putting them on a road to economic comfort and stability.[3] Sensible regulation of subprime lending should seek to curb abusive practices while preserving these benefits.

The broad causes of the subprime bust are three macroeconomic trends: stagnant or falling home values, rising interest rates especially as adjustable-rate mortgages reset, and

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[1] *See, e.g.*, CENTER FOR RESPONSIBLE LENDING, CRL ISSUE PAPER No. 14, SUBPRIME LENDING: A NET DRAIN ON HOMEOWNERSHIP (2007), http://www.responsiblelending.org/pdfs/Net-Drain-in-Home-Ownership.pdf.

[2] HOUSING. & HOUSEHOLD ECON. STATISTICS DIV., U.S. CENSUS BUREAU, HOUSING VACANCY SURVEY, THIRD QTR 2007, HOMEOWNERSHIP RATES FOR THE U.S. TABLE 5 (2007), http://www.census.gov/hhes/www/housing/hvs/qtr307/q307tab5.html [hereinafter HOUSING VACANCY SURVEY].

[3] THOMAS P. BOEHM & ALAN SCHLOTTMANN, U.S. DEP'T OF HOUS. & URBAN DEV., WEALTH ACCUMULATION AND HOMEOWNERSHIP: EVIDENCE FOR LOW-INCOME HOUSEHOLDS (2004), http://www.huduser.org/Publications/pdf/WealthAccumulationAndHomeownership.pdf.

economic dislocations in some areas of the country.[4] Legislative measures should not hope to impact these market trends. However, legislation and regulation can affect the way that lenders select their customers and the methods they use to loan money.

There is plenty of blame to go around in fixing responsibility for the subprime bust, among lenders, borrowers, and governmental regulators. Undoubtedly, some lenders preyed on borrowers with unreasonably high-cost loans meant to induce repeated refinancing and the collection of high fees and interest repayment; likewise, some borrowers defrauded lenders with schemes designed to inflate the value of a house and engage in speculative real estate investments.[5] In some cases, borrowers and lenders were simply responding rationally to governmental regulations. The sharp losses and numerous bankruptcies of subprime lenders also indicate that many financial institutions simply misjudged the market, and didn't fully understand the riskiness of subprime borrowers and market conditions at the time of loan origination. At the same time the issue must be kept in perspective. As of 2005, about 34 percent of Americans owned their homes free and clear of any mortgages. Of those with mortgages, about three-quarters have traditional fixed rate mortgages and about one-quarter of borrowers have adjustable rate mortgages (about 16 percent of total homeowners), with an even smaller subset comprising subprime loans.[6] Moreover, even under a relatively dire scenario, it has been estimated that American homeowners might lose about $110 billion in home equity

[4] Knowledge@Wharton Staff, *Subprime Meltdown: Who's to Blame and How Should We Fix It?* KNOWLEDGE@WHARTON, Mar. 1, 2007, http://knowledge.wharton.upenn.edu/article.cfm?articleid=1691.
[5] Income or asset misrepresentation makes up 38 percent of fraud cases, and false property valuation accounts for 17 percent of fraud. FANNIE MAE, FANNIE MAE MORTGAGE FRAUD UPDATE 1 (2007), https://www.efanniemae.com/utility/legal/pdf/fraudupdate0507.pdf [hereinafter FRAUD UPDATE].
[6] *Preserving the American Dream: Predatory Lending and Home Foreclosures: Hearing Before the Sen. Comm. on Banking, Housing and Urban Affairs*, 110th Cong. 13 (2007) (statement of Douglas G. Duncan, Chief Economist, Mortgage Bankers Ass'n).

over several years as a result of foreclosures—or about one percent of total accumulated home equity in the country.[7]

Without an accurate understanding of the causes of the subprime bust, regulatory measures may be counterproductive, providing bailouts for reckless lenders and speculative borrowers while resulting in higher interest rates and less credit available to legitimate borrowers. Increased protections for borrowers that increase the cost or risk of lending will raise the cost of lending and result in either higher interest rates for borrowers or reduced access to credit.[8] Because of the benefits of homeownership that the subprime market creates for millions of marginal homeowners, lawmakers should carefully consider ways to maintain the legitimate subprime market while restricting the ability of predatory lenders to originate high-cost loans that impose a net harm on borrowers. Striking an appropriate balance is difficult and must be grounded in sound data and sensible policies, not sensational headlines.

More fundamentally, there is a basic question to consider—what is the appropriate number of foreclosures in the subprime market? Despite its recent turmoil and rising foreclosures, overall the subprime market has on net increased home ownership in America.[9] In turn, homeownership appears to be a transformative financial and personal experience that transcends the mere opportunity to buy a home. The expansion of the subprime market thus brings about a set of novel challenges and policy questions—knowing that many subprime loans eventually will result in foreclosure, what is the ratio of successful to unsuccessful loans that is

[7] CHRISTOPHER L. CAGAN, MORTGAGE PAYMENT RESET: THE RUMOR AND THE REALITY 6, Fig. 1 (First American Real Estate Solutions, Feb. 8, 2006).
[8] *See* Karen M. Pence, *Foreclosing on Opportunity: State Laws and Mortgage Credit*, 88 REV. ECON. & STATISTICS 177 (2006).
[9] *See* James R. Barth et al., *Despite Foreclosures, Subprime Lending Increases Homeownership*, SUBPRIME MARKET SERIES (Milken Inst.) (2007).

appropriate in this market?[10] It should be kept in mind that the optimal level of foreclosures is not zero, which would be the case only if families were forced to save the full value of a home and then buy it in cash. Beyond that, however, it is not clear what exactly the optimal rate of foreclosures is.

I. THE RISE OF THE SUBPRIME MORTGAGE MARKET

The subprime mortgage market became a significant growth segment of the mortgage market in the 1990s.[11] Subprime mortgages rose from 10 percent to 14.5 percent of the mortgage market between 1995 and 1997, slipped back to 8 percent in 2002, before rising to about 20 percent in 2005-06.[12] Prior to the expansion of the subprime market, borrowers unable to acquire prime-rated financing were often unable to acquire any mortgage financing. Two federal laws allowed lenders to adopt risk-based pricing standards in their mortgages, which were crucial to the structure of subprime mortgages: in 1980, the Depository Institutions Deregulation and Monetary Control Act preempted state interest caps and allowed lenders to charge higher interest rates; and in 1982, the Alternative Mortgage Transaction Parity Act allowed lenders to offer adjustable-rate mortgages and balloon payments. Then, the Tax Reform Act of 1986 made interest payments deductible on mortgages, but not consumer loans.[13] This change to the tax code made mortgage debt more attractive than other forms of consumer debt, thereby increasing demand for homeownership and refinancing mortgages but also for homeowners to borrow

[10] As former Treasury Secretary Lawrence Summers recently stated the question, "We need to ask ourselves the question, and I don't think the question has been put in a direct way and people have developed an answer; what is the optimal rate of foreclosures? How much are we prepared to accept?" Lawrence Summers, Remarks at the Panel Recent Financial Market Disruptions: Implications for the Economy and American Families 15 (Sept. 26, 2007) (transcript *available at* http://www.brookings.edu).

[11] Souphala Chomsisengphet & Anthony Pennington-Cross, *The Evolution of the Subprime Mortgage Market*, 88 FED. RES. BANK OF ST. LOUIS REV. 36 (2006).

[12] Jeff Nielsen, *Looking at Subprime Clouds from Both Sides Now*, Navigant Consulting Presentation (Feb. 28, 2008) (citing Inside Mortgage Finance).

[13] *Id.* at 38.

against the wealth in their homes through home equity loans or refinancing. In 1997 the taxation of capital gains was changed to permit homeowners to take up to $500,000 from the sale of a house tax free, which further encouraged investment in residential real estate and price inflation.[14]

The possibility of risk-based pricing by lenders made a more efficient market possible. Prior to the expansion of subprime mortgages, the mortgage market consisted primarily of savings and loan firms taking deposits at three percent and lending at six percent.[15] With lenders restricted from charging higher interest rates, borrowers had to have a good credit history to be approved for a loan. But due to information asymmetries in credit markets, lenders rationed credit to reduce their risk of lending money to risky borrowers.[16] Some of the safest borrowers would be too risk-averse to borrow at the market interest rate, while some risky borrowers will appear less-risky, and be approved for loans with relatively low interest rates. As interest rates climb, borrowers who are still willing to pay the higher interest rates are likely to be riskier, resulting in lower returns to the lender despite the higher rates. At lower interest rates, the lender's return is too low and it is likely to offer fewer loans, and only to the safest borrowers.

Subprime lending emerged as a result of interest rate deregulation and improved underwriting procedures, including increased use of credit scoring as an indicator of willingness and ability to repay a loan.[17] The use of credit scores as objective tests of borrower risk allowed lenders to create the schedule of interest rates that currently make up the mortgage market. Prime borrowers as a group generally receive the same terms from most lenders, while subprime

[14] *See* Vernon L. Smith, *The Clinton Housing Bubble*, WALL ST. J., Dec. 18, 2007, at A20
[15] Kristopher Gerardi, Harvey S. Rosen & Paul Willen, *Do Households Benefit from Financial Deregulation and Innovation? The Case of the Mortgage Market* 1 (June 2006) (Fed. Res. Bank of Boston, Public Policy Discussion Papers No. 06-6).
[16] Joseph E. Stiglitz & Andrew Weiss, *Credit Rationing in Markets with Imperfect Information*, 71 AMER. ECON. REV. 393 (1981).
[17] Gerardi, *supra* note 15, at 8.

borrowers are sorted into a number of different risk classes.[18] The exact terminology used to score subprime borrowers depends on the source, but in general they are graded like high school English papers: "A-minus" borrowers are one step below the prime "A" borrowers, and have likely missed only one mortgage payment or up to two other debt payments in the past two years. Borrowers are sequentially riskier at the "B," "C," and "D" borrower levels, the last of which is typically emerging from bankruptcy. Borrowers who have prime credit scores but cannot provide full income documentation, or otherwise pose a higher risk, are considered "Alt-A" borrowers.[19] Many features that are decried in subprime loans, such as adjustable rates and balloon payments, are also found in prime loans.[20]

The growth of mortgage securitization was also a major factor in the growth of the subprime market. Securitization is the "aggregation and pooling of assets with similar characteristics in such a way that investors may purchase interests or securities backed by those assets."[21] Securitization of mortgages began in the 1970s, and subprime securities became available in the 1990s.[22] Wall Street pooled $508 billion worth of subprime mortgages in 2005, up from $56 billion in 2000.[23] The percentage of securitized subprime mortgages rose from 28 percent to 76 percent from 1995 to 2005.[24]

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[18] Amy Crews Cutts & Robert A. Van Order, *On the Economics of Subprime Lending*, 30 J. REAL ESTATE FIN. & ECON. (SPECIAL ISSUE) Table 1 (2005).
[19] Michael Collins, Eric Belsky & Karl E. Case, *Exploring the Welfare Effects of Risk-Based Pricing in the Subprime Mortgage Market* 3 (Harvard U., Joint Ctr. for Hous. Studies, Working Paper BABC 04-8, Apr. 2004).
[20] James R. Barth et al., *Surprise: Subprime Mortgage Products are Not the Problem!*, SUBPRIME MARKET SERIES (Milken Inst.) (2007).
[21] David Reiss, *Subprime Standardization: How Rating Agencies Allow Predatory Lending to Flourish in the Secondary Mortgage Market*, 33 FLA. ST. U. L. REV. 985, n. 95 (2006) (*quoting* SECURITIZATION: ASSET-BACKED AND MORTGAGE-BACKED SECURITIES § 9.04, 9-21 (Ronald S. Borod ed., 2003)).
[22] Kathleen C. Engel & Patricia A. McCoy, *Turning a Blind Eye: Wall Street Finance of Predatory Lending*, 75 FORDHAM L. REV. 107 (2007).
[23] Michael Hudson, *Debt Bomb—Lending a Hand: How Wall Street Stoked the Mortgage Meltdown*, WALL ST. J., June 27, 2007, at A1.
[24] Nielsen, *supra* note 12.

Pools of mortgages are split into a number of different tranches, whose characteristics are compared with historical data to predict the credit risk of the tranche.[25] The tranches each have a different grade, listed in order from senior to mezzanine to junior. The senior tranche is paid off first and has the highest investment grade, and the most junior tranche is most likely to be impacted by default. The most junior tranche is usually held by the originator, exposing them to the most risk, while mortgage-backed securities held by investors are normally highly-rated bonds.[26]

The securities are graded on the risk posed by the entire pool, not on the risk of the individual loans. Investors have little ability to judge the true risk of the pool of loans within a tranche, and they have a limited incentive to do so because of the relative safety provided by the seniority status of the securities. In addition, many securities have clauses that require lenders to take back loans in the event of borrower default or if the loan contains certain prohibited terms.[27] Despite the safeguards for investors in securities markets, subprime defaults still affected Wall Street. Highly-leveraged funds that invested in subprime mortgages lost most of their value, and prompted a sharp drop in the entire stock market.[28]

A. CHARACTERISTICS OF THE SUBPRIME MARKET

[25] *See* Christopher L. Peterson, *Predatory Structure Finance*, 28 CARDOZO L. REV. 2185, 2200-06 (2007); *see also* Richard K. Green & Susan M. Wachter, *The American Mortgage in Historical and International Context*, 19 J. ECON. PERSPECTIVES 93, 107-08 (2005) (describing securitization options for splitting subprime loans into tranches).
[26] Peterson, *supra* note 25, at 116.
[27] *Id.* at 124.
[28] Economist Staff, *Abandon Ship*, THE ECONOMIST, Aug. 2, 2007, *available at* http://www.economist.com/business/displaystory.cfm?story_id=9587542.

Lenders sort their customers into one of these groups, and then offer them terms based on a schedule.[29] Generally, borrowers with low credit scores are charged higher interest rates. Lenders may also charge higher interest rates where a mortgage has peculiar characteristics, such as a high loan-to-value ratio, loans without prepayment penalties, or for some borrowers who are self-employed and thus have less-predictable income.[30] Many subprime loans also shift interest rate risk to borrowers through adjustable rates. Fixed-rate mortgages promise a regular payment and thus offer insurance against interest rate fluctuations as a result of changes in inflation rates. Because borrowers have to pay a premium for this insurance, new adjustable-rate mortgage usually offers a lower interest rate than a fixed-rate mortgage.[31] Between 2004 and 2006, about 45 percent of subprime loan originations were adjustable-rate, compared with 25 percent for FRMs. The remainder of the loans were negative-amortization or interest-only loans.[32]

The higher fees and rates that lenders receive from subprime loans are offset by higher delinquency and default rates. In the fourth quarter of 2007, 17.31 percent of subprime loans were delinquent, compared with 3.24 percent of prime, 13.05 percent of FHA, and 6.49 percent of VA loans.[33] Overall, 8.65 percent of subprime loans were in the foreclosure process, compared with just 0.96 percent of prime loans, 2.34 percent of FHA loans, and 1.12 percent of VA loans.

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[29] Mortgage terms may depend on the length of the mortgage, whether mortgage is fixed- or adjustable-rate, credit score, loan-to-value ratio, and the presence of a prepayment penalty. *See, e.g.*, ACT MORTGAGE CAPITAL: SUBPRIME RATE SHEET REVISED April 18, 2007, http://www.actmort.com/pdfs/act%20subprime.pdf.

[30] *See, e.g.* FIRST GUARANTY MORTGAGE CORPORATION, SUBPRIME PRICING & RATE MATRIX (June 8, 2007) http://www.belending.com/docs/Rates/FGMC-W20Series%2010%20Subprime%20Rate%20Sheet%20%2006-08-2007.pdf.

[31] *Id.*

[32] Yuliya Demyanyk & Yadav Gopalan, *Subprime ARMs: Popular Loans, Poor Performance*, BRIDGES (Fed. Res. Bank of St. Louis), Spring 2007, at 4.

[33] Press Release Mortgage Bankers Ass'n, Delinquencies and Foreclosures Increase in Latest MBA National Delinquency Survey (March 6, 2008), *available in* http://www.mortgagebankers.org/NewsandMedia/PressCenter/60619.htm.

High foreclosure rates are a particularly problematic element of the residential real estate market because of the externalities generated by foreclosure. In particular, foreclosures have a negative externality effect of depressing prices of other homes in a neighborhood.[34] Moreover, this effect is additive—each home in foreclosure in a given neighborhood further reduces the value of all other homes in the neighborhood. This, in turn, reduces community wealth and the local tax base for support of governmental services, such as quality schools, police and fire protection, and road upkeep. Homes in foreclosure can fall into disrepair and drag down the surrounding neighborhood environment.

B. SUBPRIME LENDING VS. PREDATORY LENDING

The increase in defaults and foreclosures over the past few years has prompted the heavy criticism of subprime mortgages. There has been a much greater increase in defaults and delinquencies among subprime loans than in prime loans. Not only do subprime loans fail more often than prime loans, but subprime loans are much more common in areas with large minority or low-and-moderate-income populations.[35] As a result, some consider most subprime loans to be functionally equivalent to predatory loans targeted to unsophisticated borrowers. Although some subprime loans are predatory, most are not. For every neighborhood facing a foreclosure crisis there are other neighborhoods that have been resuscitated or families empowered by

[34] *See* Dan Immergluck & Geoff Smith, *The External Costs of Foreclosure: The Impact of Single-Family Mortgage Foreclosures on Property Values*, 17 HOUSING POL'Y DEBATE 58 (2006). Immergluck and Smith estimate that "each conventional foreclosure within an eighth of a mile of a single-family home results in a decline of 0.9 percent in value." *Id.* at 58. It is not clear how long this negative price externality effect persists and whether neighboring house prices recover. I'd like to thank Josh Wright for this observation.

