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[This paper is a work in progress circulated to stimulate discussion and comment.]

Economic Issues in Predatory Lending

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This paper contains a summary and analysis of key statistics and studies on the issue of predatory lending. The piece specifically addresses the major questions that have been raised on this topic:

- What is a predatory loan?
- How and to what extent are banks engaged in predatory lending?
- Do high interest rates and fees represent predatory practices?
- What is the relationship between interest rates charged on subprime loans and borrower risk?
- Is the structure of interest rates among subprime credit grades similar to that within the speculative grade corporate bond market?
- Are elevated risks in the subprime relative to the prime market simply a matter of degree, or is there also a difference in kind?
- To what extent do higher servicing and other costs account for the level of subprime interest rates?
- What is the evidence for lack of competition and pricing inefficiency in the subprime market?
- What is the evidence that subprime providers earn excess profits or economic rents?
- Do anti-predatory laws effectively restrain abusive lending?
- What is the evidence that anti-predatory laws restrain legitimate lending?
- Is the pattern of subprime lending activity in lower income and minority locales different than that in higher income areas?
- What is the quantitative evidence regarding the percentage of subprime borrowers who could have qualified for a prime loan?
- What is the role for CRA in curbing predatory lending abuses?



I. Summary

Concerns about predatory lending abuses have prompted financial service providers, banking regulators and legislators to seek ways to curb these practices while maintaining legitimate credit flows to subprime borrowers. Proponents of anti-predatory measures argue that there is substantial evidence that such legislation has inhibited predatory lending tactics without damaging the burgeoning subprime market.

It has also been argued that inexperienced borrowers are steered by predatory lenders into loans that are overpriced relative to the borrower's risk profile. This is viewed as justification for government intervention to protect the most vulnerable in society. Moreover, many suggest that predatory practices are often specifically aimed at minority and elderly borrowers, for whom traditional banking services are often less accessible. A series of HUD studies (2000)¹ has documented the concentration of subprime lenders in low-income and minority communities in five cities including Atlanta, Los Angeles, Baltimore, New York and Chicago. HUD found that subprime loans were three times more likely in low-income neighborhoods than in high-income neighborhoods and five times more likely in African American neighborhoods than in majority neighborhoods.

A study prepared by Calvin Bradford (2002)² on subprime lending patterns in all of the nation's 331 metropolitan areas reports similar findings and asserts that the magnitude of these disparities raises serious questions about the extent to which risk alone could account for such patterns. Bradford's analysis suggests that racial disparities actually increase as income increases suggesting that a portion of subprime lending is occurring with borrowers whose credit histories would qualify them for lower-cost, conventional prime loans. There are also those analysts who suggest that CRA be utilized to create disincentives to banks that engage in or provide indirect support for predatory lending.

By contrast, others who have analyzed the market for subprime credit have obtained results that suggest that regulatory and legislative initiatives to combat predatory practices are unnecessary and may be counterproductive. They believe that self-regulation and better enforcement of existing laws represent the best practical solution to predatory practices. Indeed, there is substantial empirical evidence that anti-predatory statutes can impede the flow of mortgage credit, especially to low income and higher-risk borrowers, and that any reduction in predatory abuses resulting from these measures is probably achieved at the expense of many legitimate loans.

North Carolina, which recently enacted legislation in this area, has been the subject of some analytical research. A recently released study by Roberto G. Quercia, Michael A. Stegman, and Walter R. Davis (2003)³ examined changes in subprime lending activity before and after enactment of North Carolina's anti-predatory law. The authors conclude that there has been a large decline in subprime refinance originations with predatory terms. They also indicate their research suggests that lending to high-risk applicants, which they define as having FICO scores below 580, in North Carolina has followed patterns similar to those in states without anti-predatory statutes. This implies that there was no reduction in access to credit among these borrowers as a result of the law. However, the authors do not address the impact of the law on subprime borrowers with FICO scores in the 580-660 range, which is recognized as the heart of the industry, and they also acknowledge that their results could be impacted by changes in the structure of the data base used in the analysis. On the other hand, Gregory Elliehausen and Michael Staten (2002)⁴, report lending to borrowers in North Carolina with FICO scores below 580 actually weakened more than for any other credit group after the law began to be implemented.⁵ Their analysis suggests that the decrease in lending to low income and higher risk borrowers in North Carolina was due to increased underwriting costs, potential legal liability and other factors associated with the law. The study also shows that the interest rates on loans within all credit grades before and after enactment of the first part of the statute closely reflected the loans' risks.

