Assessing the Impact of North Carolina's Predatory Lending Law

Roberto G. Quercia, Michael A. Stegman, and Walter R. Davis
University of North Carolina at Chapel Hill

Abstract

This article examines changes in subprime mortgage originations before and after the implementation of North Carolina's Predatory Lending Law. Previous studies have noted a decline in overall subprime lending. This was to be expected, since the law was intended to reduce the number of predatory or abusive subprime loans. But which components of subprime lending declined, which remained stable or increased, and what happened to those loans that the law defines as predatory?

Using a database of 3.3 million loans from 1998 to 2002, we find that the reduction that occurred after the law took effect was entirely due to a decline in refinancing loans and that almost 90 percent of this decline can be traced to a reduction in predatory loans. The law is doing what it was intended to do: eliminate abusive loans without restricting the supply of subprime mortgage capital for borrowers with blemished credit records.

Keywords: Mortgages; State and local governments; Subprime and predatory lending

Introduction

The 1990s were characterized by the aggressive expansion of home mortgage lending to traditionally underserved populations, including those with limited or impaired credit histories, minorities, and recent immigrants. Financial institutions became more active in this so-called subprime segment of the market as a result of technological changes, a robust economy, and the need for new markets. Subprime borrowers have benefited from this expansion of credit, and institutions have seen profits increase (Harvey and Nigro 2002).

This market sector grew significantly over a very short period of time. Across the country, subprime mortgage originations grew six-fold, from $35 billion to about $213 billion, in just eight years (1994 to 2002) (*2003 Mortgage Market Statistical Annual* 2003). This increase reflects the growing involvement of Fannie Mae and Freddie Mac in the acquisition and securitization of subprime mortgages and in the securitization of subprime loans that fail to meet government-sponsored enterprise (GSE) purchase criteria. During this period, the volume of all securitized subprime mortgage loans increased 14-fold, from $11 billion (Harvey and Nigro 2002) to at least $143 billion; this accounts for more than two-thirds of all subprime lending ("Fannie, Freddie Continue" 2004).

Subprime loans serve a wide range of borrowers, from those with minor credit imperfections to those with serious credit problems. Often, these are borrowers with credit scores below 660, two or more 30-day, or one or more 60-day, delinquencies in the past two years, a judgment or foreclosure in the past two years, or a bankrupcy in the past five years (*Expanded Guidance for Subprime Lending Programs* 2001). In addition, the subprime market also serves borrowers who have good credit, but who still represent additional risk for lenders because of higher loan-to-value (LTV) ratios, higher payment-to-income ratios, low or limited documentation of income, unstable income, or some combination of these features.[1]

In both theory and practice, the cost of borrowing should increase as the quality of a borrower's credit declines, with the highest effective rates charged to borrowers with the lowest-quality credit. However, some unscrupulous lenders charge fees and rates that are substantially higher than are justified by the elevated risk of default, fail to advise their clients of the least expensive alternatives, or offer products and services without fully disclosing all of their terms and conditions.

The term "predatory lending" generally refers to subprime lending practices that are considered to be so detrimental to borrowers as to be considered abusive. While there is no universal agreement on what practices should be considered predatory, those most often cited include making unaffordable loans based on the collateral rather than on the borrower's ability to repay the loan, inducing a borrower to repeatedly refinance a mortgage for no other reason than to generate additional points and fees (this is called "loan flipping"), and engaging in fraud and deception to conceal from unsuspecting or unsophisticated borrowers the true nature and cost of a loan (Gramlich 2000).

[1] These are commonly termed "Alt-A borrowers."

In addition, making loans with certain proscribed characteristics, such as lengthy and costly prepayment penalties that prevent borrowers from refinancing when interest rates fall, very high LTV ratios, excessive interest rates, and single-premium credit insurance that further increases total debt on which high interest rates are paid, is also considered predatory.[2]

For service providers, regulators, and legislators, dealing with predatory lending requires a delicate touch, because curbing abusive practices too aggressively could restrict the flow of legitimate subprime loans to higher-risk borrowers. Also, because some predatory lending regulations prevent certain people from entering into transactions that they freely choose, it has been argued that these public actions reduce consumer sovereignty and are patently patronizing. However, the reality is that some who seek mortgage credit may be so uncreditworthy that the only loan they can qualify for has predatory terms, in which case a predatory lending law might reduce the supply of credit to them. Historically, government has acted to curb abusive lending practices, even when doing so limits the flow of certain kinds of credit to consumers who seek it.

Given the recent explosion in subprime lending, there has been a proliferation of state predatory lending laws and calls for congressional action because predatory mortgage practices can devastate families and communities. A refinancing loan made without regard to whether the borrower can meet the payments is likely to strip away a homeowner's equity. This is especially true for minority and low-income homeowners, for whom equity comprises over 60 percent of their net worth (Joint Center for Housing Studies 2002). In addition, most older homeowners depend on equity to supplement other retirement savings (Quercia 1997). The importance of home equity for these financially unsophisticated or vulnerable populations makes them potential targets of predatory practices (Carr and Kolluri 2001).

In the absence of direct measures, the potential and extent of predatory lending, which is largely a subset of subprime lending, can be indirectly deduced by observing overall subprime lending patterns and changes over time. For instance, subprime mortgage originations are three times more common in low-income neighborhoods than in high-income neighborhoods and five times more common in black neighborhoods than in white ones. Furthermore, homeowners in high-income black neighborhoods are twice as likely as homeowners in low-income white neighborhoods to have subprime

[2] These practices (e.g., making loans based exclusively on the collateral and loan flipping) suggest that predatory practices are likely to be concentrated in the refinancing market. Empirical evidence supports this contention (HUD 2000).

loans. Similarly, subprime loans are three times more likely to be found among older borrowers than among younger ones (U.S. Department of Housing and Urban Development [HUD] 2000; Walters and Hermanson 2002). All of these figures suggest that the negative impact of abusive or predatory subprime practices may fall most heavily on those who have less access to prime credit (HUD 2000).

Although there is no agreed-upon definition of what constitutes predatory lending, the controlling federal law is the Home Ownership and Equity Protection Act of 1994 (HOEPA), implemented by Section 226.32 of federal Regulation Z. Under the 2002 revisions to Regulation Z, high-cost loans are defined as those with either (1) interest rates eight percentage points higher than comparable treasuries (for first-lien loans) or (2) total points and fees exceeding 8 percent of the total loan amount or $400 (subject to annual indexing), whichever is greater. (Points and fees are defined to include most finance charges; brokers' fees; closing costs paid for optional life, accident, health, or loss-of-income insurance; and other credit-protection products, such as debt-cancellation coverage, whether paid at or before closing).

The revised regulation limits the refinancing of a HOEPA loan with another HOEPA loan within the first year unless the refinancing is "in the interest" of the borrower (Dreher, Langer, and Tomkies 2004). In 2000, only about 1 percent of all subprime mortgage loans were estimated to fall under HOEPA (Gramlich 2000).[3] However, empirical estimates of abusive lending practices and the nature of class action settlements agreed to by large subprime lenders involved in predatory lending litigation suggest that the actual incidence may be considerably higher (for example, see Richardson 2003). Along these lines, the Reinvestment Fund estimates that in low-income black communities in Philadelphia, close to half of all subprime loans involve loan flipping (2004).

Since 1994, several states and a few local jurisdictions have enacted anti–predatory lending laws that generally set a much lower trigger than HOEPA and/or require fuller disclosure or ban a broader array of abusive practices (Mortgage Bankers Association 2004). Although prohibitions may vary, state laws generally define high-cost or predatory mortgages as loans that feature such things as excessive points and fees, balloon payments, lengthy prepayment penalties, loan flipping, single-premium life insurance policies, interest rates for real estate–secured loans that approach or exceed rates that are typically charged for unsecured credit card debt, and failure to require documentation of the ability to repay. In 2003 alone, 16 states enacted preda-

[3] Senate Bill 1149, codified at N.C. Gen. Stat. §§ 24-1.1E, 24–10.2; effective July 1, 2000.

tory lending legislation in an attempt to deal with the proliferation of abusive lending in their respective jurisdictions (Mortgage Bankers Association 2004).[4]

Critics of state anti–predatory lending laws argue that this kind of legislation essentially throws the baby out with the bath water—that in their efforts to curb the most abusive practices, these laws curtail the supply of subprime credit for all borrowers (Elliehausen and Staten 2002, 2003). Because North Carolina was the first state to enact such legislation (in 1999), this law has received a great deal of attention. Examinations of its impact to date have had varied results. This article attempts to clarify conflicting findings by using a database of subprime loans licensed to us by Loan Performance, Inc., to examine changes in subprime mortgage originations before and after the law was implemented in 1999 and 2000.