[35] *See* Chomsisengphet & Pennington-Cross, *supra* note 11, at 32.

homeownership. Thus, regulations targeted to preventing subprime lending must be carefully constructed so as not to unduly disrupt the market for legitimate subprime loans.[36]

In general, a "predatory" loan is one where there is no reasonable anticipated financial benefit to the borrower as a result of the loan. The Federal Reserve defines predatory lending as a loan that includes one or more of the following attributes:

- Making unaffordable loans based on the assets of the borrower rather than on the borrower's ability to repay an obligation. Such a loan may be thought predatory because the lender's intent is not to make money from successful performance of the loan, but rather through an inevitable anticipated default and foreclosure on the home.
- Inducing a borrower to refinance a loan repeatedly in order to charge high points and fees each time the loan is refinanced ("loan flipping"). Such a loan is predatory if the effect is to "strip" the borrower's equity in the home through the repeated imposition of excessive fees, leaving the borrower no better off in terms of loan terms, but unequivocally worse off as a result of having dissipated her equity for no economic benefit.
- Engaging in fraud or deception to conceal the true nature of the loan obligation, or ancillary products, from an unsuspecting or unsophisticated borrower.[37]

Other than stating the truism that loans induced by fraud are also "predatory," this definition is extremely vague and provides little guidance as to whether any particular loan is predatory. Because there is no clear definition of predatory lending, the extent of predatory

[36] Kathleen C. Engel & Patricia D. McCoy, *A Tale of Three Markets: The Law and Economics of Remedies for Predatory Lending*, 80 TEX. L. REV. 1255, 1260 (2002) (separating mortgage markets into prime, legitimate subprime, and predatory segments).

[37] OFFICE OF THE COMPTROLLER OF THE CURRENCY, BD. OF GOVERNORS OF THE FED. RES. SYS., FED. DEPOSIT INS. CORP. & OFFICE OF THRIFT SUPERVISION, SR 01-4, EXPANDED INTERAGENCY GUIDANCE FOR SUBPRIME LENDING PROGRAMS (2001), http://www.federalreserve.gov/boarddocs/srletters/2001/sr0104a1.pdf [hereinafter GUIDANCE].

practices is mostly unknown. Opportunities for improper practices are probably much more prevalent in the subprime market than in the prime market because the subprime market offers a wider variety of loans and strategies for lenders to mitigate risks, and thus more pricing options that may combine to make a loan predatory. Moreover, the complexity and heterogeneity of terms in subprime loans likely makes it more difficult for subprime borrowers to understand the terms of their loans and thereby more likely to be misled or defrauded.[38]

Distinguishing a "predatory" loan from a legitimate subprime loan will often be difficult. Empirical research indicates that although some loan terms may increase foreclosures in some contexts, in other contexts those same terms may reduce foreclosures, and in still other contexts their individual impact is contingent on their interaction with other loan terms.[39] For instance, while a three-year prepayment prohibition is associated with a higher probability of foreclosure for purchase money fixed-rate mortgages and refinance adjustable-rate mortgages, that same provision has no impact on increased foreclosures for refinance fixed-rate mortgages.[40] This potential for prepayment penalties to be associated with a relatively lower risk of foreclosure for fixed-rate refinance mortgages may enable those "who recognize that their future abilities to make loan payments are better or more stable than their loan applications and financial histories" to signal this fact to lenders in exchange for a reduced interest rate.[41] Low or no documentation loans "are associated with a greater probability of foreclosure for refinances FRMs and ARMs, a lesser probability of foreclosure for purchase FRMs, and has no significant impact for purchase

[38] *See* JAMES M. LACKO & JANIS K. PAPPALARDO, FED. TRADE COMM'N., IMPROVING CONSUMER MORTGAGE DISCLOSURES: AN EMPIRICAL ASSESSMENT OF CURRENT AND PROTOTYPE DISCLOSURE FORMS (2007).
[39] Morgan J. Rose, *Predatory Lending Practices and Subprime Foreclosures: Distinguishing Impacts by Loan Category*, 60 J. ECON. & BUS. 13 (2008).
[40] *Id.* at 24.
[41] *Id.* at 28. More generally, Benjamin Klein notes that certain terms that may appear to be "unfair" may actually be efficient. For instance, the information asymmetries between borrowers and lenders in consumer loan markets may make certain terms efficient that might not be absent these costs. *See* Benjamin Klein, *The Borderlines of Law and Economic Theory: Transaction Cost Determinants of "Unfair" Contractual Arrangements*, 70 AM. ECON. REV. PAPERS & PROCEEDINGS 356 (1980).

ARMs."[42] When several potentially predatory terms are combined thee is an even more complex interaction:

> In most instances, a given combination of loan features is associated with a greater increase in the predicted probability of foreclosure than the sum of the relevant individual loan feature impacts. For purchase FRMs with reduced documentation combined with either a long prepayment penalty period or a balloon payment (but not both) the reverse holds—those combinations are associated with substantial falls in the predicted probability of foreclosure beyond the sum of the relevant individual loan feature impacts.[43]

Similarly, although repeated refinancings may evidence predatory practices, consumers may refinance a given loan several times without the refinancing being predatory. During the great real estate boom of recent years, many consumers used home equity loans or mortgage refinancing not only to gain a lower interest rate, but also to fund home improvements, to consolidate other debts (such as student loans, automobile loans, or consumer debt), to diversify their wealth portfolios by reinvesting home equity in financial assets (such as stocks), or to fund consumption.[44] Given the variety of reasons for which consumers might legitimately refinance a mortgage, it is quite conceivable that a borrower might refinance a loan more than once for completely legitimate purposes.

Consumer advocates also have criticized the widespread use of prepayment penalties in subprime loans as predatory and not justified by borrowers' true risk.[45] But this blanket condemnation also may be too sweeping. To determine whether prepayment penalties are abusive, it is necessary to understand the nature of prepayment risk in the subprime market.

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[42] Rose, *supra* note 39, at 28.
[43] *Id.* at 26.
[44] *See* Alan Greenspan & James Kennedy, *Sources and Uses of Equity Extracted from Homes* (Div. of Research & Statistics & Monetary Affairs, Fed. Res. Board, Fin. & Econ. Discussion Series, Working Paper 2007-20); Margaret M. McConnell, Richard W. Peach & Alex Al-Haschimi, *After the Refinancing Boom: Will Consumers Scale Back Their Spending?*, 9 CURRENT ISSUES IN ECON. & FIN. 1 (2003).
[45] KEITH S. ERNST, CENTER FOR RESPONSIBLE LENDING, BORROWERS GAIN NO INTEREST RATE BENEFITS FROM PREPAYMENT PENALTIES ON SUBPRIME MORTGAGES 5 (2005).

In general, prepayment risk is difficult to anticipate and there appears to be no reliable model for anticipating prepayment risk.[46] Prepayment risk arises because when prepayment occurs the lender must reinvest the capital at the prevailing market rates and returns, so the lender bears the risk that the new investment will provide a lower interest return than the existing investment. Prepayment typically will occur when market interest rates fall, so the alternative investment usually will be at a much lower rate than the initial loan. In a study of 4.2 FHA loans, for instance, Calomiris and Mason estimated that prepayment losses resulting from the reduction in interest rates following a prepayment amount to about $576 million whereas losses due to default are only about $12 million.[47]

Prepayment risk on home mortgages can result from two different reasons, which are also distinct to the prime and subprime markets. In the prime market prepayment risk arises from changes in market interest rates. When market interest rates fall, prime borrowers can be predicted to refinance their existing mortgages. Although changes in market interest rates are relevant for subprime borrowers as well, prepayment risk in the subprime market is more idiosyncratic and borrower-specific than in the prime market. Because credit score is a major component of the determination that lenders make of a borrower's interest rate—and the primary component for subprime loans—an increase in credit score can qualify a borrower for a much lower interest rate and lower monthly payments or even qualify a borrower for a prime-rated loan. Borrowers who make their monthly payments for even a short time on a higher-priced loan can raise their credit score appreciably, thereby providing an opportunity to prepay and refinance to a less expensive mortgage. A study by Fair, Isaac and Co. found that more than 30% of

[46] Joseph R. Mason & Joshua Rosner, *Where Did The Risk Go? How Misapplied Bond Ratings Cause Mortgage Backed Securities and Collateralized Debt Obligations Market Disruptions* 54 (May 2007).
[47] Charles Calomiris & Joseph Mason, *Endogenous and Exogenous Mortgage Prepayments in an Optimal Stopping Framework* (Working Paper 2007), *cited in* Mason & Rosner, *supra* note 46, at 54.

individuals with FICO scores below 600 improved their scores by at least 20 points within three months.[48] Prepayment by improved credit risks also means that those who remain in the preexisting pool of borrowers will be higher-risk borrowers.

Subprime loans also may be more expensive to service and underwrite in light of the heterogeneity of subprime borrowers and their collateral and the increased time this requires of lenders. A report by the Office of the Comptroller of the Currency estimates that servicing costs may be two to three times higher for subprime loans than for prime loans, adding as much as 50 basis points to the interest rate on a subprime loan.[49] The rejection rate for subprime loans is also higher, thus the underwriting cost per endorsed mortgage is also higher.[50] Subprime borrowers typically may have more unstable employment and income, less documentation, unusual collateral, or other individual-specific risk that requires greater assessment and investigation by lenders. Liquidity-strapped borrowers often finance closing costs in the loan; thus, quick prepayment can result in loss for the lender because the truncated prepayment period can prevent the lender from recouping its upfront costs. This higher underwriting cost and tendency to finance the closing costs suggests that a prepayment penalty may be appropriate in the subprime market to ensure that the lender's up-front costs are recouped.[51] Prepayment penalities also are an obvious corollary to low introductory teaser rate loans.

Although the evidence is somewhat mixed, empirical evidence generally indicates that prepayment penalties in subprime loans are efficient and reflect risk-based pricing.[52] Thus,

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[48] *See* Cutts & Van Order, *supra* note 18.
[49] *See Economic Issues in Predatory Lending* 12 (July 30, 2003) (working paper, Office of the Comptroller of Currency).
[50] Testimony of Anthony M. Yezer, U.S. House of Representatives, Committee on Financial Services, Subcommittee on Housing and Community Opportunity, Subcommittee on Financial Institutions and Consumer Credit (March 30, 2004).
[51] *See* Cutts & Van Order, *supra* note 18, at 175.
[52] *See* Gregory Elliehausen, Michael E. Staten, & Jevgenijs Steinbuks, *The Effect of Prepayment Penaities on the Pricing of Subprime Mortgages*, 60 J. ECON. & BUS. 33, 34 (2008) (reviewing studies).

accepting a prepayment penalty typically gives a subprime borrower a lower interest rate on the loan.[53] A significantly higher proportion of subprime borrowers prepay their mortgages when compared to prime borrowers.[54] DeMong and Burroughs estimate that first lien mortgage loans with prepayment penalties carried APRs that were 38 basis points lower than loans without prepayment penalties.[55] The difference was 60 basis points for fixed rate mortgages and 29 basis points for adjustable rate mortgages. Michael LaCour-Little similarly finds that those loans with a three-year prepayment penalty period obtain a 58 basis point reduction in their rate and those with a two-year prepayment penalty period have a 43 basis point reduction in rates.[56] Elliehausen, Staten, and Steinbuks find that prepayment penalties reduce the risk premium charged in subprime loans, estimating that the "presence of a prepayment penalty reduces risk premiums by 38 basis points for fixed-rate loans, 13 basis points for variable-rate loans, and 19 basis points for hybrid loans."[57] A review of term sheets posted by wholesale issuers of mortgage credit indicates that they typically charge a premium of 20-50 basis points for loans in states with statutory prohibitions on prepayment penalties depending on the strictness of the prohibition; these quoted market adjustments are similar to those found in the academic studies.[58] Subprime mortgages with a prepayment penalty also sell for higher prices on the secondary market than those without a penalty.[59] Most prime fixed rate mortgages permit prepayment, but

[53] Cutts & Van Order, *supra* note 18, at 175.
[54] Fred Phillips-Patrick, Eric Hirschorn, Jonathan Jones, & John LaRocca, *What About Subprime Mortgages?*, 4 MORTGAGE MARKET TRENDS (2000).
[55] Richard F. DeMong & James E. Burroughs, *Prepayment Fees Lead to Lower Interest Rates*, EQUITY MAGAZINE, Nov.-Dec. 2005, at 18, *available at* www.nhema.org.
[56] Michael LaCourt-Little, *Call Protection in Mortgage Contracts* (Nov. 22, 2005) (Working Paper), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=881618.
[57] Elliehausen, Staten, & Steinbuks, *supra* note 52, at 43.
[58] *See, e.g.*, Option One Mortgage Corporation, State Prepay Penalty Matrix, http://www.oomc.com/broker/rate_sheets/prepay_matrix.pdf.
[59] *See* Elliehausen, Staten, & Steinbuks, *supra* note 52, at 34 (citing M. Lacour-Little, *Prepayment Penalties in Residential Mortgage Contracts: A Cost-Benefit Analysis*, Working Paper, California State University Fullerton).

consumers pay a substantial implicit premium for a fixed rate mortgage to have this right that can amount to several thousand dollars per year.[60]

C. BENEFITS OF THE GROWTH OF THE SUBPRIME MARKET

Prior to the expansion of the subprime market, many subprime borrowers had been excluded from the mortgage market. Credit rationing occurred when lenders could not charge higher rates on mortgages to riskier customers due to legally-mandated interest-rate caps, so they did not offer any mortgages to these customers.[61] The expansion of the subprime market is a direct result of lenders' increased use of risk-based pricing, in response to deregulated lending markets, technological changes in underwriting, and financial innovations in securities markets.[62] To compensate for the increased risk of lending to subprime borrowers, lenders use a number of instruments, including higher interest rates, higher origination fees, prepayment penalties, and down payment requirements.[63]

The growth of subprime lending has had a dramatic effect on the United States housing market. Originations in the subprime market grew from $65 billion in 1995 to $332 billion in 2003.[64] This increase mirrors a dramatic increase in the US homeownership rate. From 1965 until 1995, the homeownership rate varied between 63 percent and 66 percent. Beginning in 1995, there has been a steady increase, peaking at 69.4 percent in the fourth quarter of 2004, before recently slipping back to 68.4 percent in 2007, still substantially higher than in the past.[65]

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[60] Alan Greenspan, *Understanding Household Debt Obligations*, Remarks at the Credit Union National Association 2004 Governmental Affairs Conference (Feb. 23, 2004), http://www.federalreserve.gov/boardDocs/speeches/2004/20040223/default.htm.
[61] Collins, Belsky & Case, *supra* note 19, at 6.
[62] Chomsisengphet & Pennington-Cross, *supra* note, 11, at 32.
[63] *Id*.
[64] *Id*. at 37.
[65] HOUSING VACANCY SURVEY., *supra* note 2, at SECOND QTR, HOMEOWNERSHIP RATES FOR THE U.S., http://www.census.gov/hhes/www/housing/hvs/qtr207/q207tab5.html.

In 2006, the difference between the 65.4 percent homeownership rate from ten years prior, and the actual 68.4 percent rate, is the equivalent of 3.3 million households that own their homes rather than rent, which appears to be attributable largely to the development of the subprime market.[66]

The effect of homeownership on household wealth has been greatest among young, low-income, and minority households, which often have very few non-home assets. Although homeownership has risen across all demographic groups, the percentage increase has been largest for minority households.[67] In addition to the obvious psychological and neighborhood benefits of widespread homeownership, homeownership is the primary method of wealth accumulation for low and moderate-income people[68]—a group that is disproportionately represented in the subprime mortgage market. The positive impact of homeownership is profound. Homes are the primary source of wealth for most American households. The average low-income homeowner (annual income is less than $20,000) has nearly $73,000 in net wealth, compared with a similar renter with only $900 of net wealth.[69] Seventy-seven percent of the wealth of families with incomes under $20,000 is in their homes and 54% of the wealth of minority families is in their homes. According to the 2001 Survey of Consumer Finances, white households are approximately two-and-a-half times wealthier than black households; black home

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[66] Mark Doms & Meryl Motika, *The Rise in Homeownership*, FRBSF ECON. LETTER 2006-30 (Nov. 3, 2006) *available at* http://www.frbsf.org/publications/economics/letter/2006/el2006-30.html. Some commentators have argued that the subprime market did not actually increase home ownership levels but that adjusting for foreclosures it actually reduced home ownership rates. *See* Alan M. White, *The Case for Banning Subprime Mortgages* (working paper, Dec. 28, 2007), *available in* http://ssrn.com/abstract=1079062; CENTER FOR RESPONSIBLE LENDING, SUBPRIME LENDING: A NET DRAIN ON HOMEOWNERSHIP (March 27, 2007). But this empirical conclusion is based on flawed methodology. *See* Barth, *supra* note 9.

[67] William C. Apgar & Allegra Calder, *The Dual Mortgage Market: The Persistence of Discrimination in Mortgage Lending* 10 (Harvard U., Joint Ctr. for Hous. Studies, Working Paper W05-11, Dec. 2005), http://www.jchs.harvard.edu/publications/finance/w05-11.pdf.

[68] THOMAS P. BOEHM & ALAN SCHLOTTMANN, DEP'T OF HOUS. & URBAN DEV., WEALTH ACCUMULATION AND HOMEOWNERSHIP: EVIDENCE FOR LOW-INCOME HOUSEHOLDS (2004), http://www.huduser.org/Publications/pdf/WealthAccumulationAndHomeownership.pdf .

[69] Zhu Xiao Di, *Housing Wealth and Household Net Wealth in the United States: A New Profile Based on the Recently Released 2001 SCF Data* 8 (Harvard U., Joint Ctr. for Hous. Studies, Working Paper W03-8, Dec. 2003).

owning households are approximately *thirty-six times wealthier* than black households which rent their homes.[70] In fact, homeownership has been such a potent vehicle for wealth accumulation that the polarization of wealth between homeowners and renters has risen dramatically in recent years, even as the wealth polarization among different income classes has decreased.[71] Low-income and even middle-class homeowners rely on homeownership for the majority of their net worth—almost 80 percent of the wealth of low-income households is in residential real estate. The richest quintile by income is the only income group that holds stock wealth in equal value to their home equity. The bottom four quintiles typically have home equity equal to at least twice the value of their stocks.

In addition to improving the asset side of the household balance sheet, homeownership also may be valuable to the liabilities side of the balance sheet. The Federal Reserve's financial obligations ratio calculates that percentage of household income dedicated to monthly payment obligations, including monthly rental payments on homes, apartments, and automobiles, real estate tax obligations, and the debt service burden, including monthly payments on mortgages, car payments, student loans, and credit cards.[72] The data on household financial obligations ratio indicate that the FOR is substantially higher for those households that rent compared to those that own their homes. Although some of this difference surely is attributable to the fact that

[70] *Id.* at Figure 12. It should be noted that all of the data quoted in this paragraph are independent of one another—for instance, wealth accumulation by income does not account for age, thus a family with an income of under $20,000 may some retired families who have burned their mortgages. Similarly, homeownership is also endogenous to wealth—high-wealth households are more likely to be able to afford to purchase a home, which in turn causally increases wealth. Despite this caveat, the data is nonetheless suggestive of the positive impact that homeownership has on families.