In fact, the North Carolina statute is actually considered less onerous than those enacted in other states. One of the most important channels through which anti-predatory laws can impede credit flows is by reducing the willingness of agency and non-agency securitizers to buy loans originated in a covered jurisdiction. This can prompt lenders to cut back or eliminate their loan originations in these jurisdictions. By disrupting the secondary market, the impact of these laws can potentially go beyond simply reducing the number of loans with specifically forbidden features, such as prepayment penalties in the case of the North Carolina law. Whereas the government-sponsored enterprises (GSEs) have not announced restrictions on the purchase of mortgage loans in North Carolina, they have cut back or even eliminated entirely their purchase of high cost and other loans in Georgia and New York as a consequence of more severe anti-predatory laws enacted in those states.

In November 2002, Fannie Mae announced that it would not purchase mortgages that qualify as “high-cost home loans” under the Georgia Fair Lending Act. Fannie Mae reissued this “no-buy” policy in March 2003, following the amendments to the Georgia law. In March, Fannie Mae also announced that it would not purchase loans that qualify as “high cost home loans” under New York Banking Law § 6-1. Freddie Mac has similar “no-buy” policies concerning “high cost home loans” subject to the amended Georgia Fair Lending Act and the New York law. In addition, Fannie Mae will not purchase any mortgage originated in Georgia between October 1, 2002 and March 7, 2003, due to “continued uncertainty in the marketplace” regarding those loans originated following enactment of the original Georgia Fair Lending Act and the date of the amendments. Freddie Mac has adopted a similar policy.

Indeed, anti-predatory laws with vaguely defined compliance procedures or that involve unlimited potential liability make securitization of loans originated in that jurisdiction problematic, since lender violations may siphon off funds available to pay investors. When the magnitude of potential damages is exorbitant, it may be difficult to shield investors in these securities sufficiently to obtain an investment grade rating. When this occurs, loans subject to a particular statute may be effectively unsecuritizable.⁶ Indeed, all of the major rating agencies have recently announced severe strictures for the rating of MBS pools connected with loan purchases in Georgia, New York and New Jersey. This could easily end up restricting subprime activity in those states even more severely than has been the case in North Carolina.

Opponents of expanded anti-predatory legislation typically assert that the concept of abusive lending has been defined too broadly and that the higher interest rates typically associated with subprime mortgages are for the most part justified by the elevated level of risk inherent in this form of lending. For example, economists point out that interest rates on lower-quality subprime loans are higher than those for better quality subprime mortgages. In late 2002, subprime loans classified with a “C” credit grade carried an average interest rate of 11.8%. Those graded in the “B” category carried a 10.6% average rate. Meanwhile, subprime loans within the “A” credit grade carried a still lower 9.4% rate. The relationship between delinquencies and interest rates paints a similar picture. Delinquency rates climb steadily for subprime loans with higher interest rates. This suggests that subprime lenders are charging higher interest rates to riskier borrowers.

In addition, empirical data suggest that subprime loans are different from prime loans in terms of the greater variety and complexity of risks and this also affects pricing. While FICO scores are good predictors of delinquency patterns in both the subprime and prime markets, the pricing discrepancies between the two markets cannot be expected to conform solely to differences in traditional risk measures. In the prime market, for example, as loan-to-value ratios decrease (i.e., as equity increases) the delinquency rate decreases, as would be expected. In the subprime market, by contrast, LTVs have little relationship with loan performance. Analysts who have studied the subprime market find that loans to borrowers with blemished credit histories are more costly to service than the relatively commoditized mortgage loans extended to prime borrowers. This also accounts for the higher interest rates on subprime loans.