The North Carolina law: What do we think we know?

North Carolina's Predatory Lending Law (hereinafter referred to as the NC Act) prohibits certain types of lending activities that are considered abusive.[5] (The Appendix summarizes the key provisions.) The NC Act was implemented in two phases. Two elements took effect in the fourth quarter of 1999: a ban on prepayment penalties for loans of $150,000 or less and a ban on flipping, in which a lender repeatedly refinances an existing home loan with up-front fees that cannot be shown to provide a net benefit to the consumer. The remaining provisions took effect on July 1, 2000.

We have identified five studies that, to varying degrees, have examined the impact of the NC Act. The first, conducted by the trade publication *Inside B&C Lending* ("Lenders Will Try to Pin Down" 2001), reviewed the rate sheets of several top subprime lenders to assess the range of products and prices offered in North Carolina after the law was enacted. The review found that subprime lenders there were continuing to offer a full array of products and that there was little or no variation in the rates charged. Moreover, while some companies opted to leave the market, the study could not determine what role, if any, the NC Act played in those decisions.

[4] About 10 states have moderate to strong anti–predatory lending laws: Arkansas, California, Georgia, Illinois, New Jersey, New Mexico, New York, North Carolina, South Carolina, and West Virginia. Massachusetts also has strong anti–predatory lending regulations, but it has not yet enacted legislation. Another 11 states have enacted versions of existing federal law or industry bills. These offer no meaningful new protections for consumers.

[5] Additional elements include (1) strengthening the prohibition against making HOEPA loans without regard to the borrower's ability to repay by adding a presumptive violation if the creditor has not documented the borrower's repayment ability, (2) limiting due-on-demand provisions, and (3) prohibiting the structuring of a home equity loan as "open-end" unless the Regulation Z definition of open-end is met (Dreher, Langer, and Tomkies 2004).

Elliehausen and Staten (2002, 2003) used loan-level data from nine members of the American Financial Services Association (AFSA), an industry trade group, to compare subprime lending originations in North Carolina with those in the neighboring states of South Carolina, Tennessee, and Virginia. They found that the NC Act resulted in an overall decline in subprime originations in North Carolina relative to the comparison states, as well as a decline in originations to low-income borrowers (defined as those having a household income of $50,000 or less).

Ernst, Farris, and Stein (2002) examined the volume of subprime originations before and after the NC Act by using Home Mortgage Disclosure Act (HMDA) data to compare 1999 and 2000 subprime originations for North Carolina with those for the rest of the nation. They found that although there was an overall decline in the subprime market in North Carolina between those two dates, that state was still among the most active subprime origination markets in the nation. They also found that despite the overall decline in subprime lending in North Carolina, the percentage of all subprime originations to lower-income borrowers remained unchanged. On the basis of this finding, the authors conclude that the overall decline was not just in the lower-income portion of the market but was distributed across the spectrum. They also calculated that the NC Act saved borrowers an estimated $100 million over the study period.

Morgan Stanley (2002) surveyed 280 subprime branch managers and brokers from four companies (Household, Citigroup, Wells Fargo, and Washington Mutual) to assess the impact of predatory lending laws on lending activity across the country and found that subprime residential lending volumes were not reduced in any significant way. The report states, "Even the toughest new laws, in states like North Carolina for example, do not seem to be affecting branch volumes" (Morgan Stanley 2002, 2).[6]

Finally, Harvey and Nigro (2002) used 1998–2000 HMDA data to examine loan application and denial rates in North Carolina and neighboring states. They found that the NC Act reduced the overall level of subprime mortgage lending activity in North Carolina relative to Georgia, South Carolina,

[6] It should be noted that the study sample was stratified based on the U.S. population. While the author analyzed results for a group of states deemed to have instituted tougher lending restrictions (California, Connecticut, Florida, Georgia, New York, North Carolina, and Pennsylvania), the sample is said to be too small to draw statistically significant observations from any single state. Edward Moulin, Morgan Stanley's executive director, issued a memo on September 17, 2002, stating that the analysis and conclusions in this report represent the views of the author, Kenneth A. Posner, a company analyst, and should not be taken as Morgan Stanley's view on existing or proposed legislation.

Tenessee, and Virginia. However, they also reported that the decline was due to a reduction in subprime loan applications rather than an increase in denial rates. This suggests that the reduction in loan volume resulted from less demand rather than less credit. They also reported that the relative share of both prime and subprime mortgage loans to low-income[7] and minority borrowers in North Carolina increased after the act was implemented.

Limitations of existing data sets

To a large extent, the conflicting assessments of the NC Act and the impact of other predatory lending laws are related to the differences in the databases researchers use for their analyses. Simply put, there is no comprehensive, broadly accessible census of subprime lending available to the research and lending communities. Three of the studies mentioned (Elliehausen and Staten 2002, 2003; "Lenders Will Try to Pin Down" 2001; Morgan Stanley 2002) rely on proprietary data. Except for what the authors of these works include in their published reports and articles, little is known about the composition of their data sets, which are not available to the wider research community for validation or replication.

The other two studies (Ernst, Farris, and Stein 2002; Harvey and Nigro 2002) rely on publicly available data collected under HMDA, but while HMDA is an excellent database for some studies of the mortgage market and the variations in the lending behavior of individual reporting institutions, it leaves much to be desired when it comes to analyzing subprime and predatory lending. This is primarily due to the way HUD uses HMDA to identify subprime lenders and, therefore, subprime loans. HUD designates lenders as subprime or manufactured housing lenders if at least half of their total originations are subprime or manufactured housing loans.

Since the current HMDA database contains no field designating an individual loan application as either prime or subprime, by convention, 100 percent of all loan applications for a HUD-identified subprime lender are tallied as subprime, even if just 51 percent of those applications were actually for subprime loans.[8] Conversely, none of the applications for subprime loans

[7] These are households with incomes at or below $25,000.

[8] Under regulations published by the Board of Governors of the Federal Reserve System on February 2 and June 21, 2002, beginning January 1, 2004, lenders covered by HMDA must report the amount by which a loan's interest rate exceeds the interest rate on a comparable Treasury security for loans with rates at least three percentage points higher than the Treasury interest rate for first mortgages and at least five percentage points higher for second mortgages. Lenders must also identify loans whose interest rates and/or fees are high enough to make them subject to HOEPA.

submitted to prime lenders whose subprime lending volume accounts for less than half of their total business are identifiable in HMDA as subprime loans. Because it both understates and overstates the subprime lending activities of different lenders with no way of estimating whether the errors offset and because it contains fewer loan-level variables of interest to researchers on predatory lending, we do not share other researchers' enthusiasm for HMDA as the subprime database of choice.

Our data source

To address the data shortcomings in previous work, our study uses what we believe to be a superior database for subprime and predatory lending research and policy analysis. This database is widely recognized and used by the segment of the financial services industry that originates and securitizes large numbers of subprime loans, but heretofore has not been used by academic researchers. This source, containing loan-level data on more than 4 million securitized subprime loans, is licensed to the Center for Community Capitalism, a research center based in the Kenan Institute of Private Enterprise at the University of North Carolina at Chapel Hill, by Loan Performance, Inc. (formerly the Mortgage Information Corporation), a private company formed more than 20 years ago to provide large regional banks with mortgage market research. Over the years, the company put in place a system to track the performance of agency and nonagency loans and securities and, in 1997, started tracking subprime loans. These data have been widely used by the Office of Thrift Supervision (OTS), as well as by Freddie Mac and Fannie Mae economists and many others in the industry in analyzing market dynamics and mortgage performance.