[71] *See* Conchita D'Ambrosio & Edward N. Wolff, *Is Wealth Becoming More Polarized in the United States?* 14–16 (Jerome Levy Economics Inst. of Bard College Working Paper No. 330, May 2001), *available at* http://ssrn.com/abstract=276900. Wealth inequality appears to have increased over time, but wealth "polarization" is different from "inequality" in that polarization studies the clustering of homogeneous groups, such as homeowners, within a heterogeneous population. *See Id.* at 2. Thus, it is a more useful tool for examining the effect on wealth of particular subsets, such as homeowners.

[72] FED. RES. BOARD, HOUSEHOLD DEBT SERVICE AND FINANCIAL OBLIGATIONS RATIOS RELEASE (SECOND QUARTER 2006), *available at* http://www.federalreserve.gov/Releases/housedebt/.

homeowners generally have higher incomes than renters, renters also are more likely to revolve credit card debt and to hold student loan debt, both of which generally carry higher interest rates than mortgage debt. Homeowners also save more than do non-homeowners.[73]

In addition to these direct benefits, homeownership has a number of indirect benefits. For instance, homeownership substantially increases one's propensity to vote, dramatically improves children's life outcomes, improves labor market outcomes, creates incentives to improve property, generally increases life satisfaction, and is correlated with a reduction in crime rates.[74] There are costs to homeowernship as well, notably increased sprawl, a less mobile labor force, and homeowners appear to suffer less discrimination than renting markets.[75] Nonetheless, policy-makers have long (and somewhat reasonably) believed that the benefits of widespread homeownership outweigh the costs and thus expanding homeownership rates historically has been a lynchpin of American financial and social policy.[76]

D. HOUSING BUST AND RISING FORECLOSURES

In late 2006 and early 2007, mortgage delinquencies and foreclosures, especially in the subprime market, began to rise. One website tracking the subprime bust has estimated that as of February 2008, 226 lenders have "imploded" since late 2006—i.e., gone bankrupt, halted major lending operations, or been sold at a "fire sale" price.[77] Delinquency, default, and foreclosure on subprime mortgages have risen. Dozens of subprime lenders either went bankrupt or were

[73] ED GRAMLICH, SUBPRIME MORTGAGES: AMERICA'S LATEST BOOM AND BUST 75-77 (2007).
[74] *See* GRAMLICH, *supra* note 73, at 58-60; CHRISTOPHER E. HERBERT & ERIC S. BELSKY, THE HOMEOWNERSHIP EXPERIENCE OF LOW-INCOME AND MINORITY FAMILIES: A REVIEW AND SYNTHESIS OF THE LITERATURE (DEPT. HOUSING & URBAN DEV.) (Feb. 2006); Robert D. Dietz & Donald R. Haurin, *The Social and Private Micro-Level Consequences of Homeownership*, 54 J. URBAN ECON. 401 (2003).
[75] Dietz & Haurin, *supra* note 74, at 404.
[76] *See* Melissa B. Jacoby, *Homeownership Risk Beyond a Subprime Crisis: The Role of Delinquency Management*, 76 FORDHAM L. REV. __ (Forthcoming 2008).
[77] The Mortgage Lender Implode-O-Meter Homepage, http://ml-implode.com/.

bought by larger companies. Other lending firms have severely cut back on their subprime portfolios, or have stopped lending to subprime borrowers altogether.[78]

Although the turmoil in the subprime market has garnered much attention, macroeconomic trends still play a predominant role in increased mortgage default and delinquency. The highest concentrations of subprime delinquencies are found in states such as Michigan, Ohio, and Indiana, which have been hard-hit by the troubles in the American automotive industry and resultant layoffs and plant closures. In addition, foreclosures are high in the areas of Louisiana and Mississippi affected by Hurricane Katrina in 2005, as foreclosures have resumed in those areas after a moratorium period.[79] These areas are also struggling with high unemployment and sluggish local economies, and have been since before subprime delinquency rates rose sharply beginning in late 2006. Problems in local labor markets also exert downward pressures on local home prices, making refinancing or sale more difficult and reducing incentives to retain a home in the face of financial pressures. Moreover, these areas often have relatively high percentages of subprime loans as cash-strapped homeowners refinanced or borrowed against their equity to deal with their economic dislocations.

Subprime borrowers may be more likely to lose their jobs during recessions, and have less liquid savings during unemployment, and may be more likely to default on their loans.[80] The current foreclosure rates in the subprime market are the highest since 2001, and

[78] Jack Guttentag, *A Chill Comes Over Credit*, WASH. POST, May 5, 2007, at F9.
[79] *Where Subprime Delinquencies are Getting Worse*, WALL ST. J. ONLINE, Mar. 29, 2007, at Map 2, http://online.wsj.com/public/resources/documents/info-subprimemap07-sort2.html. Data source: First American Loan Performance.
[80] Kathleen M. Howley, *Rate Rise Pushes Housing, Economy to 'Blood Bath'* (Update2), BLOOMBERG, June 20, 2007, *available at* http://www.bloomberg.com/apps/news?pid=20601109&sid=akV2sasSGUY8&refer=home.

delinquencies are at their highest since 2002[81]. Those numbers followed the last sustained period of slow or declining economic growth.[82]

But foreclosure and delinquency do not necessarily indicate the presence of unaffordable loans, predatory loans, rising interest rates, or borrowers under duress. A proper understanding of the dynamics of foreclosure is necessary to understand the appropriate policy responses. All borrowers face a number of options with their loans—timely repayment, prepayment, delinquency, or default followed by foreclosure.[83] Although the latter two options typically are assumed to be evidence of financial distress, the reality is more complicated.

Delinquency in the subprime market may not be a sign of financial distress and impending foreclosure. Due to the riskier credit history of subprime borrowers, some may find that the interest rates of subprime loans plus any late penalties are more attractive than the rates of other personal loans for which they might qualify, such as from payday lenders or personal finance companies. The evidence on delinquency rates supports this theory. In a study using 2002 data, the prime market share of mortgages that were delinquent was found to decline between 30-day delinquency (1.73%), 60-day delinquency (0.31%), and 90-day delinquency (0.28%). In the subprime market, by contrast, the rates are highest for 30-day delinquency (7.35%), decline for 60-day delinquency (2.02%), then rise again for 90-day delinquency (4.04%). Ninety-day delinquency rates can exceed 60-day delinquency rates if borrowers fall three months behind in their loans, then begin to repay without catching up to the current

[81] *Id.*
[82] NAT'L INCOME & PRODUCT ACCOUNTS TABLES, BUREAU OF ECON. ANALYSIS, GROSS DOMESTIC PRODUCT (2007), *available at* http://bea.gov/national/index.htm#gdp.
[83] *See* Cutts & Van Order, *supra* note 18, at 169.

month's payment. This is evidence that some subprime borrowers rationally choose to, in effect, take out short-term loans worth one- or two-months rent.[84]

Foreclosure also may indicate financial distress. Foreclosure can be explained by two different, but conceptually related models. First can be called the *distress* model of foreclosure, where a borrower desires to repay the loan, but is unable to do so.[85] This would be the case for a family homeowner who buys a home for the amenities of homeownership but then experiences an income or expense shock that makes them unable to repay their loan. This could result from a "trigger event" such as job loss or divorce that causes an income loss, or an expense shock such as the reset of an adjustable-rate mortgage at a substantially higher than anticipated interest rate. In the "distress model," foreclosure would be essentially involuntary—the borrower wants to retain the home but is unable to afford it. Although it is conventional to think of foreclosure as reflecting financial distress, empirical support for the proposition is mixed.[86]

A second model of foreclosure is an *option* model. In the option model, foreclosure is driven primarily by a change in the underlying value of the asset. A mortgage essentially gives the borrower an option—she can pay the mortgage as contracted and retain the property or default on the mortgage and surrender the property to the lender (especially if the loan is non-recourse). If the underlying asset falls in value, this creates incentives for borrowers to exercise their option to default and surrender the collateral. Under the option theory, therefore, foreclosure is essentially a voluntary and rational response to the incentives created by the

[84] *Id.* at 173.
[85] This can also be referred to as the "ability to pay" model, which "views home ownership as a consumption good, and borrowers default when they can no longer make the payments." William P. Alexander, Scott D. Grimshaw, Grant R. McQueen, and Barrett A. Slade, *Some Loans Are More Equal than Others: Third-Party Originations and Defaults in the Subprime Mortgage Industry*, 30 REAL ESTATE ECON. 667, 667 (2002).
[86] *Compare* Michelle A. Danis & Anthony Pennington-Cross, *The Delinquency of Subprime Mortgages*, Fed. Res. Bank St. Louis (March 2005) (finding *inverse* relationship between local unemployment and delinquencies) *with* Kristopher Gerardi, Adam Hale Shapiro, & Paul S. Willen, *Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosures*, Fed. Res. Bank of Boston (Dec. 3, 2007) (finding positive relationship between unemployment and delinquencies but negative relationship between unemployment and foreclosure).

change in value of the asset. Default and foreclosure result because the borrower strategically chooses the option of foreclosure over the option of continued payment of the loan.

Disentangling the two hypotheses is difficult, because housing prices are inversely correlated with interest rates—as interest rates rise, housing prices will tend to fall. Nonetheless, empirical studies traditionally have tended to support the option theory of foreclosure.[87] For instance, even though interest rates generally rise uniformly across the country, the foreclosure rate is lower where residential real estate price appreciation has been higher.[88] A study by Gerardi, et al., of homeownership experiences in Massachusetts over the 18 year period of 1989 to 2007 concluded that changes in housing prices plays the dominant role in generating foreclosures: holding other factors constant, "homeowners who have suffered a 20 percent or greater fall in house prices are about fourteen times more likely to default on a mortgage compared to homeowners who have enjoyed a 20 percent increase."[89] The authors "attribute most of the dramatic rise in foreclosures in 2006 and 2007 in Massachusetts to the decline in house prices that began in the summer of 2005." They add, "Subprime lending played a role but that role was creating a class of homeowners who were particularly sensitive to declining house price appreciation, rather than, as is commonly believed, by placing people in inherently problematic mortgages." This suggests that in deciding whether to default the primary consideration by homeowners is the amount of equity that they have accrued in their property

[87] *See* Kerry D. Vandell, *How Ruthless Is Mortgage Default? A Review and Synthesis of the Evidence*, 6 J. HOUS. RES. 245 (1995); James B. Kau & Donald C. Keenan, *An Overview of the Option-Theoretic Pricing of Mortgages*, 6 J. HOUS. RES. 217 (1995); Patrick H. Hendershott & Robert Van Order, *Pricing Mortgages: An Interpretation of the Models and Results*, 1 J. FIN. SVC. RES. 19 (1987).

[88] Mark Dorns, Frederick Furlong, & John Krainer, *House Prices and Subprime Mortgaged Delinquencies*, FRBSF ECON. LETTER, Nov. 2007-14 (June 8, 2007); Ellen Schloemer, Wei Li, Keith Ernst, & Kathleen Keest, *Losing Ground: Foreclosures in the Subprime Market and Their Cost to Homeowners* 13 (Center for Responsible Lending) (Dec. 2006).

[89] Gerardi, et al., *supra* note 86, at 1. More particularly, those who suffer a drop in value of greater than 20% have a 0.70 percent probability of defaulting, between negative 20% and 0 have a 0.30 percent probability of defaulting, those who have an increase in value of 0 to 20% have a 0.10 percent probability of defaulting and those whose homes appreciate in value by more than 20% have only a 0.05 percent probability of defaulting. *Id.* at 25-26.

(which might be lost in the event of a foreclosure) rather than "payment shock" resulting from an unexpected rise in interest rates. Similarly, those who have drawn against accumulated home equity through home equity loans or junior liens exhibit a greater propensity to default than those who have retained their equity.[90]

Some foreclosures are caused by payment shock, especially those loans that were initiated with below-market "teaser" rates.[91] One study predicts that 32 percent of loans with initial teaser rates eventually will default as a result of interest rate reset, but only 7 percent of market-rate adjustable loans will default due to reset.[92] But payment shock appears to explain only a small percentage of foreclosures. Of subprime loans facing foreclosure, 36 percent are for hybrid loans, fixed-rate loans account for 31 percent, and adjustable-rate loans for 26 percent.[93] In addition, delinquency and foreclosure rates rose for all types of subprime loans originated in 2006, whether fixed-rate, adjustable-rate, purchase-money, cash-out refinancing, low-documentation, or full-documentation.[94] Demyanyk and van Hembert note that this finding of heightened foreclosures on a wide variety of subprime loans "[C]ontradicts a widely-held belief that the subprime mortgage crisis was mostly confined to adjustable-rate or low-documentation mortgages."[95] Consistent with the option model, the authors note that the only variable that explains the widespread foreclosures of subprime loans issued in 2006 is "the low subsequent house price appreciation" during that period.[96] Of those loans in foreclosure, the overwhelming

[90] *See* Michael LaCourt-Little, *Equity Dilution: An Alternative Perspective on Mortgage Default*, 32 REAL ESTATE ECON. 359 (2004).
[91] CHRISTOPHER L. CAGAN, MORTGAGE PAYMENT RESET: THE ISSUE AND THE IMPACT (First American Core Logic, March 19, 2007).
[92] *Id.*
[93] James R. Barth et al., *Mortgage Market Turmoil: The Role of Interest-Rate Resets*, SUBPRIME MORTGAGE DATA SERIES (Milken Inst.) (2007).
[94] Yuliya Demyanyk & Otto Van Hemert, *Understanding the Subprime Mortgage Crisis* 2 (working paper, Feb. 29, 2008), *available in* http://ssrn.com/abstract=1020396.
[95] *Id.* at 2-3.
[96] *Id.* at 3.

majority entered foreclosure *before* there was an upward reset of the interest rate.[97] Economists Anthony Pennington-Cross and Giang Ho similarly find that the transition in a hybrid loan from an initial fixed period to the adjustable rate period results in heightened rates of prepayment, not default.[98] This suggests that not all consumers are caught unaware by the transition from fixed interest rates to adjustable rates. They also find that the termination rate for subprime hybrid loans (whether by prepayment or default) is comparable to that of prime hybrid loans. Even when a foreclosure proceeding is initiated, mortgages with positive equity tend to terminate in a prepayment of the mortgage whereas those with negative equity tend to terminate in foreclosure.[99] As one report concludes, "Without home price increases, hybrid loans will surely exacerbate the foreclosure problem if interest rates reset upward, but they are not the basic cause of it."[100] Finally, to the extent that hybrid or adjustable-rate loans are associated with higher levels of default and foreclosure, this may reflect selection bias rather than a reflection of the products themselves—it may be that the borrowers with the most fragile finances are those most likely to choose an ARM or a hybrid loan with a teaser rate, and thus their propensity to default may reflect their underlying riskiness rather than the riskiness of the products that they choose.[101]

Anecdotal reports in the current market also report a growing number of "mortgage walkers" who are exercising their "put" option to voluntarily surrender their home to the lender, a practice known as "jingle mail" after the practice of the borrower mailing her keys to the lender

[97] *Id.* at 2. Of those subprime loans in foreclosure, 57 percent of 2/28 hybrids and 83 percent of 3/27 hybrids had not yet undergone any upward reset of the interest rate.
[98] *See* Anthony Pennington-Cross & Giang Ho, *The Termination of Subprime Hybrid and Fixed Rate Mortgages*, (Fed. Res. Bank St. Louis, Working Paper 2006-042A, 2006).
[99] Anthony Pennington-Cross, *The Duration of Foreclosures in the Subprime Mortgage Market: A Competing Risks Model with Mixing*, Working Paper 2006-027A (Federal Reserve Bank of St. Louis, April 2006).
[100] Barth et al., *supra* note 93, at 2.
[101] *Ending Mortgage Abuse: Safeguarding Homebuyers: Hearing Before the Sen. Subcomm. on Hous., Transp. and Community Dev. of the Sen. Comm. on Banking, Hous., and Urban Affairs*, 109th Cong. 5 (2007) (statement of Anthony M. Yezer, Professor of Econ., George Washington University).

and surrendering the house.[102] As house prices fall, mortgage walking has begun to spread beyond the subprime market. Kenneth Lewis of Bank of America recently observed that there has been a general change in social norms regarding mortgage default.[103] In the past consumers would default on their mortgages only as a last resort after falling behind on car payments, credit cards, and other debts. Today, however, Bank of America reports a growing number of borrowers who are current on their credit cards but defaulting on their mortgages suggesting that "[a]t least a few cash-strapped borrowers now believe bailing out on a house in one of the easier ways to get their finances back under control."[104] This temptation is especially strong for those homeowners who put little or nothing down or borrowed against their home equity. As the *Wall Street Journal* observed, these practices created "a new class of homeowners in name only. Because these people never put up much of their own money, they don't act like owners, committed to their property for the long haul. They behave more like renters, ducking out of an onerous lease in the midst of a housing slump."[105]

The incentives to "walk" are especially strong in those states with antideficiency laws that limit creditor's remedies to foreclosure without the right to sue the borrower personally for the deficiency.[106] Empirical evidence indicates that default and foreclosure rates are higher where law limits lender recourse through antideficiency laws. In a study of the neighboring provinces of Alberta and British Columbia in Canada, Lawrence Jones found that "in a period of sizable house-price declines, the prohibition of deficiency judgments can increase the incidence

[102] Nicole Gelinas, *The Rise of the Mortgage "Walkers,"* WALL ST. J. (Feb. 8, 2008), at p. A17.
[103] George Anders, *Now, Even Borrowers With Good Credit Pose Risks*, WALL ST. J. p. A2 (Dec. 19, 2007).
[104] *Id.*
[105] *Id.*
[106] *See* Michael T. Madison, Jeffry R. Dwyer, & Steven W. Bender, 2 THE LAW OF REAL ESTATE FINANCING §12:69 (Dec. 2007), *available in* Westlaw REFINLAW § 12:69. It is difficult to estimate exactly how many states have antideficiency laws as foreclosure rules vary a great deal from state to state, but an approximation may be about 15-20 states including many larger states. A full list of state laws is available at http://www.foreclosurelaw.org/.

of default by two or three times over a period of several years."[107] Similarly-situated borrowers with negative home equity in different jurisdictions "will be observed defaulting in antideficiency jurisdictions but not where deficiencies are truly collectible." In fact, in Alberta (which had an antideficiency law) 74 percent of those who deliberately defaulted had negative equity; in British Columbia (which permitted deficiency suits) only one homeowner defaulted with negative book equity.[108] Limits on collection of deficiency judgments in FHA and VA loans also may explain the higher default rates on those loans compared to private market loans.[109] Because the presence of antideficiency laws increases the risk of lending, these laws also are associated with higher interest rates and other costs (especially among those marginal borrowers who would be expected to be the most likely to default).[110] This increase in interest rates and other costs may also increase financial distress and thereby contribute to higher foreclosures at the margin.