In the view of some analysts, the subprime market suffers from pricing inefficiencies that enable financial service providers to extract excessive profits or above-normal returns. However, as a relatively new market, it would not be surprising to observe high returns prevailing in the short term. As the market matures, as seems to be happening quickly, pricing will become increasingly competitive. Indeed, interest rate spreads have narrowed in the subprime market relative to prime loans since the early 1990s when the market first started to take off. In the early 1990s, the spread between prime mortgage rates and A- rated subprime mortgages, was some 250 basis points. These have narrowed and at present are approximately 175-200 basis points. This has occurred despite the small number of subprime mortgage lenders. At present there are only 178 lenders engaged primarily in supplying subprime mortgage credit out of a total of over 7,000 bank and nonbank home mortgage lenders. Moreover, since 1999, the number of subprime lenders has actually declined by 74 due to a string of bankruptcies and consolidations in the industry.

The substantially higher risks and servicing costs associated with subprime lending, and perhaps the drop in the number of subprime lenders, appear to account for the lion's share of the pricing differential between subprime and prime mortgages. Therefore, the empirical data do not support the contention that subprime providers in the aggregate are earning excess profits. The low interest rate environment which has boosted demand and allowed lenders to spread their costs over more units of production is probably temporary. If rates should rise, or if the employment situation should deteriorate further, it is possible that housing prices could pull back. Consumer balance sheets, especially among lower income and riskier borrowers, could also deteriorate and subprime losses could jump, placing subprime lenders under financial pressure. There are tangible risks in making the blanket assertion that the subprime sector is earning abnormal returns, as even the current rate of profitability in the industry could easily dry up under less favorable economic circumstances.

The success enjoyed by many subprime providers in the mid-1990s reversed itself swiftly as the financial markets entered a period of turmoil. From late 1997 through the following year, subprime lenders that had underestimated prepayment rates and loan defaults were forced to restate the value of their servicing rights, resulting in a shrinkage of their capital base. Market participants drove down the value of the outstanding debt and asset-backed securities of subprime lenders.⁷ Simultaneously, the financial turmoil of the late 1990s engendered severe capital market disruptions. This drove up funding costs for subprime providers and in some cases these firms were squeezed out of the capital markets entirely. In fact, during 1998, Wall Street cut back its purchases of mortgage-backed securities and in particular the subordinated portions of subprime securitizations, thus seriously truncating secondary market liquidity of these loans. As a result, several subprime lenders were forced to file for bankruptcy protection during 1998. In addition, according to the FDIC, subprime lending was involved, at least to some extent, in each of the three most costly depository institution failures of 1999.⁸

There is little data suggesting that banks themselves are engaged in predatory lending to any significant degree. Banks already face disincentives to originating subprime mortgages, especially loans that might be perceived as predatory. Banks are sometimes cautious about increasing lending to consumers with impaired credit since they could come under increased scrutiny for charging higher interest rates or for having to implement more foreclosures in a community. Subprime lending also has the potential to raise increased safety and soundness issues for banks.⁹

Although some banks engage in subprime lending, most banks are not subprime lenders. According to HUD, there were 178 lenders whose business focus was subprime mortgage lending in 2001. The majority, or 112 (63%), were independent mortgage companies. Of the remaining lenders, 30(17%) were non-bank affiliates and only 36 (20%) were depository institutions or their direct subsidiaries. These depository institutions represented only 0.6% of the 6,423 depository institutions that filed HMDA reports

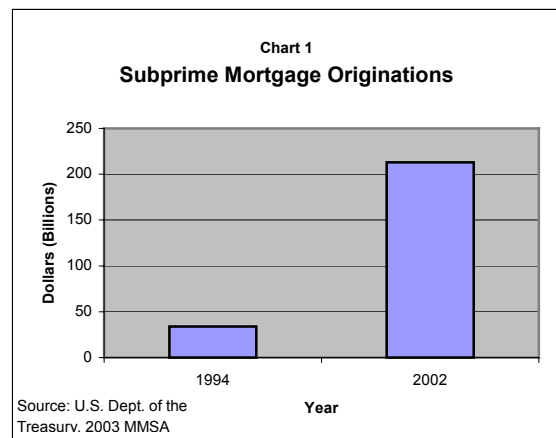
in 2001.¹⁰ Rather, an overwhelming proportion of subprime providers are non-bank mortgage lenders or finance companies.¹¹ Some of those lenders are independent companies others are non-bank affiliates or subsidiaries of insured banks.¹²