The data for this analysis come from the company's Asset Based Securities (ABS) master loan-level database (the LP database) (period #178, November 2003). The data for our analysis is a subset of this database consisting of loan-level information on more than 3 million subprime loans originated from 1998 through 2002.

The LP database represents a significant share of the overall subprime market, ranging from approximately 39 percent in 1998 to about 67 percent in 2002 (table 1) (*2003 Mortgage Market Statistical Annual* 2003). There is some overlap between the LP database and HMDA, although we cannot define it with certainty. Many ABS lenders and issuers that report data to Loan Performance, Inc., also report data under HMDA, including eight issuers on HUD's list of subprime lenders (HUD 2001) and a major lender active in both the prime and subprime mortgage markets. Eleven of the top 25 ABS home

Table 1. Subprime Loans in the National LP Database, Number and Volume, United States 1998 to 2002

Year	Number of Loans, LP Database	Percent Change	Total Volume, LP Database (Billions of Dollars)	Percent Change	Total National Subprime Volume (Billions of Dollars)	Percent Change	LP Database as a Percentage of All Subprime Loans
1998	601,491		$59.0		$150.0		39.3
1999	704,201	17.1	$65.4	10.8	$160.0	6.7	40.9
2000	621,019	–11.8	$62.1	–5.0	$138.0	–13.8	45.0
2001	734,775	18.3	$92.5	49.0	$173.3	25.6	53.5
2002	992,948	35.1	$143.0	54.6	$213.0	22.9	67.1

Source: LP database (period #178) and *2003 Mortgage Market Statistical Annual* 2003.

equity issuers for 2002, including the top 4, report to Loan Performance, Inc. (Koren 2003).

Our LP database is twice as big as Elliehausen and Staten's 1998 database of about 300,000 subprime originations from nine AFSA members (2002, 2003) and contains approximately 600,000 loans for 1998 and 3.65 million subprime loans for the overall study period covering the first quarter of 1998 through the third quarter of 2002.

It should be noted that the LP database includes a wide range of subprime loans, including loans for investor-owned properties that are not part of the owner-occupied stock. We excluded all investor-owned properties from our subsequent analysis.

The LP database also includes so-called Alt-A loans, which some have argued should not be included in our analysis because they are not risky enough to be classified as subprime mortgages. A total of 7 percent of all North Carolina subprime originations between 1998 and 2002 were Alt-A loans, accounting for less than 1 percent of all 2002 originations. Relative to prime loans, Alt-A loans carry additional risk for lenders—higher LTV or payment-to-income ratios, low or limited documentation of borrower income, unstable income, or some combination of these features—so we believe that including them in our subprime database is justified. Nevertheless, to test the proposition that including them somehow biases our results, we removed them, replicated our analysis, and confirmed our findings. We do not know the extent to which Elliehausen and Staten's (2002, 2003) AFSA portfolio contains investor-owner or Alt-A loans, nor is it possible to account for these types of loans in HMDA-based analysis.[9]

We should note that a widely circulated first draft of this article (Quercia, Stegman, and Davis 2003) was severely criticized in some quarters, largely because of our use of LP data. We feel that a response is in order. To the best of our knowledge, the LP database, which is produced by a company that has been providing financial institutions with mortgage market data for 20 years, contains the most comprehensive loan-level data available on the subprime mortgage market.

Given the robustness of the LP data, we are baffled by the criticism and disappointed by the confusion that has arisen over the mistaken interpretation of our data. In August 2003, the authors of a Comptroller of the Currency Working Paper (2003) criticized our data while uncritically accepting the data and findings of the Georgetown Credit Research Center's (CRC's) study (Elliehausen and Staten 2002, 2003) showing the NC Act to have adverse effects. The CRC study used a data set that included 1.4 million loans nationally from 1995 through 2000 but analyzed less than 145,000 of the ones that were originated in four states by nine AFSA lender members. Compared with our LP database, CRC's data set represents a smaller segment of the subprime market, covers substantially fewer lenders, ends before many of the NC Act's provisions took effect, and is not available to other researchers for independent analysis. Shortly afterward, Robert E. Litan, director of the AEI–Brookings Joint Center on Regulation, was equally critical of the LP database, arguing, ineffectively in our view, that HMDA is the better database for analyzing predatory lending (2003a).

Litan also faulted our analysis because all of the subprime loans in our database were securitized in the secondary market (2003b). However, securitization is typical in the subprime market (Litan 2003a). *Inside B&C Lending* ("Fannie, Freddie Continue" 2004) reports that nearly two-thirds of all subprime loans were securitized in 2002. We know of no evidence suggesting that securitized subprime loans are fundamentally different from unsecuritized ones.[10] Moreover, our calculations suggest that most of the loans made by

[9] The LP database is not, however, without limitations. It includes only securitized loans; and like the HMDA-based subprime list, it does not include loans sold to the GSEs. It also lacks important borrower information (race and income).

[10] An anonymous reviewer referred us to Phillips-Patrick et al. (2000), who conclude that the LP database is not representative of the subprime market. However, this paper reviewed an earlier version of the database that bears no resemblance to the LP data set we use for our analysis. For example, Phillips-Patrick et al. (2000) found no loans in their LP database for North Carolina, South Carolina, Tennessee, or several other states and no loans with LTV ratios over 90 percent. They also found that 90 percent of the loans were for home purchase. As we indicated earlier, these findings do not apply to our LP database.

subprime lenders that are members of AFSA—the data source for the CRC study—are also securitized (Elliehausen and Staten 2002, 2003).

While recognizing that there is no perfect database for studying subprime and predatory lending in North Carolina or in the country,[11] we would argue that the LP database, while far from perfect, has been shown to be at least as good as and, in our view, significantly better than those used by others who have criticized the NC Act. However, we do agree with the larger point that the mix of loans and lenders included in the various databases can affect analysis and outcomes.

In this article, we address many such issues: subprime loans to absentee owners and mortgages on second homes; separate analyses of purchase and refinancing loans; and separate analyses of fixed-rate loans, adjustable-rate loans, and loans with balloon payments. We simply request that critics turn their attention with equal vigor to the databases used in studies claiming that the NC Act has curtailed the supply of subprime credit and increased costs to consumers with blemished credit.

We begin our assessment of the impact of the law by comparing subprime lending activities in the United States, neighboring southern states, and the remainder of the South over our study period. We examine changes in the number of subprime loans, both purchase and refinancing, before and after the NC Act was implemented. We also examine two of the most serious concerns raised about it: (1) whether it reduced access to subprime loans for potential borrowers with the poorest credit and (2) whether it reduced the flow of nonpredatory subprime credit to all North Carolina borrowers, thereby raising local interest rates relative to other states. During the time covered by our study, no other southern state had an anti–predatory lending law. Our analysis concludes with an assessment of the impact of the NC Act on the origination of predatory and abusive loans before and after full implementation. In the last section, we discuss the implications of our study for future research and for predatory lending policies.

Finally, we should note that while we consider our examination to be comprehensive and analytical, we do not model the law's impact within a multivariate framework that can account for potentially confounding factors such as variations in state economic environments. Therefore, we consider our findings strongly suggestive and await future research by us and others to more definitively identify the effects of the law on subprime lending.

---

[11] Nor is it known the extent to which any of the data sets (AFSA, HMDA, or LP) are representative of the bottom of the subprime market; of subprime originations in general; of state-level subprime activity; or of the consistency with which changes in state-by-state reporting coverage occur over time. There are no publicly available benchmarks against which to compare these data.

Our research framework

As noted earlier, the NC Act was implemented in two phases that were separated by three quarters, which we refer to as the transition period. The first phase of the law became effective for loans originated on or after October 1, 1999 (at the start of the fourth quarter), while the second phase became effective on July 1, 2000 (at the start of the third quarter). Because this was a time of uncertainty and adjustment for market participants, we discount any changes in subprime lending that occurred during this transition period and focus our analysis on differences in subprime lending before initial implementation and after full implementation. Because the LP database does not have adequate market coverage before 1998, we limited our analysis to the seven quarters immediately before initial implementation (the first quarter of 1998 through the third quarter of 1999) and the first seven quarters after full implementation (the third quarter of 2000 through the first quarter of 2002).