Even where the laws do not mandate that mortgages are nonrecourse, lenders have exhibited willingness to voluntarily waive an action for deficiency.[111] Although laws vary among states over a dozen states have some type of antideficiency laws that limit creditors to seizure of the property in the event of default, with no right of recourse against the borrower personally. Many of the states with the highest rates of subprime lending and foreclosures are

[107] Lawrence D. Jones, *Deficiency Judgments and the Exercise of the Default Option in Home Mortgage Loans*, 36 J. L. & ECON. 115, 135 (1993).
[108] *Id.* at 129. Jones states that the one defaulter in British Columbia reportedly left the country. *Id.*
[109] Brett W. Ambrose, Richard J. Buttimer, Jr., & Charles A. Capone, *Pricing Mortgage Default and Foreclosure Delay*, 29 J. MONEY, CREDIT & BANKING 314, 322 (1997).
[110] Ambrose, Buttimer, and Capone note that the higher risk of FHA and VA loans associated with limits on deficiency judgments contributed to a substantial increase in the insurance premiums charged by those lenders. *Id. See also* Mark Meador, *The Effects of Mortgage laws on Home Mortgage Rates*, 34 J. ECON. & BUS. 143 (1982) (estimating 13.87 basis point increase in interest rates as a result of antideficiency laws); *but see* Michael H. Schill, *An Economic Analysis of Mortgagor Protection Laws*, 77 VA. L. REV. 489 (1991) (finding mixed results for impact of antideficiency laws on foreclosure rates depending on specification of regression).
[111] There is also evidence that subprime lenders tend to foreclose much more slowly. *See* Dennis R. Capozza & Thomas A. Thomson, *Subprime Transitions: Lingering or Malingering in Default?*, 33 J. REAL ESTATE FIN. ECON. 241 (2006).

those with antideficiency laws, including California, Colorado, Nevada, and Arizona.[112] Antideficiency laws also appear to affect homeowners' incentives to maintain their property—homeowners in states that have antideficiency laws may be less willing to invest in maintenance and improving their homes.[113] Moreover, although there are costs to "walking"—particularly the negative effect on one's credit report—in light of the widespread nature of defaults and foreclosures future lenders may discount the impact of this adverse event in comparison to prior eras.[114] In addition, the pure number of mortgage walkers may underestimate the number of truly voluntary foreclosures because during the period that a home is in foreclosure the owner ceases making mortgage payments, thus essentially living rent-free during the foreclosure period. Thus, even if the owner is willing to permit foreclosure she may nonetheless not simply surrender the property immediately.

The value of the foreclosure option also may vary among borrowers and real estate submarkets. The motives for home purchase lie along a continuum, from those who purchase for the consumption amenities of homeownership and long term stability to those who buy as a pure speculative investment with an intention to rapidly flip the home for a hoped-for wealth gain. Most homeowners lie somewhere in between, with a combination of consumption and wealth-building incentives. To the extent that a particular homeowner is motivated by speculation, she will be more likely to cut her losses and walk away if the house falls in value. It is possible that the rise in default and foreclosure in the subprime market has been driven disproportionately by borrowers who lie along the speculative range of the continuum and thus have voluntarily self-

[112] *Id.*
[113] John Harding, Thomas J. Miceli, & C.F. Sirmans, *Deficiency Judgments and Borrower Maintenance: Theory and Evidence*, 9 J. HOUSING ECON. 267 (2000); *see also* John Harding, Thomas J. Micelli, & C.F. Sirmans, *Do Owners Take Better Care of Their Housing Than Renters?* 28 REAL ESTATE ECON. 28 (4), 663- (2000).
[114] *Id.*

selected into foreclosure. If so, then this presents a very different picture of the rise in foreclosures and appropriate policy responses than if the pool is more randomly-distributed.

HMDA data indicates that since 2000 the percentage of subprime loans that are for *non*-owner-occupied home loans—i.e., to fund the purchase of rental or vacation homes—has doubled from about eight percent of all subprime loans to over 16 percent.[115] Similarly, a survey by the National Association of Realtors found that 28 percent of home buyers in 2005 purchased homes as investments, as did 22 percent in 2006.[116] This suggests that an increasing number of subprime loans in recent years may have been issued to investors and speculators, not to families. Because these properties were bought for the purpose of speculation, their owners might be especially likely to exercise the default option in response to declining residential real estate prices.[117] Speculative investors also may be more likely to self-select for teaser-rate loans if they plan to flip the home in a short time before the rate readjusts or to permit foreclosure. Thus, it is possible that a substantial percentage of the subprime loans that actually result in foreclosure may reflect strategic decision-making by speculative homeowners to allow foreclosure rather than evidence of widespread hardship and distress by many families. On the other hand, there appears to be a minimal difference in the amount of equity retained in owner-occupied versus non-owner-occupied housing, suggesting that owners of non-owner-occupied

[115] It is not clear, however, if all of these recent HMDA loans were actually subprime loans. Because of peculiarities in the yield curve for short-term versus long-term interest rates, recent years of HMDA data have seen an unusually large increase in the number of loans that fall under the HMDA definition. Nonetheless, because we are comparing a change in the percentage of non-owner-occupied houses, this concern should not systematically bias the percentage of HMDA loans that are for non-owner-occupied properties. *See* Robert B. Avery, Kenneth P. Brevoort & Glenn B. Canner, *The 2006 HMDA Data*, 93 FED. RES. BULLETIN A73 (2007).

[116] Press Release, Nat'l Ass'n of Realtors, *Vacation-Home Sales Rise to Record, Investment Sales Plummet in 2006*, (Apr. 30, 2007) (on file with author).

[117] *See* Anders, *supra* note 103.

housing are not behaving in a dramatically more risky fashion than owner-occupants at least in this respect.[118]

Still other subprime borrowers may be owner-occupied properties where the borrower invested for a mixed purpose of speculation and residential amenities, such as young, single individuals who bought a property with a subprime loan as an alternative to renting, and who might be expected to be attracted to the default option. This may be the case especially for many close alternatives to apartment renting, such as condominiums, which are most likely to be held for rental or speculative purposes. Holding other factors constant, owners of condominiums and multi-family homes have substantially higher default probabilities than owners of single-family homes.[119] If so, then this suggests that the aggregate data on foreclosures may be painting an inaccurate picture of the subprime crisis by lumping together loans entered into for speculative purposes with those made to family homeowners. It is not obvious that widespread foreclosure on speculative investments raises the same policy concerns as for family homes.

Other factors also raise additional questions about the nature of the foreclosure crisis. For instance, although foreclosures have risen rapidly, bankruptcy filings have not followed suit.[120] This may suggest that some of those homeowners being foreclosed upon are choosing to voluntarily surrender their property, rather than taking the drastic step of retaining their property through a bankruptcy filing.

A better understanding of the causes of default and foreclosure is essential to crafting a sensible policy response to the foreclosure crisis. Commentators and members of Congress have proposed such responses as interest-rate freezes on ARMs for up to five years or various forms

[118] *See* CAGAN, *supra* note 7, at 32.
[119] Gerardi, *supra* note 86, at 27.
[120] Prior to the enactment of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 annual bankruptcy filings in the United States were about 1.5 million per year. In the first year after BAPCPA's enactment, bankruptcies fell to about 600,000. For 2007, total filings are estimated to be approximately 750,000-800,000.

of foreclosure relief. Although well-intentioned, it should be evident that these reforms rest heavily on assumptions about the operation of the subprime market and the causes of default and foreclosure. As noted, at the current time it is difficult to know how many of those in default are speculators who purchased their house as a speculative investment with full knowledge of the risk that the property might decline in value. To the extent that a "foreclosure relief" package relieves these speculators of the consequences of their investments, it is not clear that this promotes any coherent federal policy. Similarly, for those "walkers" who abandon their homes when property values fall, foreclosure relief is unlikely to make a demonstrable difference in their decisions.

II. POSSIBLE EXPLANATIONS FOR THE SUBPRIME MELTDOWN

The sheer number of home foreclosures and borrowers in serious risk of defaulting on their loans has raised a number of questions about the future of the subprime market. Those who feel that subprime lending is nearly synonymous with predatory lending would like to see much stricter controls over the types of loans that can be offered and the methods that brokers and lenders use to advertise their loans. But this position ignores the benefits of legitimate subprime lending. The broad presence of adjustable-rate mortgages contributed to the subprime crisis because of the market conditions of the time. Because home values rose so quickly over the prior five years, while interest rates remained low and the economy grew, demand for homeownership rose, fueling the expansion in subprime lending. But all three of those market

conditions changed relatively quickly—interest rates rose,[121] home values remained stagnant or fell,[122] and the economy's growth slowed, especially in some specific regions of the country[123].

In response to the losses in the subprime market, lenders have tightened their lending standards. There has also been a strong market for the pools of loans from companies going bankrupt or otherwise seeking to sell large numbers of loans—at low prices[124]—as well as a strong market for struggling companies to be bought by other lenders. The tighter lending standards have added to the problem in the short-term, by making refinancing more difficult for some subprime borrowers experiencing payment shock. However, in the long-term, the tightening may have limited the number of bad loans. Borrowers who are able to secure loans now should be at less risk of default in the future, since lenders are more likely to account for ability to repay.

To the extent that the problems in the subprime market reflect more than just regional economic struggles, three possible explanations have been offered for the recent problems in the market: first, that the structure of subprime loans was unreasonably risky, second that the market simply mispriced the risk of these loans, and third that subprime borrowers were unreasonably risky. All of these explanations likely have some truth to them, although it is difficult to ascertain how much each explanation provides. Yet understanding the causes of the subprime meltdown is necessary to try to determine what regulatory responses might be appropriate.

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[121] The federal funds rate has risen from 1% in June 2004 to a plateau of 5.25% beginning in June 2006. THE FEDERAL RESERVE BOARD, OPEN MARKET OPERATIONS (2008), http://www.federalreserve.gov/FOMC/fundsrate.htm.

[122] Nationwide, annualized house price appreciation dropped from 11.88% in 4Q 2005 to 1.81% in 1Q 2007. *See* Press Release, Office of Fed. Hous. Enterprise Oversight, *U.S. House Price Appreciation Rate Remains Slow, but Positive* (May 31, 2007) (on file with author).

[123] In the four quarters between the third quarter of 2006 and the second quarter of 2007, GDP grew at rates of 1.1%, 2.1%, 0.6%, and 3.4%. Data from the Bureau of Economic Analysis.

[124] Economist Staff, *A Good Time for a Squeeze.* ECONOMIST, Aug. 2, 2007, *available at* http://www.economist.com/opinion/displaystory.cfm?story_id=9587517.

A. ARE SUBPRIME LOANS UNREASONABLY RISKY?

Years of rapid house price appreciation – at times, annual appreciation rates topped 10 percent[125] – made homeownership a very good investment for millions of families in the early 2000s. Interest rates on 30-year fixed rate mortgages fell from 8.05 percent in 2000 to 5.8 percent in 2003-05 before rising to 6.4 percent in 2006.[126] In 2000 the average price of existing homes nationwide was 143,600 and by 2005 the average price was $219,600; in some regions of the country prices almost doubled during that period.[127]

Lenders expanded their business during this time, both in the prime market and in the subprime market. From 1995 to 2003, subprime originations grew from $65 billion to $332 billion, while total mortgage originations grew from $639.4 billion to $3.76 trillion over the same period. Over this time, the subprime share of the total market dropped from a high of 14.5 percent in 1997 to 8.8 percent in 2003.[128] Much of the rise in subprime lending was due to an increase in loans to the safest subprime borrowers. The early stages of the growth in subprime lending, from the mid-1990s through 1999, was due to an increase in loans to relatively risky borrowers rated B and lower. Beginning in 2000, the market grew much more around A-minus graded borrowers, and lenders allowed larger loans or higher LTVs to relatively safe borrowers, and reduced loan amounts to riskier borrowers.[129]

Some of this growth in subprime lending and subsequent foreclosures was a predictable byproduct of specific regulatory policies intended to increase homeownership among

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[125] Press Release, Office of Fed. Hous. Enterprise Oversight, *U.S. House Price Appreciation Rate Remains Slow, but Positive*, May 31, 2007 (on file with author).
[126] DEP'T OF HOUS. AND URBAN DEV., U.S. HOUSING MARKET CONDITIONS, MORTGAGE INTEREST RATES, AVERAGE COMMITMENT RATES, AND POINTS, 1973-PRESENT Table 14 (Feb. 2007), http://www.huduser.org/periodicals/ushmc/winter06/Q406_historical.pdf.
[127] *Id*. at Table 9 (Existing Home Prices). Points fell as well during this period. *Id.* at Table 15.
[128] Chomsisengphet & Pennington-Cross, *supra* note 11, at 37.
[129] Chomsisengphet & Pennington-Cross, *supra* note 11, at 55.

traditionally excluded groups, such as through the Community Reinvestment Act ("CRA").[130] Regulators pressured banks to loosen their underwriting standards in order to expand access to home loans to riskier borrowers, many of whom now face default and foreclosure.[131] As Federal Reserve Chairman Ben Bernanke recently observed, "[R]ecent problems in mortgage markets illustrate that an underlying assumption of the CRA—that *more* lending equals *better* outcomes for local communities may not always hold."[132] As Bernanke observes, differentiating "good" from "bad" lending in the CRA context "is an issue that is likely to challenge us for some time."[133]

In retrospect it seems obvious that many new loans during the housing boom were irresponsibly created by lenders, borrowers, or both. One type of loan that has drawn criticism from consumer advocates[134] and regulators[135] is the stated-income loan, on which borrowers do not provide full documentation of their income. In some cases, this type of loan is necessary for borrowers who are self-employed or work a second job. Stated-income loans are colloquially known as "liar's loans," because of the opportunity to lie about one's income on the application, and income misrepresentation is the most common form of mortgage fraud.[136] However, lenders claim that stated-income loans perform at least as well as full-documentation loans.[137] This assertion seems to be true with respect to some types of subprime loans, but not all, thus it is

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[130] *See* Martin S. Feldstein, *Housing, Credit Markets and the Business Cycle* (NBER Working Paper 13471, 2007).
[131] Stan Liebowitz, *The Real Scandal*, N.Y. POST (Feb. 5, 2008), *available in* http://www.nypost.com/seven/02052008/postopinion/opedcolumnists/the_real_scandal_243911.htm.
[132] Ben S. Bernanke, Chairman, Board of Governors of the Fed. Res. Sys., Remarks at the Community Affairs Research Conference: The Community Reinvestment Act: Its Evolution and New Challenge 6 (Mar. 30, 2007).
[133] *Id*.
[134] Statement of Martin Eakes at the Federal Reserve Board On Home Ownership and Equity Protection Act (June 14, 2007), (transcript *available at* http://www.responsiblelending.org/pdfs/Fed-6-14-07-ME-Statement.pdf).
[135] The financial regulatory agencies provided in their final guidance that stated income loans should only be used when there are specific mitigating circumstances. *See* OFFICE OF THE COMPTROLLER OF THE CURRENCY, BOARD OF GOVERNORS OF THE FED. RESERVE SYS., FED. DEPOSIT INS. CORP., OFFICE OF THRIFT SUPERVISION & NAT'L CREDIT UNION ADMIN., STATEMENT ON SUBPRIME LENDING (2007).
[136] FRAUD UPDATE, *supra* note 5.
[137] Lingling Wei, *Stated Income Home Mortgages Raise Red Flags*, WALL ST. J., Aug. 22, 2006, at D2.

difficult to generalize that such loans are inherently unreasonably risky as opposed to merely treating low or no documentation as another risk variable to be priced accordingly.[138]

Another practice that fueled the growth in the subprime market and has since exacerbated the subprime meltdown is the presence of "piggyback loans." Many first-time homebuyers have relatively limited assets and thus are unable to scrape together a substantial down payment for a mortgage, qualifying them only for a mortgage with a high LTV ratio (if they qualify at all). Lenders and secondary-market purchasers often require loans with high LTV ratios to be protected with private mortgage insurance (PMI), carried at the expense of the borrower to indemnify the lender against the elevated risk of default on the loan.[139] In recent years, so-called piggyback loans have emerged as an alternative to PMI. In piggyback lending, borrowers simultaneously receive a first mortgage and a junior-lien piggyback loan. The piggyback loan finances the portion of the purchase price not being financed by the first mortgage and sometimes any cash payment that might have been made; the junior loan may amount to as much as 20 percent of the purchase price.[140] Piggyback loans often are taken out so that the first-lien mortgage can meet the conforming loan size limits.[141] Although housing prices rose dramatically in recent years, the dividing line set by Fannie Mae between conforming and jumbo mortgages remained constant at $417,000, suggesting that a growing number of borrowers were taking out piggyback loans simply to avoid paying the jumbo penalty.[142] This meant that an increasing number of loans would have been forced into the jumbo classification, requiring the payment of an interest rate premium, even if they were really not much riskier than conforming

[138] *See* discussion at *supra* note 42 and accompanying text; *see also* Danis & Pennington-Cross, *supra* note 86, at 19.
[139] Avery et al., *supra* note 115, at 18.
[140] *Id.* at 18.
[141] *Id*. at 18, n. 18.
[142] *See* Sara Murray & Jonathan Karp, *New Definition of Jumbo Loans May Help Few*, WALL ST. J. (Feb. 7, 2008). Federal legislation pending at the time this article is being written would temporarily boost the level for conforming loans to up to $729,750 in areas of the country with higher than average home prices.

loans. In addition, until recently payments on PMI could not be itemized for federal income tax purposes, whereas the interest paid on piggyback loans could be. In other situations, the underwriting standards applied by PMI companies may have been more conservative than those used by the lender providing the piggyback loan. According to HMDA data, in 2006 about 22 percent of mortgage loans for owner-occupied houses also had piggyback second-lien mortgages attached.[143] The number and dollar volume of piggyback loans rose dramatically between 2001-04.[144] By contrast, the number of home purchases backed by PMI declined about 6 percent from 2005 to 2006 alone.[145]