II. Background: Trends in the Subprime Market

Nationally, subprime mortgage originations have skyrocketed since the early 1990s. Finance companies, non-bank mortgage companies and to a lesser extent commercial banks have become active players in this area. Several factors contributed to the rapid growth of the subprime mortgage market including: (i) the Tax Reform Act of 1986, which eliminated the deductibility of most consumer interest payments except for mortgage interest; (ii) increased securitization of subprime loans which facilitated expanded capital flows to the subprime market;¹³ (iii) growing competition in the prime market which squeezed margins on loans to higher-quality borrowers, thus pushing lenders increasingly toward the subprime market; (iv) the rapid escalation in home prices during the 1990s which allowed borrowers more money with the same loan-to-value ratio. More recently, the low interest rate environment has led to an unusually robust housing sector. This has also powered expansion in subprime originations.

The subprime segment of the mortgage market is undergoing rapid transition. Prior to the early 1990s, most subprime mortgages were small-balance second liens. During the 1990s, by contrast, the subprime market has shifted to originating primarily first lien mortgages. By 1999, over 75 percent of loans in the subprime mortgage market were first liens. At the same time, the lion's share of these subprime first lien mortgages, or 82 percent, were used for refinancing rather than for purchasing a home.¹⁴ Subprime refinance mortgages are typically smaller than prime refinance mortgages. According to 1998 HMDA data, the median loan amount for a subprime refinance mortgage was \$63,000 compared to \$98,000 for a prime refinance mortgage.¹⁵

In 1994, just \$34 billion in subprime mortgages were originated, compared with over \$213 billion in 2002 (Chart 1). The proportion of subprime loans compared with all home loans also rose dramatically. In 1994, subprime mortgages represented 5.0% of overall mortgage originations in the U.S. By 2002, the share had risen to 8.6%. Meanwhile, securitized subprime loans increased from \$11 billion in 1994 to \$83 billion in 1998 before retreating back to \$60 billion in 1999. The fallback was likely related to turmoil in the industry during that period that resulted in increased failures and consolidation.¹⁶



III. Review of Major Economic Issues in Predatory Lending:

This section provides a summary of the major predatory lending issues. We examine the arguments of proponents of anti-predatory lending laws as well as the often more formal statistical analyses published by economists in this area. A good deal of the piece also represents our own analysis. While proponents of anti-predatory measures assert that there is substantial evidence that such legislation has inhibited predatory lending tactics, others who have analyzed the market for subprime credit have obtained results that suggest that any reductions in predatory lending achieved by such measures come at the expense of fewer legitimate loans as well.

Issue #1: What Is A Predatory Loan?

There is no single, generally accepted definition of a “predatory loan.” Indeed, disagreements over the definition of predatory lending have often served to confuse the debate over this issue. The federal Home Ownership and Equity Protection Act (HOEPA) of 1994 has served as the basis for many of the definitions generally in use at present. The act classifies mortgage loans with relatively high interest rates and fees as potentially predatory and imposes upon them a range of additional consumer protections.* The term has been employed loosely by community groups, policymakers and regulators to refer to a wide range of practices.

Kathleen Engel and Patricia McCoy (2001) define predatory lending as exploitive loan practices involving one or more of the following five characteristics: (i) loans structured to result in seriously disproportionate net harm to borrowers; (ii) rent seeking that is harmful to borrowers; (iii.) loans involving fraud or deceptive practices; (iv) other instances of lack of transparency in loans that are not actionable as fraud; (v) loans that require borrowers to waive meaningful redress.¹⁷ Other participants in the debate, such as the Association of Community Organizations for Reform Now (ACORN), assert that predatory lending occurs when loan terms or conditions become “abusive” or when borrowers who should qualify for credit on better terms are targeted instead for higher cost loans.¹⁸

Within the academic literature on predatory lending, economists typically suggest that judgments as to whether a loan’s price is high or abusive in the absence of additional concrete economic analysis of underlying risks, costs and other fundamentals, such as the level of demand for credit, are not a valid basis for defining predatory lending. These analysts point out that without a precise definition, many of the published figures on predatory lending abuses become less convincing. There have been a variety of estimates on the societal costs of predatory lending released in the media. However, a closer examination of some of these studies suggests that with even slight definitional or methodological changes, a case could be made for significantly smaller estimates of abusive lending costs.