While previous work on the impact of the NC Act has focused on the overall subprime market, we focus on its impact on specific market segments and on the supply of subprime credit with abusive or predatory terms. To preview our empirical results, our analysis indicates that there was a decrease in subprime activity after the NC Act was implemented, but it was concentrated in the refinancing sector, not the home purchase sector. Since most predatory lending involves refinancing existing mortgage debt, such a decline would be expected. As we would also expect, a significant share of the decline in refinancing is in the subset of loans with abusive or predatory features, such as loans with extended prepayment penalties, balloon payments, and very high LTV ratios that exceed the encumbered home's market value.[12] We find that these results were achieved without a differential impact on the lowest-credit borrowers or an increase in interest rates.

[12] Lengthy prepayment penalties and balloon clauses, which limit the ability to refinance, are two of the abusive characteristics identified in the NC Act. Repeated refinancing of first mortgages with financed loan fees secured by second liens is common to loan flipping and is likely to result in high combined LTV ratios in the range of 110 percent or more. The fact that very high combined LTV ratios are indicative of abusive lending practices is suggested in, among others, a recent report from the State of Washington, Department of Financial Institutions, where the state regulator criticized one subprime lender for "steering borrowers into larger first mortgages" and "situations where the borrowers were required to take out a second mortgage primarily to pay points on the first mortgage" (2002, 59). The NC Act aims to reduce this predatory practice through its prohibition on originating refinance loans that do not provide the borrower with a net tangible benefit. High combined LTV ratios also serve as a deterrent to prepayment, locking a borrower into loans with high interest rates by making it economically infeasible for a responsible lender to offer a refinancing loan (State of Washington 2003).

Changes in the national subprime market from 1998 through 2002

Nationally, the volume of subprime originations in 2000 was $138 billion, compared with $160 billion a year earlier; this is a decline of 14 percent (see table 1).[13] Starting in 2000, total subprime originations increased steadily, reaching $213 billion in 2002; this is a two-year increase of 54 percent (*2003 Mortgage Market Statistical Annual* 2003). Our LP database shows a similar pattern, declining 12 percent from 1999 to 2000, and more than doubling over the next two years.

The reason for the greater relative increase in total subprime originations measured by the LP database relates to its growing market coverage over time. Benchmarking our database against independent measures of the size of the national subprime market indicates that LP's market coverage has grown over our study period from about 39 percent of the total subprime market in 1998 to about 67 percent in 2002. While this greater coverage is good for exploring many lending issues, it complicates time series analysis of changes in subprime lending before and after the NC Act was implemented.

For this reason, our impact analysis will focus more on relative changes in lending over time in North Carolina and in comparison states, rather than on absolute changes.[14] Since we have no reason to believe that LP's growth in national market coverage varies significantly from state to state, this should not prove to be a problem. Moreover, when we find the number of originations of loans with abusive features to have declined more in North Carolina

[13] Readers familiar with an earlier version of this article may notice that we are reporting a slightly smaller number of loans in the earlier period. This is because Loan Performance, Inc., removed 101,611 loans from the database over concerns about the reliability of the information from a particular source. All of these loans, which were included in that earlier analysis, were in the prelaw period, and many were in North Carolina and comparison states. However, because of the missing data in these loans, very few appeared in tables other than those that looked at the overall market, so their removal has no substantive impact.

[14] To our knowledge, there are no annual estimates of subprime volume by state, nor are there quarterly estimates of subprime volume. Consequently, we are unable to precisely estimate the coverage of the LP data in each state or in the pre- and postlaw periods. Using numbers from table 1, our best estimate is that LP covers about 40 percent of the market in the prelaw period versus about 53 percent in the postlaw period. Consequently, increases in the number of loans would be around 30 to 35 percent in a perfectly stable market with no differences among states.

than in comparison states in the postlaw period, our estimates of the positive impact of the NC Act are most likely understated because of LP's growing market share.[15]

Like the subprime market generally, our LP database includes subprime loans made to owner-occupants, investor-owners, and originations for second homes. In each of the four years, subprime lending to owner-occupants predominates, increasing from 85 percent of all LP securitized loans in 1998 to 90 percent in 2002 (table 2).

Although we have no way of knowing how other researchers treat various categories of subprime loans in their studies of predatory lending, our impact analyses include only loans made to owner-occupants because the purpose of the NC Act is to protect potential home buyers and existing owner-occupants from abusive lending.

Table 2. Subprime Loans in the National LP Database by Occupancy Type, United States, 1998 to 2002

Year	Owner Occupied	Second Home	Investor Owned	Total*
1998	505,527	10,263	78,827	594,617
1999	603,522	12,745	75,849	692,116
2000	555,265	5,246	53,151	613,662
2001	670,003	7,543	52,689	730,235
2002	893,298	9,824	87,271	990,393
Total	3,227,615	45,621	347,787	3,621,023

Source: LP database (period #178) and authors' calculations.
*0.92 percent of loans with missing data on occupancy type are not included.

The volume of subprime lending before and after the law

In our sample, North Carolina experienced a 3 percent decline in overall subprime loan originations in the seven quarters immediately following full implementation of the predatory lending law, versus the preceding seven quarters. This compares with a 17 percent increase in subprime lending nationally, an 18 percent increase in the rest of the South, and increases ranging from 3 percent to 25 percent in the states bordering North Carolina (table 3).[16] Let us

[15] There is also an improvement in data reporting over the analysis period for credit scores. However, this improvement appears to be similar across comparison areas. There is no reason to believe that it was greater in North Carolina than in other areas.

[16] Again, readers familiar with an earlier version of this article may notice that we report a slightly smaller number of loans in the prelaw period for North Carolina and all comparison areas. See footnote 13 for details.

Table 3. Number of and Relative Change in Subprime Loans for Owner-Occupied Homes by Purchase (First Lien) and Refinancing, Seven Quarters before and after the NC Act: Selected Southern States, the Remainder of the South, and the United States

	Purpose of Loan								
	Purchase, First Lien			Refinancing			All*		
	Prelaw	Postlaw	Percent Change	Prelaw	Postlaw	Percent Change	Prelaw	Postlaw	Percent Change
North Carolina	4,429	7,612	71.9	19,551	15,575	–20.3	25,427	24,640	–3.1
South Carolina	2,278	4,118	80.8	10,545	9,622	–8.8	13,787	14,261	3.4
Virginia	3,773	6,715	78.0	14,565	15,341	5.3	19,913	26,158	31.4
Tennessee	3,860	6,186	60.3	14,733	14,009	–4.9	19,687	21,871	11.1
Georgia	8,312	10,781	29.7	20,941	24,081	15.0	30,966	38,759	25.2
Rest of the South	56,351	78,397	39.1	130,258	136,748	5.0	198,649	233,381	17.5
Entire United States	224,386	322,444	43.7	682,472	701,719	2.8%	959,917	1,119,594	16.6

Source: LP database (period #178) and authors' calculations.

Note: The prelaw period runs from the first quarter of 1998 through the third quarter of 1999; the postlaw period runs from the third quarter of 2000 through the first quarter of 2002.

*Second-lien purchase loans and loans with missing purchase/refinancing information are also included in the All columns.

underscore the point that the emphasis here should be placed not on the raw percentage changes, which are influenced by the increased national market share of our database in the postlaw period, but on the change in North Carolina relative to the nation and the comparison states. Using this criterion, we conclude that North Carolina's overall level of subprime lending activity fell relative to that of other states. This postlaw decline has been well documented in other studies.

However, this is only the beginning of the story, because there was a postlaw growth of 72 percent in the number of subprime home purchase loans in North Carolina; this equals or exceeds the growth in some of the neighboring states and in the rest of the country. This is an important finding because we can then reasonably conclude that access to subprime credit for home buyers was not limited by the implementation of the NC Act. This growth occurred despite the fact that many or all provisions of the law also apply to purchase money mortgages.