As noted above, a primary factor driving foreclosure is the presence or absence of equity in the property. Thus, loans with little or no down payments (such as those with high LTV, mortgages combined with junior piggyback loans, or subsequent home equity loans) offer an unusually strong incentive to default if property values fall. Lower downpayments are correlated with higher rates of default[146] and lower LTV ratios are reflected in lower risk premiums in interest rates[147]. One study found that conventional mortgages with loan-to-value ratios at origination of 91-95 percent were twice as likely to default as loans with LTVs of 81-90 percent and five times more likely to default than those with LTVs of 71-80 percent.[148] Another study found that, conditional on surviving for two years, a loan that began with an initial LTV of one or greater was four times more likely to default than a loan with an LTV between 0.9 and 1, and even more likely than for a loan with an LTV of less than 0.8.[149] In some instances this

[143] Avery et al., *supra* note 115, at 19.
[144] Joseph R. Mason & Joshua Rosner, *How Resilient Are Mortgage Backed Securities to Collateralized Debt Obligation Market Disruptions?* Hudson Institute, Washington, DC (Feb. 15, 2007).
[145] *Id*.
[146] *See id.*
[147] *See* Elliehausen, Staten, & Steinbuks, *supra* note 52, at 43-44.
[148] Robert B. Avery, Raphael W. Bostic, Paul S. Calem, & Glenn B. Canner, *Credit Risk, Credit Scoring, and the Performance of Home Mortgages*, FED. RES. BULLETIN 621, 624 (July 1996).
[149] Gerardi, et al., *supra* note 86, at 25.

relationship may reflect the fact that those who are unable to scrape together a substantial downpayment are riskier borrowers and so are more likely to default. This would be expected if consumers treat default and foreclosure as an option—if the borrower makes a 20% downpayment, then the owner will be reluctant to default unless the value of the property depreciates by more than 20%. If, however, the borrower puts down little or nothing then there is little disincentive against default and foreclosure when property values fall. In fact, Demyanyk and Van Hembert conclude that "the increases in the adjusted delinquency and foreclosure rates are *almost exclusively* caused by the worsening of performance of loans with a combined LTV of 80 percent or more."[150] By reducing the effective equity investment and raising the LTV ratio, piggyback loans create similar incentives for opportunistic default: "[F]irst-lien mortgages connected with piggyback loans are 43 percent more likely to go into default than stand-alone first mortgages of comparable size" and the default rate is even higher for piggyback loans extended to riskier borrowers.[151]

Subprime loans also may be inherently riskier for reasons unrelated to borrower characteristics or risky practices. Subprime loans face a correlation of two related risk factors that can make risk both higher and less predictable than conventional loans—rising mortgage interest rates and declining property values. Although these factors are present in the prime market, they may be exacerbated in the subprime market. Most outstanding mortgages today remain traditional 30-year fixed-rate mortgages. Interest rate fluctuations for these mortgages present a risk for new purchasers of homes, but not for those with established mortgages. Similarly, unless a given homeowner intends to sell her home, short-term changes in property values are fundamentally irrelevant to these borrowers. Those who hold traditional mortgages

[150] *See* Demyanyk & Van Hembert, *supra* note 94, at 4.
[151] Rosner & Mason, *supra* note 146, at 8.

are more likely to have purchased a home as owner-occupied housing and to gain the amenities of home ownership—a home to raise a family in, an established school district, a welcoming neighborhood. Homeowners also gain insurance against the risk of fluctuations in rent prices.[152] In fact, homeownership rates and home prices are higher in areas where rent volatility is higher and the positive effect on homeownership is higher in areas where rent comprises a larger percentage of household income.[153] Homeownership, on the other hand, bears the risk of fluctuations in housing asset values; thus, homeownership rates are higher in areas with longer average time horizons, as longer expected residence serves as a hedge against short-term fluctuations in real estate values. These homeowners also are more likely to have a longer time horizon for ownership and thus less concerned about short-term fluctuations in property values.

These conditions are reversed in the subprime market. First, many subprime loans are adjustable rate mortgages or "hybrids" that have an initial period with a fixed interest rate followed by an adjustable rate. From 1999-2007, 44 percent of subprime loans were fixed rate, 16 percent were adjustable rate, and 32 percent were hybrids, as compared to the prime market where the percentages were 84 percent, 10 percent, and 5 percent respectively.[154] As a result, an increase in market interest rates will lead to an increase in rates not only for new borrowers but existing borrowers as well as their interest rates reset under their ARM contracts. This "payment shock" effect will have the effect of increasing foreclosure rates under a distress theory of foreclosures.

Second, in areas where there are a higher percentage of subprime loans, this increase in interest rates will have a more dramatic impact on pushing down house prices—just as the

[152] Todd Sinai & Nicholas S. Souleles, *Owner-Occupied Housing as a Hedge Against Rent Risk*, 120 Q. J. ECON.763 (2005).
[153] *Id*.
[154] Barth et al., *supra* note 93.

availability of "cheap money" had an effect of pushing up market prices more dramatically in recent years in areas with higher percentages of subprime lending. In turn, this will create stronger incentives to default and permit foreclosure. Higher interest rates and declining property values thus combine to exacerbate one another, thereby driving up default and foreclosure rates. In turn, the rising number of foreclosure properties further exerts downward pressure on property values, furthering the vicious cycle of declining property values and foreclosure.

Third, many subprime borrowers purchased a property for speculative or investment purposes than a traditional homeowner. In the situation of non-owner-occupied housing used as a rental property, this motivation is explicit. There may also be others for whom the motivation is implicit—such as young, single individuals who use the opportunity of low interest rates to purchase a home (or perhaps more accurately a condominium or townhouse) as an alternative to leasing an apartment.[155] Although this owner gains some amenity value from homeownership, those amenities are modest compared to a traditional family and many expect their ownership to be short-term. The presence of a larger number of speculators in a given market will exacerbate a downward cycle of falling home values as they are more likely to exercise their default option. If foreclosure becomes sufficiently widespread in a community, it can negatively impact the amenity value of home ownership by destabilizing neighborhoods, the local tax base, and the quality of schools and other government services, which will create further incentives for other homeowners to default. When combined with local economic recessions, as such situations often are, this dynamic can be devastating for established communities.

[155] For instance, in 2006, single men purchased 17 percent of residential real estate investment property; all other household categories are in the single digits. Press Release, Nat'l Ass'n of Realtors, *Vacation-Home Sales Rise to Record, Investment Sales Plummet in 2006* (Apr. 30, 2007) (on file with author).

Although adjustable rate mortgages appear unreasonably risky when interest rates rise, it must be recognized that they are also equally beneficial when interest rates fall. Thus, one cannot generalize that ARMs are unreasonably risky. In periods of declining interest rates ARMs allow homeowners to decrease their interest rates without the expense and trouble of refinancing. As then-Federal Reserve Chair Alan Greenspan observed in 2004 (prior to recent increases in interest rates):

> One way homeowners attempt to manage their payment risk is to use fixed-rate mortgages, which typically allow homeowners to prepay their debt when interest rates fall but do not involve an increase in payments when interest rates rise. Homeowners pay a lot of money for the right to refinance and for the insurance against increasing mortgage payments. Calculations by market analysts of the "option adjusted spread" on mortgages suggest that the cost of these benefits conferred by fixed-rate mortgages can range from 0.5 percent to 1.2 percent, raising homeowners' annual after-tax mortgage payments by several thousand dollars. Indeed, recent research within the Federal Reserve suggests that many homeowners might have saved tens of thousands of dollars had they held adjustable-rate mortgages rather than fixed-rate mortgages during the past decade, though this would not have been the case, of course, had interest rates trended sharply upward.[156]

Greenspan further observed that ARMs are much more common in other countries than in the United States with no apparent problems and where efforts to introduce American-style fixed rate mortgages have been largely unsuccessful, suggesting that adjustable rate mortgages *per se* are not unreasonably risky. International comparisons indicate that the United States is almost unique in offering fixed-rate mortgages with long maturities (beyond 20 years).[157] The United States mortgage market is also anomalous in generally allowing borrowers to prepay their mortgages without a penalty.

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[156] Greenspan, *supra* note 60.

[157] Richard K. Green & Susan M. Wachter, *The American Mortgage in Historical and International Context*, 19 J. ECON. PERSPECTIVES 93, 100 (2005). Green and Wachter find that in the countries they examined, Japan and Denmark in addition to the United States offer fixed-rate mortgages at long maturities. Many countries offer no fixed-rate mortgages and of those that do, many do so only for shorter maturity ranges.

Finally, the likelihood of borrowers taking out an ARM versus a fixed loan is explained in large part by the riskiness of long-term investments generally, especially the risk of expected inflation over the life of the mortgage. Thus, where the risk premium on longer-term bonds is higher, fixed interest rates tend to be higher relative to adjustable rates; therefore, the percentage of adjustable rate mortgages relative to fixed rate mortgages will rise.[158] Thus, adjustable rate mortgages do not appear to be unreasonably risk when compared to market benchmarks.

B. DID THE MARKET MISPRICE THE RISK?

A related explanation relates not the risk associated with individual loans, but rather a general systematic mispricing of risk in the market generally over the past several years, and specifically, a belief that many systematic market risks were no longer worrisome to investors.[159] As a result, there may have simply been an excess flow of capital to all types of riskier investments, of which investments in subprime loans are merely one type. Martin Feldstein notes that there was a perception that over the past several years risk was underpriced in the market in the sense that the "differences in interest rates between U.S. Treasury bonds and riskier assets (i.e., the credit spreads) were very much smaller than they had been historically."[160] Feldstein describes the factors that led to this development:

> Some market participants rationalized these low credit spreads by saying that financial markets had become less risky. Better monetary policies around the world have reduced inflation and contributed to smaller real volatility. Securitization and the use of credit derivatives were thought to disperse risk in ways that reduced overall risk levels. Most emerging market governments now avoid overvalued exchange rates and protect themselves with large foreign exchange reserves. There was also the hope based on experience that the Federal

[158] Ralph S.U. Koijen, Otto Van Hemert & Stijm Van Nieuwerburgh, *Mortgage Timing* (NBER Working Paper No. 13361, 2007).
[159] THE PRESIDENT'S WORKING GROUP ON FINANCIAL MARKETS, POLICY STATEMENT ON FINANCIAL MARKET DEVELOPMENTS (March 2008).
[160] Martin S. Feldstein, *Housing, Credit Markets and the Business Cycle* (NBER Working Paper No. 13471, 2007).

> Reserve would respond to any financial market problems by an easing of monetary policy.[161]

Feldstein argues that this widespread belief in the effective "disappearance" of risk from the market was incorrect and that there was a radical mispricing of risk in the market that resulted from overuse of credit derivatives and similar financial.

Under-pricing systematic risk in the secondary market this could have contributed to the subprime bubble by artificially reducing the wholesale cost of funds to be used for consumer lending. If the current deflating of the subprime bubble has been caused in part by the impact of these systematic risks that were thought to be unnecessary to hedge against, then this could help to account for the general subprime boom and bust even independent of any mispricing of any risks specifically associated with subprime lending products.

Others have suggested that even if there was no systematic mispricing of risk in the market generally, there may have been a misunderstanding and mispricing of risk in the subprime mortgage market specifically. Joseph Mason and Joshua Rosner have argued that there was a fundamental intellectual error in the rationale for securitizing mortgages—contrary to conventional understanding, *pooling* mortgages does not actually *diversify* their risk.[162] Mason and Rosner note that a fundamental principle of finance theory is that when "we combine a number of uncorrelated investments *both* expected profit and standard deviation grow in direct proportion to the number of investments." Thus, while combining uncorrelated investments may reduce the standard deviation of risk associated with a portfolio if you increase the *scale* of the investment (by increasing the number of investments in the portfolio), it will increase the overall standard deviation of the investment portfolio. The risk/return tradeoff does not improve with the accumulation of more mortgages, thus there is no diversification in pooling mortgages.

[161] *Id.* at 3-4.
[162] Mason & Rosner, *Where Did the Risk Go?*, *supra* note 46, at 36.

There also was a dramatic deterioration in underwriting standards for subprime loans, especially from 2004 onwards.[163] Nonetheless, despite this deterioration in lending standards from 2001-2006, the spread between prime and subprime loans actually narrowed during this period, indicating a radical mispricing of risk.[164] As suggested above, the largest mistake likely was the increased use of high-LTV loans that have provided strong incentives to default when property values fell. In 2001, the premium paid by a high LTV borrower was close to zero.[165] By 2006 the market eventually corrected itself to impose a risk premium on high LTV borrowers.[166] Underwriting criteria deteriorated the most where the competition to originate new loans was highest.[167]

Agency costs that created incentive misalignment and heightened information costs may also have contributed to the deterioration in subprime lending standards. First, there is an agency costs relationship between mortgage brokers and the lenders who actually provide the funds for the loan might also provide some of the explanation for the deterioration in underwriting standards.[168] The incentive of a broker is to make as many loans as possible whereas the lender actually bears the risks of the loan. This can create incentives for brokers to lend in an over-aggressive manner compared to the lender's desires, leading eventually to a higher default rate for broker-originated mortgages than for captive lenders. On the other hand, this agency problem has been known for some time and it appears that even though this risk was not initially priced into the mortgage market eventually it was and that the interest rates on broker-originated loans rose to account for this risk.

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[163] PRESIDENT'S WORKING GROUP, *supra* note 159; *see also* Demyanyk & Van Hembert, *supra* note 94, at 20.
[164] Demyanyk & Van Hembert, *supra* note 94, at 5.
[165] *Id.* at 28.
[166] *Id.*
[167] *See* Giovanni Dell' Ariccia, Deniz Igan, & Luc Laeven, *Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market* (working paper, Feb. 2008).
[168] William P Alexander, Scott D Grimshaw, Grant R McQueen, Barrett A Slade, *Some Loans Are More Equal than Others: Third-Party Originations and Defaults in the Subprime Mortgage Industry*, 30 REAL ESTATE ECON. 667 (2002).

Second, there is another layer of agency costs created when mortgages are securitized.[169] The ability of banks to securitize risk by spreading it across many investors can reduce the incentives of banks to carefully screen borrowers. But "banks and investors are involved in repeated relationships, [thus] reputation concerns may prevent any moral hazard from lenders."[170] So it is not certain that this will be a problem in practice. Moreover, similar incentives have long existed in the prime market where the vast majority of loans have been securitized for some time, yet the prime market has not imploded like the subprime market, thus it is not clear why this risk would have been unique to the subprime market. Perhaps the rapid growth of the subprime market and the rapid growth in securitization in the subprime market led the secondary market to misprice the risks of subprime lending as a transitional matter. Demyanyk and Van Hembert conclude, however, that the secondary market was aware of the increasing riskiness of subprime loans and was charging an increased risk premium, thus it is not clear how much this phenomenon explains.[171]

Lenders also may have also been lending under a model of lending risk that was unsuited to the current market context. Traditional lending models have been based on credit scores and were developed during a period where most lending was in the prime market and during an era of largely uninterrupted appreciation in housing prices.[172] But although these models accurately predicted default under those conditions, they may not be equally valid when applied to subprime borrowers or in a declining real estate market. If default and foreclosure is the result of changes in home property values and the accumulated equity in a home, or if subprime borrowers are more willing to exercise their default option when real estate prices decline, then

[169] Benjamin J. Keys, Tanmoy Mukherjee, Amit Seru, & Vikrant Vig, *Did Securitization Lead to Lax Screening? Evidence from Subprime Loans 2001-2006* (working paper, Jan. 2008), *available in* http://ssrn.com/abstract=1093137.
[170] *Id.*
[171] Demyanyk & Van Hembert, *supra* note 94, at 4.
[172] Danis & Pennington-Cross, *supra* note 86, at 15.

credit scores will not provide an accurate measure of a borrower's propensity to default.[173] In addition, unlike credit scores, this risk will be extremely difficult to price and diversify—it depends to some extent on the subjective commitment that a given borrower has to paying his mortgage even if the value of the home falls. Because this depends on the private preferences idiosyncratic to a given borrower and myriad other variables that will be difficult to estimate, it will be very difficult to predict and price.[174] As Jones observes, "Isolating the role of household attributes [for foreclosure] requires controlling for deficiency enforceability, loan contract terms, interest rate and house price movements, and the wealth positions of mortgagors subsequent to the granting of the loan."[175] The multiplicity of these variables and their complex interaction for any given household makes it difficult to determine which borrowers will be likely to default.[176] Different borrowers will have different strike points for the amount of negative equity that will trigger an exercise of a default option. Purchase money lenders who may have positive equity will also have little ability to prevent a borrower from subsequently obtaining a home equity loan that may subsequently result in the borrower being put into an overall negative equity position if housing values fall.[177] Moreover, it will be difficult for a lender to estimate in advance the probability and extent to which homes will fall in value in a given region, thereby affecting the value of the option to borrowers.

C. ARE SUBPRIME BORROWERS UNREASONABLY RISKY?

[173] *See* Anders, *supra* note 103.
[174] Jones, *supra* note 107, at 134.
[175] *Id.* at 134.
[176] *See* Donald F. Cunningham & Charles A. Capone, Jr., *The Relative Termination Experience of Adjustable to Fixed-Rate Mortgages*, 45 J. FIN. 1687 (1990).
[177] *See* Lacour-Little, *supra* note 90. This problem of moral hazard may explain the apparent propensity for subprime borrowers to seek refinance loans rather than home equity loans.