Predatory loans can occur in a variety of lending areas, including home mortgages, auto loans, credit cards and payday loans. Researchers have typically directed their efforts at analyzing predatory residential mortgage lending due to the more severe financial consequences to borrowers resulting from abusive tactics in this area.¹⁹ Specific terms or measures that many associate with predatory lending include high interest rates and fees, balloon payments, high loan-to-value ratios, excessive prepayment penalties, loan flippings, loan steering and unnecessary credit insurance.

Issue #2: How and To What Extent Are Banks Engaged In Predatory Lending?

Banks and their direct subsidiaries are not major participants in the subprime market and there is scant evidence that they are engaged in predatory lending practices. Putting aside for the moment the issue of what actually defines a predatory loan, banks could potentially participate in predatory lending through a number of channels. The most important of these is simply through direct lending by originating predatory mortgages. There are also indirect and inadvertent ways in which banks could facilitate

* “HOEPA loans” are closed-end loans secured by a consumer’s principal dwelling (other than a reverse mortgage or a loan to finance the acquisition or initial construction of the home) that are higher cost because they exceed specified statutory and regulatory interest rate or fee thresholds. Such loans are subject to specific disclosure requirements and substantive restrictions. Among other things, HOEPA prohibits negative amortization, increases in the interest rate upon default and balloon payments for covered loans with a term of less than five years. It also restricts the use of prepayment penalties and due on demand clauses in covered loans. HOEPA also prohibits the refinancing of a covered loan to another covered loan in the first year of the loan, unless the refinancing is in the borrowers interest.

predatory lending practices. There is the potential that banks could inadvertently buy securities that were issued on RMBS pools (i.e. pools of residential, mortgage-backed securities) containing predatory loans. Banks could also unintentionally facilitate predatory lending practices through the use of third party loan brokers. In order to prevent indirectly supporting abusive practices, banks are expected to establish appropriate due diligence and monitoring procedures to adequately address such risks.

There is little data suggesting that banks themselves are engaged in predatory lending to any significant degree. The majority of mortgage loans to LMI (low-to-moderate income) borrowers[†] and in LMI neighborhoods are originated by lenders covered under CRA. However, CRA-covered institutions are primarily prime lenders. Between 1993 and 1998, CRA-covered institutions accounted for eighty-three percent of the growth in prime loans to LMI borrowers. By contrast, CRA covered institutions were responsible for only fifteen percent of the increase in subprime loans during the same interval.^{20 ‡}

According to HUD, there were 178 lenders that concentrated primarily on subprime mortgage lending in 2001. The majority, or 112 (63%), were independent mortgage companies. Of the remaining lenders, 30(17%) were non-bank affiliates and only 36 (20%) were depository institutions or their direct subsidiaries. These depository institutions represented only 0.6% of the 6,423 depository institutions that filed HMDA reports in 2001.²¹ Rather, an overwhelming proportion of subprime providers are non-bank mortgage lenders or finance companies.²² Some of those lenders are independent companies others are non-bank affiliates or subsidiaries of insured banks.²³

Issue #3: Do High Interest Rates and Fees Represent Predatory Practices?

High interest rates and fees could be the result of a variety of factors unrelated to predatory practices. However, some suggest that interest rates on subprime loans, if they reach a sufficiently high level, are in and of themselves evidence of predatory practices. A similar argument is made for high fees. Indeed, as mentioned earlier, since its passage in 1994, the federal Home Ownership and Equity Protection Act (HOEPA) has classified mortgage loans with relatively high interest rates and fees as potentially predatory. In recent years, many state and local governments have also enacted or proposed their own

[†] As defined under CRA, LMI borrowers are those having household incomes that are less than eighty percent of the local median family income. [Engel and McCoy (citing Litan), p.1 footnote 3]

[‡] The data as to bank involvement in predatory lending is therefore vague, although there is some anecdotal evidence on the issue. Numerous borrowers sued the failed subprime lender Superior Bank in alleging that the institution engaged in predatory lending (Federal regulators seized Superior Bank in July 2001.) The plaintiffs have alleged that Superior encouraged them to take on loans they did not need or could not afford, and engaged in various types of fraud. Separately, the U.S. Department of Justice brought fair lending actions against Fleet Mortgage Corp. (*U.S. v. Fleet Mortgage Corp.* is May 7, 1996 (E.D.N.Y.)) and Huntington Mortgage Corp. (*U.S. v. Huntington Mortgage Co.* is Oct. 18, 1995 (N.D.Ohio)) for allegedly charging higher rates or fees to minorities than similarly situated nonminorities. [From Engel and McCoy, p.7 and p.14, footnote 47]