If overall subprime lending in our North Carolina sample fell by 3 percent in the postlaw period while purchase loans increased significantly, then it stands to reason that subprime refinance lending fell dramatically after full implementation. In fact, the number of refinancing loans fell by 20 percent in North Carolina, while most comparison states experienced more modest losses or small gains. Rather than bad news, we believe that this represents a positive impact of the NC Act, whose purpose is to discourage abusive lending practices. Since most abusive subprime lending involves refinancing existing loans, we would expect a good law to result in a decline in home refinancing loans generally and in predatory refinancing loans in particular. The more detailed analysis presented next confirms that this is largely the case.

Access to loans and the cost of credit to high-risk borrowers

Concerns have been raised about the potential of the NC Act to curtail access to credit for high-risk borrowers. Using low income as a proxy for high-risk borrowers, Elliehausen and Staten (2002, 2003) found a decrease in the number of subprime loans to North Carolina borrowers with incomes of $50,000 or less. However, Ernst, Farris, and Stein (2002) found no change in low-income borrowers' access to subprime credit, and Harvey and Nigro (2002) found that the NC Act had no differential impact on borrowers with incomes of $25,000 or less.

Rather than use income as a proxy for high-risk borrowers, we use the borrower's credit score, a better measure of risk, to determine whether the NC Act curtailed the supply of credit to the least creditworthy borrowers, those with a credit score below 580 (Roche 2000).[17] With respect to first mortgage loans for home purchase, the postlaw experience of North Carolina borrowers with low credit scores is equal to or significantly better than that of equally credit-impaired borrowers in other states and regions. In our sample, home purchase loans to North Carolina borrowers with credit scores below 580 more than doubled since the NC Act was fully implemented, compared with a 62 percent increase nationally and smaller increases in all of the other comparison states (table 4).

Postlaw purchase loans to borrowers in the middle credit score category (581 to 660) almost doubled in North Carolina, and those to borrowers with strong credit scores of 661 or higher increased by more than 50 percent. Because of the growth in market coverage of the LP database and more complete reporting of credit scores in more recent years, we cannot put too much faith in the absolute numbers in table 4.[18] However, as stated earlier, since there is no reason to believe that this growing market coverage or

[17] Borrowers with credit scores below 580 are generally considered B– and C– borrowers (Calomiris and Mason 1999).

[18] Credit score reporting improved in all the comparison states and regions. In the prelaw period, 20.5 percent of loans nationally had missing credit scores. For North Carolina, South Carolina, Tennessee, and the rest of the South, missing data rates range from 21.9 percent to 22.8 percent. Only Georgia and Virginia had substantively different rates at 16.3 percent and 17.3 percent, respectively. In the postlaw period, the national rate for missing credit scores was

Table 4. Number of and Relative Change in Subprime Purchase First-Lien Loans for Owner-Occupied Homes by Credit Score, Seven Quarters before and after the North Carolina Act: Selected Southern States, the Remainder of the South, and the United States

	FICO Credit Score								
	580 and below			581–660			661 and higher		
	Prelaw	Postlaw	Percent Change	Prelaw	Postlaw	Percent Change	Prelaw	Postlaw	Percent Change
North Carolina	1,042	2,593	148.8	1,540	2,831	83.8	1,308	1,967	50.4
South Carolina	663	1,502	126.5	813	1,604	97.3	558	900	61.3
Virginia	684	1,412	106.4	1,096	2,823	157.6	2,131	4,062	90.6
Tennessee	1,166	1,902	63.1	1,336	3,095	131.7	862	1,506	74.7
Georgia	2,074	2,451	18.2	3,143	4,903	56.0	2,608	4,683	79.6
Rest of the South	14,025	22,322	59.2	17,528	33,555	91.4	16,762	23,553	40.5
Entire United States	45,713	74,165	62.2	65,958	134,093	103.3	86,992	132,138	51.9

Source: LP database (period #178) and authors' calculations.

Note: The prelaw period runs from the first quarter of 1998 through the third quarter of 1999; the postlaw period runs from the third quarter of 2000 through the first quarter of 2002.

improvement in credit score reporting varies systematically by state, we can confidently conclude that the NC Act did not reduce the supply of home purchase credit to borrowers with the poorest-quality credit relative to comparison states and the nation.

What about the flow of credit to credit-impaired borrowers for refinancing loans? Refinancing originations as a whole declined in the postlaw period in North Carolina relative to comparison states and the nation as a whole, but more so among those with higher credit scores. The rate of growth in refinancing loans to the most credit-impaired borrowers in North Carolina, those whose credit score was 580 or less, was significantly below the national average and most comparison states, but was roughly similar to the trend in Tennessee and South Carolina (table 5).

Taken together, the data in tables 4 and 5 provide strong evidence that the NC Act did not adversely affect the highest-risk borrowers. In fact, our analysis suggests that in North Carolina and in most comparison states, an equal or greater share of subprime lending for both home purchase and refinancing loans went to the most credit-impaired borrowers after the NC Act rather than before (table 6). In fact, postlaw lending to the under-580 group in North Carolina increased by about seven percentage points. On the basis of these results, we conclude that the NC Act did not differentially impact borrowers with poor credit scores.

11.7 percent, with Georgia, North Carolina, Tennessee, and the rest of South having rates ranging from 10 percent to 10.8 percent. South Carolina's rate dropped to 6.6 percent, while Virginia's was 13.8 percent.

Table 5. Number of and Relative Change in Subprime Refinancing Loans for Owner-Occupied Homes by Credit Score, Seven Quarters before and after the NC Act: Selected Southern States, the Remainder of the South, and the United States

	FICO Credit Score								
	580 and below			581–660			661 and higher		
	Prelaw	Postlaw	Percent Change	Prelaw	Postlaw	Percent Change	Prelaw	Postlaw	Percent Change
North Carolina	4,950	5,867	18.5	6,213	5,335	–14.1	4,072	3,115	–23.5
South Carolina	2,962	3,683	24.3	3,356	3,523	5.0	1,920	1,900	–1.0
Virginia	2,564	3,519	37.2	4,229	4,283	1.3	5,386	5,762	7.0
Tennessee	3,989	4,691	17.6	4,884	5,178	6.0	2,775	2,862	3.1
Georgia	4,973	7,754	55.9	6,884	8,806	27.9	5,716	5,790	1.3
Rest of the South	33,702	45,799	35.9	38,730	45,946	18.6	30,036	34,631	15.3
Entire United States	153,618	216,093	40.7	192,402	230,917	20.0	199,506	186,230	–6.7

Source: LP database (period #178) and authors' calculations.

Note: The prelaw period runs from the first quarter of 1998 through the third quarter of 1999; the postlaw period runs from the third quarter of 2000 through the first quarter of 2002.

Table 6. Credit Score Distribution for All Subprime Loans for Owner-Occupied Homes, Seven Quarters before and after the NC Act: Selected Southern States, the Remainder of the South, and the United States

	FICO Credit Score					
	Prelaw			Postlaw		
	580 and Under	581–660	Above 660	580 and Under	581–660	Above 660
North Carolina	31.4	40.5	28.1	38.2	37.1	24.6
South Carolina	35.0	40.5	24.5	39.0	38.8	22.2
Virginia	20.3	33.1	46.6	22.0	31.9	46.2
Tennessee	34.5	41.4	24.1	33.9	42.7	23.4
Georgia	27.8	39.5	32.7	29.4	39.6	31.1
Rest of the South	31.8	37.3	30.9	32.7	38.3	29.0
Entire United States	26.9	34.8	38.4	29.5	37.2	33.3

Source: LP database (period #178) and authors' calculations.

Note: The prelaw period runs from the first quarter of 1998 through the third quarter of 1999; the postlaw period runs from the third quarter of 2000 through the first quarter of 2002.