Subprime borrowers are, by definition, riskier and have more checkered credit histories when compared to prime borrowers. Subprime loan applicants are almost four times more likely to be rejected for loans than prime applicants.[178] The difference between a prime borrower and a subprime borrower is often marginal, and dependent on loan-to-value ratio or other terms of the mortgage as well as the borrower's credit history. The majority of subprime loans are made to A-minus or Alt-A borrowers[179] who nearly qualify for prime mortgages and many of whom can refinance their mortgages into less expensive loans or prime loans within two years of timely repayment and a concomitant improvement in credit score.[180]

Some critics contend that some otherwise qualified borrowers may not be sophisticated enough to take on high-cost subprime loans. However, repayment statistics show that, while subprime borrowers are significantly more risky than prime borrowers, the vast majority repay their loans, and often repair their credit scores to qualify for prime loans. Moreover, subprime borrowers show little difference from prime borrowers in their ability to understand their loans. A study by the Federal Trade Commission found that borrowers who had recently originated a prime mortgage were able to understand, on average, 62 percent of questions related to a mortgage disclosure document correctly. Subprime borrowers in the study were able to answer 59.6 percent of the questions correctly.[181] A study by economists at the Federal Reserve similarly finds that most homeowners are generally aware of their house values and mortgage terms.[182] However, many borrowers who have ARMs do not fully understand how much their

[178] *See* Giang Ho & Anthony Pennington-Cross, *The Varying Effects of Predatory Lending Laws on High-Cost Mortgage Applications*, 89 FED. RES. BANK ST. LOUIS REV. 39, 41 (2007) (noting rejection rate of 33 percent for applicants for subprime loans and 9 percent for prime loans).
[179] Seventy percent of subprime loans are to A-minus or Alt-A customers. *See* Cutts & Van Order, *supra* note 18, at Table 1.
[180] *Id*. at 174.
[181] LACKO & PAPPALARDO, *supra* note 38, at 70.
[182] Brian Bucks & Karen Pence, *Do Homeowners Know Their House Values and Mortgage Terms?* (Federal Reserve, Jan. 2006).

interest rates could change under their mortgage.[183] Moreover, subprime borrowers in general are disproportionately minority and lower income, older, less well educated, less financially sophisticated, and less likely to search for the best interest rate when applying for a mortgage.[184] They are also more likely to express dissatisfaction with the mortgages they receive.[185]

The difference between the prime and the subprime market then does not appear to be the result of different levels of sophistication or education among borrowers, but that subprime loans are simply more complex than prime mortgages, both in the complexity of the individual terms (e.g., adjustable versus fixed rates) and the total number of relatively complex terms. For instance, neither prime nor subprime borrowers generally can accurately discern whether their loan documents include a prepayment penalty or what that penalty might be, but these terms are more common in subprime mortgages.[186]

Prime borrowers tend to receive fixed-rate mortgages with an initial monthly payment that will stay constant through the life of the loan. Most subprime mortgages are adjustable-rate, and may include a below-market initial "teaser" rate that will increase sharply after two or three years, depending on the loan. In 2005 and 2006, for instance, it is estimated that 15% of adjustable rate mortgages that were issued had initial interest rates of 2 percent or less.[187] The formula establishing the required monthly payment after the reset may not be fully understood by borrowers at the time they enter into the loan. And even if these complex terms are justified by risk-based pricing, which they probably are, they still make loans more complicated.

Fraud by borrowers also may be more prevalent in the subprime market than in the prime market. According to research by BasePoint Analytics, 30 to 70 percent of early payment

[183] *Id.*
[184] Howard Lax, Michael Manti, Paul Raca, & Peter Zorn, *Subprime Lending: An Investigation of Economic Efficiency*, 15 HOUSING POLICY DEBATE 533 (2004).
[185] *Id.* at 566.
[186] *Id*. at 78.
[187] CAGAN, *supra* note 91, at 18.

defaults on mortgages were linked to significant misrepresentations by borrowers in the initial loan application, such as exaggerating income or the property appraisal.[188] Applications that contained misrepresentations were five times more likely to go into default than others.[189] In some situations, of course, lenders turned a blind eye toward borrower misbehavior, thereby enabling fraud to occur. Some subprime borrowers also may have been pursuing a Ponzi-like scheme of planning to flip the home within a short period of time for an expected profit, thereby reselling the home and retiring the mortgage before the fraud catches up with her.

III. RESPONSES TO THE PROBLEMS IN THE SUBPRIME MARKET

As a result of the subprime meltdown, legislators, regulators, consumer interest groups, and the lending industry are weighing different measures to prevent a similar event in the future. But the concerns over the risk of subprime lending and its effect on borrowers must be measured against the positive effects of the expansion of subprime lending. Moreover, regulators must determine the extent to which the problems in the subprime market are temporary or chronic. The history of consumer credit in the United States suggests that the introduction of new credit products are met by an initial excess that leads to an initial boom and bust cycle that subsequently stabilizes. Often after the initial period of excess many of the problems have proven self-correcting. The subprime mortgage market may prove similar.

A. CURRENT REGULATORY FRAMEWORK

[188] *See* Federal Bureau of Investigation, *2006 Mortgage Fraud Report*, http://www.fbi.gov/publications/fraud/mortgage_fraud06.htm (citing BasePoint White Paper, "New Early Payment Default-Links to Fraud and Impact on Mortgage Lenders and Investment Banks," p. 2, 2007).
[189] *See* Tyler Cowen, *Economic View: So We Thought, But Then Again...*, N.Y. TIMES (Jan. 13, 2008).

There are a number of possible remedies for the subprime market being discussed which are possible under current laws and regulations. These remedies assume that most of the ills in the subprime market are due to fraudulent lenders and borrowers or faulty lending models. Initially, the federal financial regulatory agencies which together oversee consumer lending, released a guidance statement on subprime lending.[190] The guidelines were not binding. In December 2007, however, the Federal Reserve issued a Proposed Rule to Amend the Home Mortgage Provisions of Regulation Z, which implements TILA and HOEPA that would impose new rules.[191]

1. Prosecution of Fraud

Mortgage fraud can be committed at the expense of either the borrower or the lender. Examples of lenders or brokers defrauding borrowers can include fraudulent disclosures, omitted disclosures, "bait-and-switch" tactics where the broker presents substantially more expensive terms to the borrower at closing, misrepresentation, or other tactics.[192] Borrowers or brokers can also defraud sources of capital by inflating income or assets, falsifying the appraisal value of the home, or changing the borrower's records in order to secure financing and making the loan suitable for the secondary market.[193]

Regulators have actively pursued prosecution of claims of fraud.[194] But a more general question is that of the extent to which the problems in the subprime market are the result of

[190] GUIDANCE, *supra* note 37.
[191] FDIC Truth in Lending, 73 Fed. Reg. 1672 (Jan. 9, 2008) (to be codified at 12 C.F.R. § 226).
[192] Peterson, *supra* note 25, at 1267.
[193] *Id.* at 1268.
[194] *See Efforts to Combat Unfair and Deceptive Subprime Lending*: *Hearing Before the Sen. Spec. Comm. on Aging*, 108th Cong. 1 (2004) (statement of Howard Beales, Director, Office of Consumer Protection, Fed. Trade Comm'n) (summarizing enforcement actions).

simple, "garden variety" fraud that are most amenable to being addressed through case-by-case prosecution of bad actors rather than categorical regulatory restrictions.[195]

Some claims of fraud can be addressed by anti-fraud laws, and others may fall under disclosure laws discussed below.

2. Enforcement of Anti-Predatory-Lending Laws and Disclosure Laws

a. Disclosure Laws

Required and standardized disclosures can be one mechanism for mitigating the problem of defrauding vulnerable borrowers. It is not clear, however, that the system of mandatory disclosures currently in place is structured to effectively address the problem of fraud against borrowers. Borrowers don't get firm information on their loans until after they begin the loan application process. Currently, lenders are required to provide a Good Faith Estimate (GFE) within 3 days of application.[196] GFEs are required to bear a reasonable relationship to the final charges, but lenders are not liable for inaccurate GFEs, or for failing to provide one.[197] Estimates can be inaccurate because of willful misrepresentation by the lender or because of unforeseen charges that arise by the final settlement.

Borrowers also see a number of other disclosures during the application process. In addition to federally required disclosures under TILA and RESPA, borrowers can see up to 50 total disclosures including those required by lenders and state laws. Federal agencies have recommended that the current disclosure requirements be improved to make disclosures clearer

[195] As noted below there are other alternatives to prosecution of fraud, such as greater involvement in the market by more established and highly-reputable lenders. *See* discussion *infra* notes 236-246 and accompanying text.
[196] DEP'T TREASURY & DEP'T HOUS. & URBAN DEV., CURBING PREDATORY HOME MORTGAGE LENDING 28, 65 (2000) [hereinafter CURBING].
[197] *Id.* at 63.

and more timely, allowing borrowers to shop between lenders more easily.[198] Borrowers whose GFEs are misleading, and who see much higher costs at closing, may feel committed to the lender and unable to shop for better terms.[199]

Since many borrowers don't understand the more complicated terms of their mortgage from the disclosure forms, many rely on mortgage originators to explain the terms of their contract.[200] Mortgage brokers and loan officers are often indispensable sources of expertise for borrowers on what is likely the most complicated transaction they will ever make.

Some lenders have been accused of bait-and-switch tactics, where the terms of the loan change considerably between the good-faith-estimate and the final loan documents.[201] Even when borrowers catch the switch and realize the higher cost of their loans, they have often invested too much time and money in the process to search for another loan, or they must close on the loan in order to complete the purchase of a house, and have little alternative.

There are also a number of laws that require certain disclosures to the borrower during the mortgage origination process, including the Truth in Lending Act (TILA), the Home Ownership and Equity Protection Act (HOEPA) and the Real Estate Settlement Procedures Act (RESPA).[202] HOEPA is the most distinctly aimed at regulating high-cost mortgage loans.[203] Under the act, lenders originating HOEPA-protected loans must provide further disclosures of the costs involved in the loan, including the annual percentage rate, the monthly payment amount, and the amount of any balloon payments. HOEPA also places substantive restrictions on high-cost loans, such as a prohibition on negative amortization, a ban on increases in the

[198] *Id*.; *see also* LACKO & PAPPALARDO, *supra* note 38.
[199] CURBING, *supra* note 196, at 65.
[200] CURBING, *supra* note 1985, at 121.
[201] Frederick L. Miller, *Bait and Switch in the Mortgage Market*, 85 MICH. BAR J. 21, 21-23 (2006).
[202] *See* Peterson, *supra* note 25, at 2225-30 (summarizing the multiple federal laws and regulations governing mortgage markets, mostly disclosure rules).
[203] 15 U.S.C. §§ 1601, 1602(AA), 1639(a)-(b) (2000). HOEPA is a subsection of TILA.

interest rate upon default, and limitations on refinancing the loan within a year unless the new loan provides an interest rate or fees below the HOEPA thresholds. But HOEPA has relatively high triggers—currently a loan is considered high-cost for purposes of HOEPA if the loan's APR exceeds the rate for Treasury securities or comparable maturity by 8 percentage points or more on first mortgages and 10 percentage points or more for second mortgages. It is also considered a high-cost loan if points and fees, including prepaid fees for optional insurance programs, exceed the greater of 8 percent of the loan amount or $528. However, HOEPA only applies to refinance mortgages and closed-end second mortgages, but not to purchase-money mortgages or home equity lines of credit. Most lenders, even predatory lenders, can tailor their loans so that they don't fall under HOEPA rules.[204]

Both TILA and RESPA apply to all mortgage loans. TILA requires lenders to provide total finance charges and the annual percentage rate (APR).[205] RESPA requires lenders to provide a good-faith estimate (GFE) of the closing costs within three days of application.[206] However, lenders face no liability for errors in their GFEs, so the estimates may differ greatly from the final loan offered to the homeowner at closing.[207]

To the extent that lenders can engage in term repricing in order to avoid HOEPA's triggers, this not only will frustrate regulatory efforts, but also illustrates the unintended consequences that can result from efforts to regulate certain consumer lending terms. Lending contracts are multi-term contracts. HOEPA rules—and liability—are triggered when the price of certain terms exceed a certain threshold. Loans that are covered by HOEPA cannot "provide short-term balloon notes, impose prepayment penalties greater than five years, refinance loans

[204] Engel & McCoy, *supra* note 22, at 1307.
[205] 15 U.S.C. §§ 1601-1693 (r) (2000)
[206] 12 U.S.C. §§ 2601-2617 (2000).
[207] Engel & McCoy, *supra* note 20, at 1269.

into another HOEPA loan in the first 12 months, or impose higher interest rate[s] upon default." Creditors must also account for borrowers' ability to repay when originating a loan.[208] This gives lenders an incentive to reprice those terms of the lending contract that are not subject to the regulatory triggers, including such practices marketing ancillary "add-on" terms and products such as credit insurance or completely separate goods and services. In turn, this makes loan pricing both more heterogeneous and less transparent, making it more difficult for borrowers to compare and shop among competing loan offers. Moreover, this heterogeneity will increase the complexity of subprime loans and thereby make it easier for dishonest and unscrupulous lenders to defraud consumers through the insertion of concealed terms in the contract.

There is evidence that the current disclosures from lenders are ineffective, and that borrowers poorly understand the information that they are given. Lenders are unlikely to unilaterally adopt new disclosure forms rather than use the standard format. A new standard disclosure designed to maximize borrower comprehension may be the best solution, as discussed below.

The statement issued by the federal financial regulatory agencies includes guidance that lenders should clearly explain the possible effects of payment shock, prepayment penalties, balloon payments, pricing premiums attached to certain subprime products, and responsibility for taxes and insurance. The statement also clarifies the characteristics of predatory loans which may violate Federal Trade Commission rules: making loans based on the foreclosure value rather than the borrower's ability to repay; inducing repeated loan "flipping" in order to collect high fees; and engaging in fraud or deceptive practices.[209]

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[208] Giang Ho & Anthony Pennington-Cross, *The Impact of Local Predatory Lending Laws on the Flow of Subprime Credit*, 60 J. URBAN ECON. 214 (2006).
[209] GUIDANCE, *supra* note 37.

b. State Anti-Predatory Lending Laws

The federal rules only apply to federally-chartered banks and lenders, which make up less than half of the subprime lending market. There are a number of state and local governments that have passed anti-predatory-lending legislation which can require more extensive disclosures or restrictions on the types of terms and products that lenders can offer. Most of these laws are tailored after HOEPA but frequently adopt stricter restrictions.[210]

Empirical studies generally have found that city-wide or state-wide attempts to regulate predatory lending result in rationing of credit. A number of cities and states have passed legislation intended to curb predatory and abusive lending, beginning with North Carolina in 1999. The laws have various degrees of strictness and use various means to protect citizens against predatory lending. Some laws expand the coverage of HOEPA to cover a wider range of loans. Other laws impose substantive restrictions or requirements that go beyond HOEPA or impose new penalties. Many laws combine these two paradigms.

These mini-HOEPA laws can substantially increase the costs associated with subprime lending. Professor Marcus Cole describes the impact of the "Illinois Fairness in Lending Act," which was enacted in 2005.[211] The law provides that for any mortgage applications within a nine zip-code area in Cook County, Illinois, the Department of Financial and Professional Services has the option to examine the terms of the loan and mandate credit counseling if it believes appropriate. The nine zip-codes covered are associated with poor to modest income neighborhoods on the South and Southwest sides of the City of Chicago. If the counseling requirement is triggered, the lender must pay the cost of counseling, which may be as much as

[210] Under the Supreme Court's decision in *Watters v. Wachovia National Bank*, these laws are preempted in application to nationally-chartered banks. 127 S.Ct. 1559 (2007).

[211] *See* G. Marcus Cole, *Protecting Consumers from Consumer Protection:* Watters v. Wachovia Bank, 2006-2007 CATO S. CT. REV. 251, 265 (2007).

$500-$700 and could result in a delay of up to 27 days in the loan approval process. Professor Cole notes that the many mortgage lenders quickly moved to cease lending on homes purchased in the covered zip-codes. Those who continued to lend increased the interest rates on their loans. This dampening of lending activity also dampened home sales and prices within the covered zip-codes, stripping home owners of much of their home equity. That increased lending costs and restrictions on creditor remedies lead to higher costs and interest rates for consumers is well-established.[212] Although some consumers thus simply end up paying more for loans, others will be unable to borrow at the higher interest rate, inevitably leading to reduced lending volume.[213]

Studies have found mixed results from these "mini-HOEPA" laws, but generally conclude that they produce an overall a reduction of subprime lending activity.[214] Whether this reduction in loans is normatively good or bad depends on whether those loans that are deterred are legitimate subprime loans or "predatory" loans. In North Carolina, the 1999 law expanded the number of loans defined as high-cost by lowering the fee triggers created by HOEPA. The law also imposed tighter restrictions against high-cost loans.[215] Elliehausen and Staten found that the number of subprime mortgage originations dropped by 14 percent. The decline in originations was almost entirely among lower-income borrowers in North Carolina.[216] A subsequent study concluded that less-restrictive laws do not appear to dampen the availability of high-cost loans, but that states with more-restrictive laws experienced significant declines in the

[212] *See*, *e.g.*, Mark Meador, *The Effects of Mortgage Laws on Home Mortgage Rates*, 34 J. ECON. & BUS. 143 (1982).
[213] *See* Cole, *supra* note 211, at 272, 272 n. 98 (citing studies).
[214] Empirical studies of the effects of these laws is summarized in Gregory Elliehausen, Michael Staten & Jevgenijs Steinbuks, *The Effects of State Predatory Lending Laws on the Availability of Subprime Mortgage Credit*, CREDIT RESEARCH CENTER MONOGRAPH #38 (Georgetown U., Ctr. for Real Estate & Urban Analysis) (2006). We are not aware of any studies that have tried to determine whether these particular laws have increased the costs of lending as well.
[215] *Id*. at 4.
[216] Gregory Elliehausen & Michael Staten, *Regulation of Subprime Mortgage Products: An Analysis of North Carolina's Predatory Lending Law* 15 (Credit Research Ctr. Working Paper No. 66, 2002).

origination of subprime loans.[217] The cumulative decline ranged from a low of 26 percent in North Carolina to 94 percent in New Mexico.[218] Harvey and Nigro also found that subprime applications and originations dropped significantly, though most of the drop was due to fewer applications, and not a significant change in rejection rates.[219] Another study comparing mortgage originations in North Carolina with those in neighboring states, both before and after the law, found that originations declined in North Carolina relative to its neighbors after the law, again due to a decline in applications.[220]

Ho and Pennington-Cross conclude that the various state and local laws that they studied did not significantly impact the rate of originations. They do, however, reduce the rate of application, and applicants are more likely to be accepted. The authors speculate that this may be due to lenders marketing less aggressively for subprime products because of strengthened predatory lending legislation; the change in rejection may also have been due to increased pre-screening by lenders, increased borrower self-selection, or a shift to lenders and loan products unregulated by the new law.[221] Harvey and Nigro reach a similar conclusion to explain the reduction in mortgage originations in North Carolina after the passage of the predatory lending law,[222] but do not mention the possibilities of increased pre-screening by lenders or borrowers. Overall, the economic studies show that restrictions on lenders tend to tighten the subprime

[217] Elliehausen, Staten, & Steinbuks, *supra* note 214.
[218] *Id.*
[219] Keith D. Harvey & Peter J. Nigro, *Do Predatory Lending Laws Influence Mortgage Lending? An Analysis of the North Carolina Predatory Lending Law*, 29 J. REAL ESTATE FIN. & ECON. 453-4 (2004).
[220] KIMBERLY BURNETT, MERYL FINKEL & BULBUL KAUL, ABT ASSOCIATES, MORTGAGE LENDING IN NORTH CAROLINA AFTER THE ANTI-PREDATORY LENDING LAW: FINAL REPORT (2004).
[221] Ho & Pennington-Cross, *supra* note 208, at 222-223.
[222] Harvey & Nigro, *supra* note 219, at 453.

market and reduce the number of applicants for subprime loans, and depending on the strength of the law,[223] can reduce the number of loan originations.