Changes in the postlaw cost of credit

As mentioned earlier, critics have argued that in attempting to filter out abusive loans, state predatory lending laws also curtail the flow of subprime mortgage credit generally, thereby causing interest rates to rise above prelaw rates. Elliehausen and Staten (2002, 2003), for example, make this case specifically with reference to the NC Act. Our analysis disputes their findings. If the decline in subprime originations had been due to the reduced supply of capital into North Carolina as a result of the law, interest rates would be expected to rise relative to the cost of credit in comparison states. If, however, the decline in subprime originations is demand-induced—that is, the result of fewer subprime loan applications, as suggested by Harvey and Nigro (2002)—postlaw interest rates in North Carolina would not be expected to rise. We examine this issue by comparing changes in mean origination interest rates before and after the NC Act was implemented and find no distinct pattern in North Carolina compared with other states or the nation as a whole.[19]

The mean change in interest rates for all subprime originations in North Carolina after the law took effect amounted to just 22 basis points (table 7). This is significantly lower than the national increase and increases in Tennessee. South Carolina and Georgia experienced smaller increases, while mean subprime interest rates actually fell by 7 basis points in Virginia.

Next, we discuss what happened to the composition and mean interest rates for three types of subprime loans contained in the LP database: fixed-rate mortgages, adjustable-rate mortgages (ARMs), and loans with a balloon payment. Our cost of capital analysis should be viewed in the context of a substantial national shift in the relative composition of subprime loans from fixed-rate loans in the prelaw period to ARMs in the postlaw period (table 8). Whereas more than 60 percent of all subprime loans in our LP database in the prelaw period were fixed-rate, this was true for less than half of all loans in the

Table 7. Changes in Mean Interest Rates at Origination for Owner-Occupied Homes, Seven Quarters before and after the NC Act; All Subprime Loans, Selected Southern States, the Remainder of the South, and the United States

	Prelaw	Postlaw	Change in Basis Points
North Carolina	10.396	10.613	21.7
South Carolina	10.445	10.638	19.3
Virginia	10.502	10.428	–7.4
Tennessee	10.269	10.574	30.5
Georgia	10.174	10.335	16.1
Rest of the South	10.306	10.589	28.3
Entire United States	9.957	10.274	31.7

Source: LP database (period #178) and authors' calculations.
Note: The prelaw period runs from the first quarter of 1998 through the third quarter of 1999; the postlaw period runs from the third quarter of 2000 through the first quarter of 2002.

[19] Obviously, interest rate changes are the result of complex supply and demand interactions not captured in our analysis. The findings, however, are consistent with the contention that the NC Act has had no negative impact on the cost of credit. The LP database does not include information on annual percentage rates. The interest rates reported are nominal.

postlaw period. While the incidence of balloon-payment loans remained low in North Carolina and elsewhere before and after the NC Act, there was significant growth across the board in the frequency of adjustable-rate originations in the postlaw period.

Fixed-rate loans in North Carolina experienced a substantially smaller rate increase in the postlaw period than in the nation as a whole, specifically, about 17 basis points compared with 45 basis points nationally (table 9). Among the

Table 8. Product-Type Distribution for Subprime Loans for Owner-Occupied Homes, Seven Quarters before and after the NC Act: Selected Southern States, the Remainder of the South, and the United States

	Product Type					
	Prelaw (%)			Postlaw (%)		
	Fixed	ARM	Balloon	Fixed	ARM	Balloon
North Carolina	63.6	21.1	15.3	47.6	43.5	8.9
South Carolina	71.3	16.2	12.5	54.5	41.0	4.6
Virginia	72.9	16.3	10.9	52.9	28.4	18.7
Tennessee	65.9	22.9	11.2	55.9	36.8	7.3
Georgia	65.0	25.7	9.2	52.1	36.9	11.0
Rest of the South	68.5	23.8	7.7	58.8	33.8	7.4
Entire United States	61.3	29.4	9.3	46.9	42.4	10.7

Source: LP database (period #178) and authors' calculations.

Note: The prelaw period runs from the first quarter of 1998 through the third quarter of 1999; the postlaw period runs from the third quarter of 2000 through the first quarter of 2002. Percentages may not sum to 100 because of a small number of loans (about 0.01% to 0.02%) with no product type specified.

Table 9. Changes in Mean Interest Rates at Origination for Owner-Occupied Homes by Fixed, ARM, and Balloon Loans, Seven Quarters before and after the NC Act: All Subprime Loans, Selected Southern States, the Remainder of the South, and the United States

	Fixed Rate			ARM			Balloon Payment		
	Prelaw Rate (%)	Postlaw Rate (%)	Change in Basis Points	Prelaw Rate (%)	Postlaw Rate (%)	Change in Basis Points	Prelaw Rate (%)	Postlaw Rate (%)	Change in Basis Points
North Carolina	10.513	10.685	17.3	10.040	10.447	40.7	10.376	11.024	64.7
South Carolina	10.536	10.784	24.8	10.033	10.367	33.4	10.406	11.264	85.8
Virginia	10.709	10.839	13.0	9.707	9.869	16.2	10.224	10.107	–11.7
Tennessee	10.302	10.701	39.9	10.074	10.320	24.6	10.421	10.867	44.6
Georgia	10.321	10.544	22.3	9.634	10.008	37.3	10.546	10.424	–12.2
Rest of the South	10.343	10.683	33.9	10.126	10.338	21.2	10.444	10.977	53.3
Entire United States	9.992	10.437	44.5	9.734	9.910	17.5	10.325	10.983	65.8

Source: LP database (period #178) and authors' calculations.

Note: The prelaw period runs from the first quarter of 1998 through the third quarter of 1999; the postlaw period runs from the third quarter of 2000 through the first quarter of 2002.

comparison states, only Virginia experienced a smaller increase (13 basis points). Conversely, North Carolina experienced the highest mean rate increase for ARMs, about 41 basis points, although Georgia and South Carolina (37 and 33 basis points, respectively) were close behind. Finally, the mean interest rate on postlaw loans with balloon payments rose in North Carolina by about 65 basis points, the same as in the country as a whole. Virginia and Georgia experienced modest reductions in interest rates on balloon loans during the postlaw period.

The bottom line: The postlaw decline in predatory lending in North Carolina

To summarize, after the law was implemented, North Carolina experienced a sharper decrease in subprime lending than occurred in neighboring states, with virtually all of the decline in the refinancing market. This pattern is generally consistent with the intent of the law, which was to purge the market of predatory loans, or seriously reduce their number, and predatory practices are largely limited to the refinancing sector (ACORN 2000).

We systematically examine postlaw changes in refinancing originations in two steps. First, we identify changes in the number of subprime refinancing originations for loans having at least one of three predatory features identified by the NC Act: loans with prepayment penalty terms of three years or more, loans with balloon payments, and loans with an LTV ratio of 110 percent or more (which we use as a proxy for loans that provide no "net tangible benefits" to borrowers). If the NC Act is effective, we would expect to find a greater postlaw decline in abusive refinancing originations in North Carolina than in comparison states. Next, we examine changes in the number of loans with at least one of these predatory features.

During the postlaw period, refinancing loans with prepayment penalty terms of three years or more fell in North Carolina, while increasing in all comparison states (table 10). There was a 75 percent decline in extended-prepayment loans in North Carolina, compared with a 30 percent increase nationally. Comparison states and the remainder of the South all saw substantial increases, with extended-prepayment loans increasing by 271 percent in South Carolina.[20]

[20] We should mention, though, that South Carolina still has a very low incidence of originations with long prepayment penalties. For example, before the NC Act, only 5 percent of South Carolina's subprime originations had a three-year prepayment penalty or more. After the law, 16.6 percent of South Carolina's originations had such penalties—this compares favorably with a national average of 46.4 percent and with Virginia, Tennessee, and Georgia, which all averaged over 60 percent.

Refinancing loans with balloon payments fell by more than half in postlaw North Carolina, about the same as in Tennessee, less than in South Carolina, and much more than in Georgia, the rest of the South, and the nation as a whole. The contrast with neighboring states is not as clear as in the prior finding (table 11). Virginia is the only state that experienced a substantial increase in mortgages with balloon payments in the postlaw period.