While reducing overall loan volume, there is no evidence as to whether anti-predatory lending laws actually reduce the incidence of predatory lending.[224] So, for instance, milder regulations appear to have a minimal disruptive impact on the market. On the other hand, milder laws may provide minimal additional protection for borrowers as well. The finding of no credit-rationing effect from milder lending regulations may reflect the ability of borrowers and lenders to reprice unregulated terms of credit contracts in order to avoid a reduction in the supply and demand of credit. By contrast, it may be more difficult to reprice terms in the face of more onerous credit regulations, thus resulting in some rationing of credit and substitution to other forms of credit, such as payday lending and pawnbrokers. In fact, some claim that mild but more broadly-applicable regulations may actually *increase* the overall volume of subprime lending.[225]

Anecdotal reports also suggest that anti-predatory lending regulations may have the unintended consequence of interfering with the flow of legitimate subprime credit. Consider the following story reported in a local Ohio newspaper:

> When David Sanderson recently applied to a lender for a second mortgage, he was denied for an unusual reason. Undeterred, he went to another lender and was denied again. Same thing happened at a third institution. In all three cases, he was given the same reason for the denial—the lenders thought he lived in Cleveland and claimed that the city's anti-predatory lending law prevented them from giving him the loan he needed....
>
> Since Cleveland's anti-predatory lending law caps interest charges, some lenders don't give second mortgages or home-equity loans to Cleveland residents having potential credit risks.

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[223] North Carolina's law was one of the most restrictive in the Ho and Pennington-Cross study, which found that stricter laws have a stronger effect on the market, reducing both applications and originations. *See* Ho & Pennington-Cross, *supra* note 208.

[224] Although the laws may lead to a reduction in foreclosures that may simply reflect a reduction in home purchases rather than a reduction in predatory lending. *See* Cole, *supra* note 211, at 267.

[225] Ho & Pennington-Cross, *supra* note 178; Ralph W. Bostic et al., *State and Local Anti-Predatory Lending Laws: The Effect of Legal Enforcement Mechanisms* (Aug. 7, 2007) (Working Paper), http://ssrn.com/abstract=1005423.

> But Sanderson lives in Fairview Park, a small, inner-ring suburb west of Cleveland. "When we were applying for loans, the companies would key in our zip code, and Cleveland would come up," he said....
>
> Desperate for a solution, Sanderson contacted his suburb's City Hall. Fairview Park Mayor Eileen Patton wrote a letter on his behalf, verifying he was a resident of the suburb.
>
> "Her inquiry into the matter must have accomplished something, because we received a call from one of the companies that initially turned us down, and offered to finance us," Sanderson said. "Sometimes it pays to e-mail the mayor."
>
> Patton said she and City Council have received similar requests from six other residents who encountered the same problem as Sanderson's.[226]

The overall evidence that stricter laws have a greater effect on the subprime market suggests that there is a balance between eliminating predatory lending and restricting high-cost but legitimate subprime lending. The federal financial regulatory agencies treated the most controversial subprime lending practices carefully in their statement in order to avoid a credit-rationing response. The strongest explicit guidelines that they issued were for lenders to greatly limit their use of reduced-documentation loans to only a few exceptional cases, and to allow borrowers to prepay their loans within sixty days of the initial reset period without incurring a prepayment penalty.[227]

Expansive liability provisions may also reduce the supply of legitimate subprime credit by making it more difficult or impossible to securitize or otherwise sell mortgages on the secondary market. For instance, in some situations Standard & Poor's has refused to rate high-cost loans in states that have enacted assignee liability laws with indeterminate damages provisions.[228] Georgia, for instance, passed an aggressive "anti-predatory lending" statute in 2002, which included a strict assignee liability law. S&P thereby announced that it would refuse to rate all Georgia home loans subject to the law, after which the Georgia legislature amended

[226] Ken Prendergast, *Predatory Lending Laws Can Cause Headaches*, PARMA SUN POST, July 10, 2003.
[227] GUIDANCE, *supra* note 37.
[228] Kathleen C. Engel & Patricia A. McCoy, *Turning a Blind Eye: Wall Street Finance of Predatory Lending*, 75 FORDHAM L. REV. 2039, 2099 (2007).

the law to cap damages on high-priced loans.[229] In response to the amendment, S&P agreed to "review transactions that propose to include [Georgia] high-cost loans on a case-by-case basis."[230] Engel and McCoy note that currently "S&P refuses to rate loan pools containing high-cost loans governed by assignee liability laws in Indiana, Massachusetts, and New Jersey on grounds that those laws create indeterminate damages exposure and thus do not permit S&P to calculate the maximum exposure per loan for securitized trusts."[231] The inability to resell loans on the secondary market will reduce the availability of capital to the market in those states.

Anti-predatory lending laws generally result in a decline in subprime originations, due in part to fewer applications and, if the law is strict, more denials. However, it is difficult to assess whether this is a result of reduced predatory lending activity or reduced legitimate subprime lending activity. Without detailed study of the terms of individual loans it may be impossible to separate these two markets for statistical purposes.[232]

3. Market Correction

Since foreclosure rates sharply increased, dozens of lenders have failed and many consumers have faced default and subsequent disclosure. Most lenders have also raised their lending standards and cut down on loans with little documentation or loans to the riskiest borrowers. Tighter lending standards have added to the subprime woes, by making it more difficult for some borrowers to refinance their mortgages as their ARMs reset to higher interest rates, and causing some additional foreclosures, which may further reduce home values.[233] Homeownership rates and home values could continue to decline until the end of 2008, as the

[229] *Id.*
[230] *Id.* at 2099 n. 287(quoting Press Release, Standard & Poor, *Standard & Poor's Will Admit Georgia Mortgage Loans Into Rated Structured Finance Transactions* (Mar. 11, 2003)).
[231] *Id.*
[232] BURNETT, FINKEL & KAUL, *supra* note 220, at 4.
[233] Ruth Simon, *Owner Ranks Fall as Credit Woes Hurt Housing.* WALL ST. J., July 31, 2007, at D3.

bulk of adjustable-rate mortgages continue to reset to higher rates and foreclosures continue.[234] Consumers have responded by greater wariness in purchasing homes, causing a slowdown in the housing market and falling prices in many areas of the country. In short, there is a clear market self-correction at work for some of the most reckless practices.

B. IMPROVING THE OPERATION OF THE SUBPRIME MARKET

If the remedies under current laws and regulations cannot correct the subprime market, new regulations or legislation may be necessary. The possible remedies include improved disclosure rules, substantive regulations on the types of loans that can be allowed, or requirements that lenders consider the "suitability" of a loan for a particular borrower.

1. Improved Market Competition

The most productive approach to improved regulation of the subprime market would be to try to improve the operation of the subprime market by improving the conditions of competition and consumer choice in the market. Most subprime loans are welfare-improving for both borrowers and lenders. Nonetheless, consumer fraud, confusion, and abuse are more prevalent in the subprime market than in the prime market. As noted above, research by the Federal Trade Commission indicates that subprime borrowers and prime borrowers appear to be equally capable in terms of natural ability to understand their loans, thus this distinction in outcomes does not appear to be the result primarily of differences in the intelligence or education of subprime borrowers. Moreover, as further noted above, most lending regulations such as RESPA and TILA apply equally to prime and subprime loans, thus the difference in outcomes is

[234] Numerous industry experts have predicted that housing prices will remain low until 2008 or later. *See e.g.*, Mark Zandi, Chief Economist of Moody's Economy quotations. James R. Hagerty & Ruth Simon, *The State of the Slump*, WALL ST. J., July 26, 2007, at D1.

unlikely to result from differences in the regulatory regime (in fact, the subprime market is more heavily regulated than the prime market due to additional regulations such as HOEPA that are layered on top of other regulations).

A primary difference between the prime and subprime markets is the structure of market competition between the two markets. In the prime market, competition works well, to produce a high degree of transparency in key price terms (such as the interest rate) and a high degree of standardization in other non-price terms (such as the general absence of prepayment penalties and adjustable interest rates). This standardization and transparency generates a process of beneficial competition in the market and through this interaction of unfettered consumer choice and robust competition the incidence of fraud in the market is quite small.

Today, mortgages in the prime market are essentially fungible commodities—the terms of every prime mortgage are essentially identical, except for a few easily-identifiable price terms. Virtually every prime mortgage is securitized or resold on the secondary market to a mortgage servicing company or some third-party mortgage holder, such as Fannie Mae. In order to encourage the "commoditization" of mortgages and reduce the costs associated with buying and selling mortgages, third-party mortgage holders demand standardization on most of the terms contained in a mortgage. Although this standardization is designed primarily to encourage the resale of mortgages from the initial underwriters into the secondary market, it also has the beneficial—if unintended—consequence of making it easier for consumers to compare mortgage offers and to shop for the best deal. Because of this imposed standardization of the terms of a prime market mortgage, a consumer can be assured that it is extremely unlikely that there are buried or surprise terms in their mortgages. As a result, consumers can focus on just those few terms that differ among mortgages, confident that there are no unusual terms in the remainder of

the mortgage. Thus, as the FTC found, few prime mortgage customers actually read or understand the terms of their mortgages in any detail, and certainly with no greater diligence or understanding than subprime borrowers. Nonetheless, borrowers in the prime market are rarely victimized and needn't fear victimization as a result of their ignorance—the imposed standardization of mortgage terms by third-party purchasers of prime mortgages serves to protect prime mortgage borrowers.

Subprime loans, by contrast, tend to lack this homogeneity in contract terms and this commodity-like nature. Instead, subprime loans are highly heterogeneous in nature. As suggested above, much of the heterogeneity of subprime loan terms can be readily explained by the heterogeneity of subprime borrowers—whereas every prime borrower is essentially similar, subprime borrowers often present idiosyncratic borrower-specific risks, whether because of a high LTV, impaired credit, unpredictable income, or an asymmetry in the ability to predict the likelihood of prepayment. But at the same time, this heterogeneity increases the complexity of subprime loans and makes it more difficult for borrowers to easily shop and compare terms. This complexity increases borrower confusion and increases the risk that a borrower will be defrauded or unaware of important terms in her contract. Thus, the FTC notes that the difference in outcomes between prime and subprime borrowers is not a result of their different intellectual abilities. All borrowers have trouble understanding complicated and unusual loan terms. But subprime loans simply have a greater number of complicated and unusual terms and that those terms are more complicated than other terms.

In part, this greater heterogeneity reflects term repricing by lenders seeking to avoid the onerous rules and expansive liability exposure under HOEPA and other regulations. Most regulations tend to regulate the most obvious, transparent, and important terms, such as interest

rates, points, and costs. This has the unintended consequence of causing substitution to less-obvious and less-transparent terms, such as prepayment penalties and loan-to-value ratio. This in turn makes it more difficult for borrowers to recognize and understand all of the terms of their loans and to efficiently compare terms.

The current regulatory regime thus may have matters exactly backward. By regulating the most obvious and important terms of loans, such as the interest rate and points, the current structure creates incentives for substitution toward greater use of less-transparent and expected terms. Regulation could further better market operations by trying to impose tighter restrictions or prohibitions on unusual terms and permitting largely unregulated pricing on material and transparent loan terms.

Thus, whereas the prime mortgage market tends to produce transparency and standardized terms that permit easy comparison on key price terms with little concern of surprise or fraud on other terms, the subprime market tends to produce more complex, highly-tailored, and borrower-specific terms. Although this difference is likely efficient in terms of the differences between the borrowers in the two markets as an initial matter, in the prime market it tends to produce positive externalities in terms of robust and healthy competition among credible lenders, in the subprime market it may present a heightened potential for fraud and abuse.[235]

2. More Established Lenders

A second distinction between the prime and subprime markets is the historic absence from the subprime market of highly-reputable lenders with established reputation. Whereas the prime market is dominated by highly-reputable lenders with well-established reputations, the

[235] *See* Todd J. Zywicki, *Spontaneous Order and the Common Law: Gordon Tullock's Critique*, __ PUB. CHOICE __ (Forthcoming 2008) (comparing benign and non-benign spontaneous orders).

subprime market traditionally has been left to less-established lenders. Mortgages, whether in the prime or subprime market, are inherently complex products about which a consumer knows and can know little. First-time homebuyers are generally overwhelmed at the complexity and amount of loan documentation that accompanies a home purchase and their lack of opportunity to fully read and ask questions about their mortgage terms. Having gone through the experience once, second-time homebuyers rarely even closely examine their loan documents. Nor is it likely that even if they did take the time to examine their documents, as we have seen, most borrowers would be unable to comprehend most of their terms. In short, due to the complexity and sheer volume of documentation associated with a home mortgage, there is a large information asymmetry between borrowers and lenders that makes borrowers highly vulnerable to fraud and oppression by lenders. But despite this massive information asymmetry, bad behavior seems to be quite rare in the prime mortgage market.

But the mortgage market is not unique in being a market characterized by information asymmetry between sellers and buyers.[236] Many products contain important attributes that a consumer cannot easily verify or cannot verify at reasonable cost, such as computers, automobiles, medical services, bridges, buildings, etc. Where these information asymmetries exist consumers must depend on other institutions to protect them from the risk of exploitation that would otherwise characterize these markets and which as a result would make consumers reluctant to make any purchase at all. Two important solutions to this problem are direct government regulation and common law regulation through products liability laws, warranties that arise under contract law, and the like.

[236] *See* George A. Akerloff, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q. J. ECON. 488 (1970)

The market itself also produces important protections for consumers. One important market response is investing in name brands, which create reputation bonds that can serve as a promise that a seller will not exploit asymmetric information advantages that they hold over buyers.[237] In many situations the financial value of a firm's name brands will greatly exceed the expected punishments of governmental regulators or civil liability.[238] We are aware of no compelling empirical evidence of the effect of name brands in the consumer credit industry; in mitigating the possible abuses from information asymmetries; nonetheless, name brands are obviously advertised quite extensively and the growing consolidation of the retail banking industry suggests that such name brands are quite valuable.

On the other hand, there is a longstanding ambivalence and distrust by many Americans toward banks and financial institutions. Moreover, this feeling of distrust may be especially pronounced among lower-income Americans and recent immigrants.[239] Many of these consumers are also likely to be borrowers in the subprime market. This may explain in part why, for instance, many subprime borrowers tend to rely very heavily on personal relationships established with particular brokers rather than shopping around more aggressively for credit.[240] Some scholars have argued that expanding the scope of anti-predatory lending regulations to cover more loans (rather than merely increasing their severity) can enable consumers to more readily sort between fraudulent and credible lenders and to thereby increase consumer trust and

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[237] Benjamin Klein & Keith B. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 J. Pol. Econ. 615 (1981).

[238] Gregg Jarrell & Sam Pelzman, *The Impact of Product Recalls on the Wealth of Sellers*, 93 J. POL. ECON. 512 (1985); Mark L. Mitchell, *The Impact of External Parties on Brand-Name Capital: The 1982 Tylenol Poisoning and Subsequent Cases*, 27 ECON. INQUIRY 601 (1989) Indeed, the negative reputational effects may substantially exceed even punitive damage awards. *See* W. Kip Viscusi, *The Social Costs of Punitive Damages Against Corporations in Environmental and Safety Torts*, 87 GEO. L.J. 285 (1998).

[239] *See*, Jack Loechner, *Fourteen Million Unbanked Americans Represent New Frontier for Banks*, CTR. FOR MEDIA RESEARCH BRIEFS (Apr. 27, 2005), *available at* http://blogs.mediapost.com/research_brief/?p=921.

[240] *See* LACKO & PAPPALARDO, *supra* note 38, at 26.

reduce fraudulent practices.[241] If a consumer generally distrusts financial institutions, they may be more reliant on personal relationships with those they trust in order to overcome information asymmetry problems. At the same time, this greater reliance on personal relationships may expose borrowers to a greater risk of exploitation by unscrupulous lenders who are presented with this greater opportunity to abuse that trust.

Until recent years, traditional mortgage lenders historically eschewed the subprime market. In recent years, however, leading mortgage lenders such as Countrywide Mortgage aggressively entered the subprime lending market—only to quickly lose their shirts as they were swept up in the general mania of the subprime lending market.[242] Countrywide and others have responded by announcing their intention to exit the subprime market.[243] Although this decision to scale back operations is difficult to question in light of the financial catastrophes suffered by Countrywide, Capital One Financial, and others, the decision is unfortunate in that the retreat of established, credible lenders with established name-brands will leave a void in the market that may be filled by sketchier lenders. For instance, Harvey and Nigro find that after Chicago passed one of the earliest municipal "anti-predatory lending" laws, the primary effect was to drive banks out of the city but to largely replace that lost volume with nonbank lenders who were not covered by the law.[244] The overall volume of subprime lending was largely unaffected by the law. In Philadelphia, where a similar law was applied to all lenders, loan originations declined significantly after the law was enacted with the minority and low-income market

[241] Bostic et al., *supra* note 225; Ho & Pennington-Cross, *supra* note 178.
[242] *See* James R. Hagerty, Valerie Bauerlein & Lingling Wei, *Bank of America Invests $2 Billion in Countrywide*, WALL ST. J., Aug. 23, 2007, at A1. Bank of America, which provided $2 billion to bail out Countrywide, exited the subprime mortgage business in 2001.
[243] Countrywide eventually announced plans to be acquired by Bank of America.
[244] Keith D. Harvey & Peter J. Nigro, *How do Predatory Lending Laws Influence Mortgage Lending in Urban Areas? A Tale of Two Cities*, 25 J. REAL ESTATE RESEARCH 479 (2003).

segments experiencing the largest reduction.[245] This suggests that regulators should be aware of the benefits associated with drawing more established lenders into this market and should be wary of imposing new regulations that may further encourage more reliable lenders to exit the market, such as expanded liability generally or increased liability for secondary purchasers of subprime loans.

Competition in the subprime market appears to be fundamentally beneficial in the sense that increased competition tends to reduce the prevalence of predatory lending, rather than maximizing the exploitation of vulnerable borrowers.[246] Thus, to the extent that competition and consumer choice in the subprime market can be enhanced, this should increase consumer welfare in this market and reduce the prevalence of predatory practices in the subprime market.