Refinancing loans with a combined LTV of 110 percent or more are frequently used by homeowners to consolidate credit card and other consumer debt into their home loan, thereby putting their home equity and tenure security at risk.[21] The number of these ultra-high LTV originations declined by 34

Table 10. Percentage of Subprime Refinancing Loans for Owner-Occupied Homes with Prepayment Penalty Terms of Three Years or More, Seven Quarters before and after the NC Act: Selected Southern States, the Remainder of the South, and the United States

	Prelaw	Postlaw	Percent Change
North Carolina	3,784	956	–74.7
South Carolina	410	1,520	270.7
Virginia	4,764	8,326	74.8
Tennessee	6,905	8,967	29.9
Georgia	10,691	14,119	32.1
Rest of the South	48,860	62,306	27.5
Entire United States	226,059	294,633	30.3

Table 11. Number of and Percent Change in Subprime Refinancing Loans with Balloon Payments for Owner-Occupied Homes, Seven Quarters before and after the NC Act: Selected Southern States, the Remainder of the South, and the United States

	Prelaw	Postlaw	Percent Change
North Carolina	2,950	1,351	–54.2
South Carolina	1,233	412	–66.6
Virginia	1,321	1,961	48.5
Tennessee	1,623	751	–53.7
Georgia	1,990	1,516	–23.8
Rest of the South	9,417	7,228	–23.3
Entire United States	63,456	55,787	–12.1

[21] This type of loan occurs either when a borrower refinances the first mortgage and simultaneously takes out a new second loan, or when the first mortgage is kept in place and a new second loan is originated.

percent in postlaw North Carolina, while they increased slightly in the country as a whole, and rose more significantly in the rest of the South and in Tennessee, where they swelled by 39 percent (table 12).

The focus of this analysis is on separate loan terms, where the same loan might be counted more than once because it has more than one predatory term. Table 13 presents the same kind of information about refinancing originations, but this time we eliminate the double counting and estimate the number of refinancing loans with one or more of the three predatory terms. The impact of the law is impressive. In our sample, the percentage of postlaw North Carolina subprime refinancing loans with predatory terms declined by more than half (53 percent) relative to prelaw rates, while increasing in South Carolina (13 percent), Virginia (36 percent), Tennessee (19 percent), Georgia (28 percent), the rest of the South (19 percent), and the country as a whole (21 percent).

Using data from tables 13 and 3, we can also calculate the portion of the decline in refinancing originations in our sample that can be accounted for solely by the reduction in predatory loan originations. Here, too, the impact of the law is impressive. From table 3, we see that the total decline in refinancing loans in our sample was 3,976; from table 13, we see that the decline in the number of loans with at least one of the predatory characteristics was 3,541. This means that almost 90 percent of the decline in refinancing loans in our North Carolina sample in the postlaw period can be attributed to the decline in predatory loans.

Table 12. Number of and Percent Change in Subprime Refinancing Loans for Owner-Occupied Homes with a Combined LTV Ratio of 110 Percent or More, Second Lien and Higher, Seven Quarters before and after the NC Act: Selected Southern States, the Remainder of the South, and the United States

	Prelaw	Postlaw	Percent Change
North Carolina	1,812	1,189	–34.4
South Carolina	771	810	5.1
Virginia	3,132	2,924	–6.6
Tennessee	811	1,123	38.5
Georgia	2,131	2,056	–3.5
Rest of the South	10,962	13,308	21.4
Entire United States	55,308	56,827	2.7

Table 13. Number of and Percent Change in Subprime Refinancing Loans for Owner-Occupied Homes with at Least One Predatory Characteristic,* Seven Quarters before and after the NC Act: Selected Southern States, the Remainder of the South, and the United States

	Prelaw	Postlaw	Percent Change
North Carolina	6,723	3,182	–52.7
South Carolina	2,337	2,648	13.3
Virginia	7,484	10,191	36.2
Tennessee	8,088	9,598	18.7
Georgia	11,944	15,225	27.5
Rest of the South	60,230	71,939	19.4
Entire United States	290,545	351,224	20.9

Source: LP database (period #178) and authors' calculations.

Note: The prelaw period runs from the first quarter of 1998 through the third quarter of 1999; the postlaw period runs from the third quarter of 2000 through the first quarter of 2002.

*Includes at least one of the following: a prepayment penalty of three or more years, a balloon payment, or a combined LTV of 110 percent or more.

Conclusion

Our study posed the important question that other studies of the NC Act failed to ask: Was the decline in overall subprime lending that occurred in North Carolina due to a decline in legitimate loans or to a decline in loans with abusive terms and features? To answer this question, we used loan-level data from the LP database to examine specific market segments and prevalent practices in the subprime market. Studying loans down to their very terms (such as prepayment penalties of a certain length and balloon payments) gave us a strong indication of the frequency of predatory characteristics before and after the law was implemented.

Our analysis revealed that although the total volume of subprime originations in North Carolina declined, the number of home purchase loans was unaffected. While refinancing originations did fall, about 90 percent of the decline was in predatory loans. These findings suggest strongly that the NC Act is doing what it is supposed to do.

These results also have policy significance beyond North Carolina. First, we have demonstrated that a carefully crafted law can selectively filter out the most egregious kinds of subprime loans without having to resort to punitive enforcement provisions that increase the cost of securitization and otherwise complicate evaluation by Wall Street rating agencies. Despite having a form of assignee liability, the NC Act has passed muster with Standard & Poor's, which recently announced its intention to continue to rate structured finance transactions that include covered loans ("Standard & Poor's Addresses" 2004).

Although we do not take a position on the need for national legislation, the Comptroller of the Currency's recent order exempting national banks and their operating subsidiaries from state and local predatory lending laws, while not having the resources in place to effectively police the market, suggests to us that the move toward national legislation may gain momentum (Comptroller of the Currency 2004). However, in the event that Congress does decide to act, we worry most about the possibility of ending up with a federal predatory lending law that has no teeth and that preempts state and local laws without banning the kinds of abusive lending practices with which this article deals. Of most concern would be provisions that would raise HOEPA interest-rate and points-and-fees thresholds that define high-cost loans, water down disclosure requirements, or considerably weaken existing prepayment penalty protections. In our view, American home buyers who depend on the subprime market for their mortgage loans would be better served by existing state predatory lending laws than they would be by watered-down federal legislation. We would argue that the NC Act serves as a good template for national legislation because it protects consumers against the harshest and most abusive market practices without unduly restricting the flow of subprime mortgage credit.

Appendix

Key features of the NC Act

The law amends N.C. Gen. Stat. § 24–1 *et seq*. to

- Prohibit prepayment penalties for home mortgage loans of $150,000 or less
- Prohibit flipping, where a lender repeatedly refinances an existing home loan with new up-front fees
- Prohibit financing of up-front, single-premium insurance (monthly payment insurance is still permitted)
- Prohibit, in high-cost home loans, the financing of fees, balloon payments, negative amortization, and lending without regard to a homeowner's ability to repay, where high-cost was defined generally as loans with fees in excess of 5 percent or annual percentage rates over the federal law trigger level, which is currently more than 8 percent above comparable U.S. Treasury securities

- Create a new section dealing with high-cost home loans—residential home loans of $300,000 or less with

  High fees—Loans for which the borrower is charged more than 5 percent of the loan amount in up-front points, fees, or other charges. This 5 percent

  Does not include escrow fees collected at closing or fees for appraisal, attorneys, credit reports, etc., that are paid to third parties

  Does include fees paid directly by the borrower to mortgage brokers, but does not include the back-end payments to brokers by lenders (yield spread premiums)

  High interest rates—Loans for which the borrower is charged an interest rate that is 10 percent more (this was dropped to 8 percent more in October 2002) than the comparable Treasury bond rate or

  Prepayment penalties longer than 30 months or more than 2 percent of the amount prepaid

- Restrict the terms of high-cost home loans to protect consumers

  No refinancing of up-front fees and insurance premiums

  Counseling for high-cost home loan borrowers required before closing

  No balloon payments, where the borrower owes a large lump sum at some point during the loan

  No loans with negative amortization, where the loan amount increases because the monthly payments do not cover the costs

  No lending without consideration of the consumer's ability to repay

Signed into law by Governor Jim Hunt on July 22, 1999. Most sections of the law went into effect on July 1, 2000. The prepayment penalty and flipping prohibitions went into effect on October 1, 1999.