C. NEW REGULATIONS

1. Improved Disclosure Regulations

Government regulation can also enhance the value of the natural competitive processes of the market by mandating disclosures to consumers.[247] Government regulation can enhance market competition either by mandating disclosure of important terms that sellers might otherwise be unwilling or reluctant to disclose. Alternatively, government can mandate a more standardized format for disclosures, thereby enhancing the ability of consumers to more easily compare competing offers and choose optimally.

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[245] *Id.*

[246] *See* Philip Bond, David K. Musto & Bilge Yilmaz, *Predatory Lending in a Rational World* (Fed. Res. Bank of Philadelphia Working Paper 06-2, Nov. 2006), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=875621. Increased competition in the payday lending industry also tends to lead to reduced prices and better credit terms for consumers. *See* Donald P. Morgan, *Defining and Detecting Predatory Lending*, FEDERAL BANK OF NEW YORK STAFF REPORTS, Staff Report No. 273 (January 2007).

[247] Thomas A. Durkin & Gregory Ellihausen, *Disclosure as a Consumer Protection, in* THE IMPACT OF PUBLIC POLICY ON CONSUMER CREDIT 109 (Thomas A. Durkin & Michael E. Staten eds., Kluwer 2001).

Incomplete or misleading disclosure likely contributes to the problem of predatory lending. Predatory loans can include mortgages where the terms were fraudulently or deceptively described, or key terms weren't disclosed or were falsely disclosed. Increased disclosure requirements can clarify to lenders exactly what information should be conveyed to the borrowers, and can inform borrowers of the minimum amount of information that they should expect from lenders. Alternately, disclosure rules can require increased documentation from borrowers, and can preclude lenders from making the most irresponsible no-documentation loans.

This approach allows lenders and borrowers to continue judging their own risk, but with more information on both sides to accurately assess the risk that the lenders face from borrowers and the responsibilities which borrowers assume when applying for the mortgage. Disclosure requirements can also standardize the information that borrowers receive from numerous lenders, allowing them to compare many offers more efficiently.[248]

But creating disclosure rules can be difficult, since there are potentially dozens of terms that can be disclosed, and not all terms are relevant to all borrowers or lenders. Requiring too many disclosures can overload borrowers or lenders with too much information, and cause the relevant information to be lost among the noise. Crafting disclosure rules thus requires a balance if the rules are to achieve their intended results.

The FTC's report details the difficulties that current mortgage borrowers have in understanding existing disclosure forms. The lack of understanding is shared by both prime and subprime customers. More than half could not find the overall loan amount on the disclosure

[248] *See Id.* at 109-43.

form, more than two-thirds could not detect the presence of a prepayment penalty in two years, and ninety-five percent could not find the amount of the prepayment penalty.[249]

In the same report, the FTC found that a simpler, prototype disclosure form improved the performance of the mortgage customers on nearly every question. The improvement in comprehension was especially large for subprime borrowers presumably because of the relative complexity of subprime loan forms and a greater number of complex terms when compared to prime loans. The report also indicates that borrowers rely on lending agents for much of the information on the written disclosure form.[250]

2. New Substantive Regulations

Substantive regulation of credit markets is difficult because the unintended consequences of regulation often are greater than the benefits created by the intended effects. The intended consequence of substantive regulation is a reduction or elimination of the targeted practices. The precise unintended consequences are more difficult to forecast, but will likely fall into a number of categories, including term substitution or repricing, product substitution, and rationing.

Term substitution might occur if lenders are held to an interest rate ceiling or other terms that restrict them from certain risk-based pricing practices. Lenders can then use other, less-precise terms to mitigate their risks. This could include increased origination or application fees, greater down-payment requirements, stricter default and foreclosure rules, prepayment penalties, or other terms.

Product substitution—replacing one source of credit with another, such as using credit cards instead of personal finance loans—may be less likely in the mortgage market than in other

[249] LACKO & PAPPALARDO, *supra* note 38, at 81 Figure 6.1.
[250] *Id*. at 31.

types of credit markets, such as credit cards, since there are fewer sources willing or able to lend the thousands of dollars required for purchasing a home. The more likely result of stricter mortgage origination rules is a return to rationing, which could result in a reduction in overall homeownership, since some of the recent increase in homeownership was due to the ability of subprime borrowers to access credit.[251]

3. Requiring Lenders to Consider Borrower Suitability

Proponents of suitability standards want lenders to consider the ability of a borrower to repay his mortgage. While the increased use of credit scoring has allowed lenders to better judge borrowers' credit risk, suitability places too much responsibility on a lender – and too little on a borrower - to know a borrower's ability and intent to repay, especially given the informational asymmetries of the mortgage market. The case for a suitability obligation rests on the idea that the lender may be in a better position than the borrower to assess whether a loan with certain terms is appropriate for that borrower. The concept originates in securities law, where it places substantive limits on the ability of a stockbroker to sell to a client a security that is "unsuitable" for the consumer. So, for instance, it would be unsuitable for a stock broker to sell a high-risk stock to an elderly person of modest means who is seeking a secure and steady financial return. But the suitability requirement cannot be simply transplanted from the securities context to the home mortgage context. As the noted Wharton mortgage economist Jack Guttentag observes:

> For there to be a net benefit, the borrower must have the mortgage long enough for the monthly cost reductions to exceed the upfront costs. Only the borrower has any idea of how long they want the mortgage…I recently reviewed a cash-out refinance in which the borrower paid about $12,000 in refinance costs and a quarter-percent rate increase in a loan of $150,000 to raise $4,500 in cash. Was there a net benefit? There is no objective way for the loan provider to answer the

[251] Doms & Motika, *supra* note 66.

question. The price was very high, but maybe the borrower needed the cash to pay for life-saving medicine for his children.[252]

There are countless scenarios where a loan might appear unaffordable or ill-advised to an outside observer, but is the best option for a borrower. One example is a borrower who expects future income to grow—such as a doctor nearing the end of his residency—who takes a mortgage with a reset rate that he cannot afford at his current income. However, in two years, when the interest rate jumps, the borrower's income will also jump and he will be able to afford the higher payments at his new salary. Incomes for most people tend to rise over time, and many borrowers might not qualify for loans based on their current income, but which they expect to be able to afford as their income rises. Or a given borrower may currently be unemployed or underemployed, but with some likelihood of gaining more or higher-paying work in the near future. Would it be "unsuitable" to allow that borrower to refinance his loan to push off some of his obligations to a future date? Professor Guttentag also describes another scenario he has encountered—that of a low-income widow who wanted to remain in her home for five more years and had a lot of equity, but couldn't afford the taxes.[253] They devised a reverse mortgage that allowed her to remain in the home, but as Guttentag notes, "The mortgage that allowed her to stay in the house would not meet any affordability test."

In addition to these problems of devising coherent standards, suitability raises some basic theoretical problems as well. The underlying assumption that justifies the application of a suitability requirement is the idea that with respect to certain types of loans, lenders supposedly have greater information about what types of loans and risks are "suitable" for a given borrower than the borrower himself. This is a reversal of the common assumption that underlies models of

[252] Jack Guttentag, *Mortgage Suitability* (2007), *available at* http://www.mtgprofessor.com/A%20-%20Public%20Policy%20Issues/mortgage_suitability.htm.
[253] Jack Guttentag, *Suitability Standards Could Carry Unintended Consequences*, WASH. POST, Mar. 31, 2007, at F20.

consumer credit. The prevailing model of the economics of consumer credit is that captured in Joseph E. Stiglitz and Andrew Weiss's seminal article, "Credit Rationing in Markets with Imperfect Information."[254] Stiglitz-Weiss argues that an information asymmetry will exist between lenders and borrowers in that borrowers will have greater information than lenders about whether the borrower is currently a good risk and is likely to remain a good risk in the future. In equilibrium, the effect of this information asymmetry will be to lead to a suboptimal level of credit supply (or credit rationing) in the market.

Recent legal scholars such as Engel and McCoy have argued that the Stiglitz-Weiss model also explains the rise of predatory lending and justifies the imposition of a new suitability requirement on lenders.[255] Engel and McCoy argue that a variety of market innovations has over time reduced the traditional information asymmetry and thus has led to an increased extension of credit to high-risk borrowers. This includes the securitization of subprime loans, innovative mortgage products, incentives to lend to low and middle-income borrowers, and the entry of lenders into the market that specialize in subprime lending. It is argued that these innovations have ameliorated and in many cases even reversed the traditional information asymmetry to the point where today *lenders* have more information than borrowers about the borrower's ability to repay loans or the suitability of certain terms for certain borrowers.

There are a number of issues with this theoretical justification for imposing a suitability requirement. First, given that the focus here is on home mortgages, the Stiglitz-Weiss model may be less relevant to explaining lending practices in this market versus the market for personal

[254] Stiglitz & Weiss, *supra* note 16.
[255] Engel & McCoy, *supra* note 36; Daniel S. Ehrenberg, *If the Loan Doesn't Fit, Don't Take It: Applying the Suitability Doctrine to the Mortgage Industry to Eliminate Predatory Lending*, 10 J. AFFORDABLE HOUS. & COMMUNITY DEV. L.117 (2001).

loans, the primary focus of their article.[256] A primary purpose of the provision of collateral through a mortgage is to overcome the information asymmetry by allowing the lender to reach the collateral in the event of default. This reduces the need to rely on the borrower's promises as well as enabling the borrower to overcome the information asymmetry through signaling.

As noted earlier, the propensity to default in the current market is explained to a substantial extent by the subjective willingness of a borrower to pay her mortgage even where there has been a fall in the value of her home, rather than traditional underwriting criteria such as the borrower's credit score. This subjective willingess to default is precisely the type of unobservable private information that gives rise to information asymmetries in the consumer credit market. As discussed above, it may be that the market failed to adequately recognize and price this risk; nonetheless, this suggests the opposite inference from that of Engel and McCoy—the problem was *not* a reduction in the information asymmetry in this market, but rather a failure to identify a *new* information asymmetry and to respond appropriately. The proper response, it would seem, would be for the market to accurately price the risk associated with this information asymmetry rather than to assume its disappearance.

Moreover, although Engel and McCoy identify numerous innovations in consumer lending markets that have permitted the expansion of mortgage credit to new classes of borrowers, the forces that they identify seem to have little to do with eliminating the underlying information asymmetries that characterize consumer lending relationships. The expansion of the subprime market does not appear to have resulted from a reduction of information asymmetries; rather, this expansion has come about through a reduction in the transaction costs of consumer lending as well as the elimination of regulatory policies (such as usury restrictions) that had

[256] *See* Dwight M. Jaffee & Franco Modigliani, *A Theory and Test of Credit Rationing: Reply*, 66 AM. ECON. REV. 918 (1976).

artificially resulted in credit rationing to low-income borrowers. Securitization, new mortgage products and the like have reduced the transaction costs of delivering home mortgages and home equity loans to borrowers and have thereby increased the supply of mortgage lending to low-income borrowers. But these innovations have not altered the information asymmetries between borrowers and lenders.

Nor is it clear why these innovations should have increased predatory lending as opposed to subprime lending generally. All of these innovations have made possible a large expansion of lending to subprime borrowers. Yet they seem irrelevant to predatory practices such as asset-based lending, loan flipping, and equity stripping, none of which has anything at all to do with information asymmetries but are simply fraudulent practices. These are simply bad practices that seem to have no logical connection to the mortgage market innovations that supposedly spawned them. They provide no evidence, for instance, that predatory loans are more likely to be securitized than legitimate subprime loans.

Many of the ills sought to be remedied by a suitability requirement might be addressed by more specifically-tailored regulations that would not have the same risk of open-ended liability and the impact that such rules would have on lending markets. For instance, if one problem is the door-to-door "hard sell" of home improvement loans, then a more direct approach would be to prohibit this form of sale, or alternatively to require a "cooling off" period—as is already required by law. Engel and McCoy reject the value of a cooling off period on the basis of behavioral economics research that supposedly shows that people are more likely to rationalize their decisions rather than change their minds in such situations. The underlying research itself is open to question. But more fundamentally, they provide no conclusion as to the *marginal*

value of a cooling-off period, either in isolation or in combination with other protections or information.

Finally, there is an inherent paternalism in the imposition of a suitability requirement. A problem with paternalistic rules is that they may have a tendency to ignore the actual perspective of a given individual. As Professor Guttentag suggests, it is difficult in the abstract to determine whether a given loan is "suitable" for a given person without actually standing in that person's shoes with the full array of information and constraints a person faces.[257]

There are practical problems as well. First, the relationship between mortgage applicants and loan officers is not the same as that between investors and financial advisors.[258] First, the loan officers are merely employees who take mortgage applications, they do not assess the creditworthiness of the applicant, a task that is performed by underwriters according to automated processes and case-by-case examination of the applicant's file. Thus, the loan officer is not in a position to assess the suitability of a loan for a given borrower. Second, the loan officer and borrower are not in a fiduciary relationship, thus there is no reason for a borrower to have to reveal their situation beyond that which is necessary for underwriting purposes. So, for instance, a borrower should not be encouraged (much less required) to reveal that her income is uncertain or that expenses would rise, which could result in a rejection of the application or a higher interest rate, or their intent to prepay the loan. Finally, to the extent that a suitability requirement might mandate the lender to recommend the loan that is "most suitable" for a particular buyer's circumstances, this would require a given loan officer to be familiar with the

[257] *See* THOMAS SOWELL, KNOWLEDGE AND DECISIONS 217-18 (1980) ("The real problem is that the knowledge needed is a knowledge of subjective patterns of trade-off that are nowhere articulated, not even to the individual himself. I might think that, if faced with the stark prospect of bankruptcy, I would rather sell my automobile than my furniture, or sacrifice the refrigerator rather than the stove, but unless and until such a moment comes, I will never know even my own trade-offs, much less anybody else's. There is no way for such information to be fed into a computer, when no one has such information in the first place.").
[258] Yezer, *supra* note 101.

entire array of loan products that might be available to the borrower. As Professor Anthony Yezer observes, a major lender may have hundreds of loan products and it would be impossible for any single loan officer to be familiar with all of those products and to identify which product is optimal for a given applicant.[259]

The five federal agencies that oversee consumer lending released a guidance statement on subprime lending following review of public comments. The statement updated previous guidance, and clarified best practices that lenders should follow. Governmental regulators expressed particular concern about the problem of "payment shock," a situation where a borrower enters into a loan and later confronts an adjustment in the interest rate, a balloon payment, or some other contract term that causes their payment obligation to rise dramatically.[260] The new subprime lending statement tells lenders to consider a borrower's ability to repay a mortgage at the higher possible reset rate, rather than simply at the introductory rate. However, denying certain borrowers access to a mortgage because they are only able to repay at the introductory rate could reduce credit opportunities for a significant number of safe borrowers. Borrowers with marginal credit who plan to refinance into a prime loan, or borrowers who plan to sell their home and move within the introductory period, may rationally choose a loan that appears unaffordable, and indeed would be at the higher rates.

D. NEW FEDERAL RESERVE REGULATIONS

In December 2007 the Federal Reserve issued a Proposed Rule to Amend the Home Mortgage Provisions of Regulation Z, which implements TILA and HOEPA.[261] The new rules would establish a new category of "higher-priced loans," defined as those mortgages whose

[259] *Id*.
[260] GUIDANCE, *supra* note 37.
[261] FDIC Truth in Lending, *supra* note 191.

annual percentage rate (APR) exceeds the yield on Treasury securities of comparable maturity by at least three percentage points for first-lien loans or five percentage points for subordinate-lien loans. Several of the provisions formalize the earlier-issued five agencies guidance letter into a new regulation. Whereas HOEPA applies to relatively few loans (less than one percent of all mortgages), the Federal Reserve's new Regulation Z is expected to cover most subprime loans, which were about 25 percent of all loans in 2006.[262] The regulations would address many of the major abuses described above, including the following:

- Prohibit a lender from engaging in a "pattern or practice" of lending without considering the borrowers' ability to repay loans from sources other than the home's value;
- Prohibit "liar's loans," by prohibiting a lender from making a loan by relying on income or assets that it does not verify;
- Limit prepayment penalties, including the condition that the penalty expire at least sixty days before any possible payment increase;
- Require that the lender establish an escrow account for the payment of property taxes and homeowners' insurance.

The regulation also creates several new protections against a variety of "bad practices" in the subprime market with respect to marketing and appraisals as well as new limitations on mortgage broker compensation. First, it prohibits lenders from paying mortgage brokers "yield spread premium" that exceed the amount the consumer had agreed in advance the broker would receive. It also prohibits certain unfair servicing practices and prohibits a creditor broker from pressuring an appraiser to misrepresent the value of a home. The regulation also prohibits

[262] Edmund L. Andrews, *In Reversal, Fed Approves Plan to Curb Risky Lending*, N.Y. TIMES, Dec. 19, 2007, at A1.

several misleading or deceptive advertising practices for closed-end loans, such as limitations on "teaser" rates and describing a loan as having a "fixed" rate. Finally, it requires truth-in-lending disclosures to borrowers early enough to use while shopping for a mortgages and prohibits lenders from charging fees until after the consumer receives the disclosures.

IV. CONCLUSION

The subprime mortgage bust has had a severe impact on many lenders and homeowners, as well as on financial markets and the economy as a whole. While the general macroeconomic causes of the losses are known, the specific details of predatory lending, irresponsible underwriting, or simple bad luck are still muddy.

Attempts to solve the problems of the subprime market must be tempered with the reality that the subprime market has likely boosted homeownership levels, and that strict anti-predatory regulations can raise the costs of mortgage credit and reduce legitimate subprime lending. Homeownership can be a transformative experience for many Americans. Lending disclosures are not ideal, and some disclosure reform might go a long way towards allowing borrowers to make more-informed decisions of their ability to repay their mortgages, even with rising interest rates.

The subprime bust was not caused exclusively by unscrupulous lenders pushing borrowers to sign unaffordable, but legal, loans. Exuberant borrowers, lenders, and investors nationwide combined to inflate housing prices and members of each group made bad bets on future appreciation. Those bets failed when the housing bubble burst. Such initial boom-and-bust cycles are recurrent in American history when new consumer credit products are introduced into the market. Without detailed knowledge of why certain loans went bad, a drastic reshaping

of the subprime mortgage market may hurt millions of homeowners given credit opportunities through the subprime market. Until more is known about how to balance the costs and benefits of the subprime lending, regulators should tread cautiously in this area.