Source: N.C. Session. Law 1999–332 §5.

Authors

Roberto G. Quercia is associate professor in the Department of City and Regional Planning and a senior research fellow at the Center for Community Capitalism in the Kenan Institute for Private Enterprise at the University of North Carolina at Chapel Hill. Michael A. Stegman is MacRae Professor of Public Policy, Planning, and Business and Director of the Center for Community Capitalism at the University of North Carolina at Chapel Hill.

Walter R. Davis is research director at the Center for Community Capitalism at the University of North Carolina at Chapel Hill.

The authors acknowledge financial support from the Center for Responsible Lending (CRL). However, the views expressed here are those of the authors and do not necessarily represent the views of CRL.

References

ACORN (Association for Community Organizations for Reform Now). 2000. *Separate and Unequal: Predatory Lending in America*. World Wide Web page <http://www. acorn. org/acorn10/predatorylending/plreports/separate.htm> (accessed February 19, 2004).

Calomiris, Charles W., and Joseph P. Mason. 1999. *High Loan-to-Value Mortgage Lending: Problem or Cure?* Washington, DC: AEI.

Carr, James H., and Lopa Kolluri. 2001. *Predatory Lending: An Overview*. Washington, DC: Fannie Mae Foundation.

Comptroller of the Currency. 2003. Economic Issues in Predatory Lending. OCC Working Paper.

Comptroller of the Currency. 2004. *OCC Issues Final Rules on National Bank Preemption and Visitorial Powers; Includes Strong Standard to Keep Predatory Lending out of National Banks*. World Wide Web page <http://www.occ.treas.gov/scripts/NewsRelease.aspx?Doc= ZN9I8H7T.xml (accessed July 16, 2004).

Dreher, Langer, and Tomkies. 2004. *Alerts*. World Wide Web page <http://www.dltlaw. com/CM/Alerts/Alerts137.asp> (accessed June 3).

Elliehausen, Gregory, and Michael E. Staten. 2002. *The Regulation of Subprime Mortgage Products: An Analysis of North Carolina's Predatory Lending Law*. Working Paper No. 66. Georgetown University, McDonough School of Business, Credit Research Center. World Wide Web page <http://www.msb.edu/prog/crc/pdf/RevisedWP66.pdf> (accessed July 16, 2004).

Elliehausen, Gregory, and Michael E. Staten. 2003. An Update on North Carolina's High-Cost Mortgage Law. Unpublished paper. Georgetown University, McDonough School of Business, Credit Research Center.

Ernst, Keith, John Farris, and Eric Stein. 2002. North Carolina's Subprime Home Loan Market after Predatory Lending Reform. A Report from the Center for Responsible Lending. Durham, NC. Mimeo.

Expanded Guidance for Subprime Lending Programs. 2001. OCC Bulletin No. 2001–6. Washington, DC: Office of the Comptroller of the Currency.

Fannie, Freddie Continue to Eat Large Slice of the Subprime Pie. 2004. *Inside B&C Lending* 9(2):2.

Gramlich, Edward M. 2000. Remarks at the Federal Reserve Bank of Philadelphia, Community and Consumer Affairs Department Conference on Predatory Lending. Philadelphia, December 6.

Harvey, Keith D., and Peter J. Nigro. 2002. Do Predatory Lending Laws Influence Mortgage Lending? An Analysis of the North Carolina Predatory Lending Law. Paper presented at the Credit Research Center Conference on Subprime Lending, Washington, DC. September 17.

Joint Center for Housing Studies. 2002. *State of the Nation's Housing*. Cambridge, MA: Harvard University.

Koren, Imma. 2003. *Unprecedented Issuance and Strong Credit Performance Have Been the Dominant Themes in the Home Equity Sector in 2002; 2003 Is Shaping Up to Be More of the Same*. Wachovia Securities Structured Products Research, March 4. World Wide Web page <http://www.absnet.net/search/globalsearch.asp?global=1&q1=Unprecedented+Issuance+and+Strong+Credit+> (subscription required, accessed March 8).

Lenders Will Try to Pin Down Effects of NC Mortgage Law. 2001. *Inside B&C Lending* 6(5):3.

Litan, Robert E. 2003a. *North Carolina Predatory Lending Law: Still a Problem despite New Study*. Regulatory Analysis 03–9. Washington, DC: AEI–Brookings Joint Center for Regulatory Studies.

Litan, Robert E. 2003b. *Unintended Consequences: The Risks of Premature State Regulation of Predatory Lending*. World Wide Web page <http://www. aba.com/NR/rdonlyres/D881716A-1C75-11D5-AB7B-00508B95258D/28871/PredReport200991.pdf> (accessed August 18).

Morgan Stanley. 2002. Channel Check: Surprisingly Strong Subprime Growth. *Diversified Financials*. August 1. World Wide Web page <http://www.butera-andrews.com/legislative-updates/directory/Media/other/MS-SubPrime.pdf> (accessed July 16, 2004).

Mortgage Bankers Association. 2004. *Latest State Legislative and Regulatory News*. World Wide Web page <http://www.mortgagebankers.org/state_update/states.asp> (accessed February 9).

Phillips-Patrick, Fred, Eric Hirschborn, Jonathan Jones, and John LaRocca, for the Office of Thrift Supervision. 2000. What about Subprime Mortgages? *Mortgage Market Trends* 4(1):1–21.

Quercia, Roberto G. 1997. House Value Appreciation among Older Homeowners: Implications for Reverse Mortgage Programs. *Journal of Housing Research* 8(2):201–23.

Quercia, Roberto G., Michael A. Stegman, and Walter R. Davis. 2003. *The Impact of North Carolina's Anti–Predatory Lending Law: A Descriptive Assessment*. Chapel Hill, NC: Center for Community Capitalism.

Reinvestment Fund. 2004. *Predatory Lending: An Approach to Identify and Understand Predatory Lending*. World Wide Web page <http://www.trfund.com/policy/predatory.lending.htm> (accessed June 4).

Richardson, Christopher A. 2003. *Predatory Lending and Housing Disinvestment*. Unpublished paper. World Wide Web page <http://wwwcpr.maxwell.syr.edu/seminar/spring 03/richardson.pdf> (accessed June 23).

Roche, Ellen P. 2000. Statement of Ellen P. Roche [Director of Corporate Relations, Freddie Mac]. *Profitwise* 10(3):8–9.

Standard & Poor's Addresses North Carolina Anti–Predatory Lending Law. 2004. *Business Wire*. World Wide Web page <http://home.businesswire.com/portal/site/google/index.isp?ndmViewId=news_view&newsId=20040218005778&newsLang=en> (accessed July 16, 2004).

State of Washington. 2003. World Wide Web page <http://www.wa.gov/ago/household finance/terms.shtml> (accessed June 20, 2003).

State of Washington, Department of Financial Institutions. 2002. *Expanded Report of Examinations for Household Finance Corporation III as of April 30, 2000*. World Wide Web page <http://news.bellinghamherald.com/downloads/hfc-document.pdf> (accessed July 16, 2004).

The 2003 Mortgage Market Statistical Annual. 2003. Washington, DC: Inside Mortgage Finance Publications, Inc.

U.S. Department of Housing and Urban Development. 2000. *Unequal Burden: Income and Racial Disparities in Subprime Lending in America*. Washington, DC.

U.S. Department of Housing and Urban Development. 2001. *Subprime and Manufactured Home Lender List, 2001*. World Wide Web page <http://www.huduser.org/datasets/manu.html> (last modified November 7, 2003).

Walters, Neal, and Sharon Hermanson. 2002. *Older Subprime Refinance Mortgage Borrowers*. Washington, DC: AARP Public Policy Institute. World Wide Web page <http://research.aarp.org/consume/dd74_finance.html> (accessed June 20, 2003).