At the same time, a more recent case found no evidence of abusive practices. This involved a revised regulation issued by OTS to implement the Alternative Mortgage Transaction Parity Act. In supporting the OTS's decision to distinguish between supervised depository institutions and unsupervised housing creditors and to retain preemption of state laws with respect to the former, but not for the latter, the State Attorneys General stated: "Based on consumer complaints received, as well as investigations and enforcement actions undertaken by the Attorneys General, predatory lending abuses are largely confined to the subprime mortgage lending market and to non-depository institutions. Almost all of the leading subprime lenders are mortgage companies and finance companies, not banks or direct bank subsidiaries." [Brief for Amicus Curiae State Attorneys General, National Home Equity Mortgage Association v. OTS, No. 1:02CV02506 (GK) (D.D.C. filed March 21, 2003) at 10-11.]

regulations that impose even more restrictive regulations than does HOEPA. The first statute below the federal level for regulating high-cost mortgage loans was enacted in North Carolina in July 1999. That law covers more loans than the federal law and its restrictions are more severe. A recent law enacted in Chicago defined predatory loans as any mortgages with interest rates more than five percentage points above the yield on U.S. Treasury securities of comparable maturity.

Others who have analyzed the market for subprime credit, point out that loans with higher interest rates than those seen in the conventional prime market are not necessarily predatory. The higher interest rates on these loans may simply reflect the higher risks and servicing costs associated with subprime lending. To some extent, higher rates may also reflect robust demand for subprime credit (empirical examination these issues is taken up later on).[§]

Table 1
Subprime Mortgage Market Data²⁴

	Alt-A or A-Minus					CC or D	All Subprime
	AA+	AA	A	B	C		
Share of All 2001 1-Family Mortgage Originations*	0.47	3.42	1.94	0.87	0.66	0.89	8.25
30-Year, Fixed APR Interest Rate**	7.2	9.1	9.4	10.6	11.8	12.75	9.83
Serious Delinquency Rate ***	1.36	5.88	10.19	15.83	21.00	23.56	10.44
Loss Rate (% of original UPB) ****	0.05	0.51	1.05	1.64	2.80	2.62	1.10

Source: Data collected and assembled by Cutts and Van Order (citing B&C Lending, Option One, Loan Performance, and Inside Mortgage Finance.) Notes following are edited version of Cutt's & Van Order's. * Share of all mortgages based on 2001-dollar volume of originations. Inside B&C Lending (2/11/02), Inside Mortgage Finance (1/25/02), and Option One Mortgage Corporation (June 2002)). ** Interest rates are from the week ended 9/6/2002. Rates are APRs calculated using average points and fees with simple interest rate using the standard APR formula; Prime rates are from Inside Mortgage Finance (9/6/02); Subprime rates are from Option One Mortgage Corporation (OOMC) for Legacy Plus Platinum (AA+) and Legacy (all others) program loans for Colorado and Utah. LTVs are assumed to be 80% in all cases except C and CC quality loans, which assume 75% and 65% LTVs, respectively. Option One's prices are wholesale; to get retail prices 50 bps were added for average broker compensation. *** Delinquency and loss data from Option One Mortgage Corporation (2002). ****Loss rates are total net cumulative losses.

Issue #4: What Is The Relationship Between Interest Rates Charged on Subprime Loans and Borrower Risk?

The concept that high interest rates in and of themselves represent an abusive practice is a popular argument in some quarters. However, others make the more economically sophisticated assertion that one of the key symptoms of predatory lending is *a lack of correlation between price and borrower risk*. They assert that vulnerable and inexperienced borrowers are sometimes steered by predatory lenders into loans that are overpriced relative to the borrower's risk profile and that as a result subprime lenders make excessive profits.

By contrast, economists generally view the subprime lending area as

Table 2
Prime Mortgage Market Data²⁵

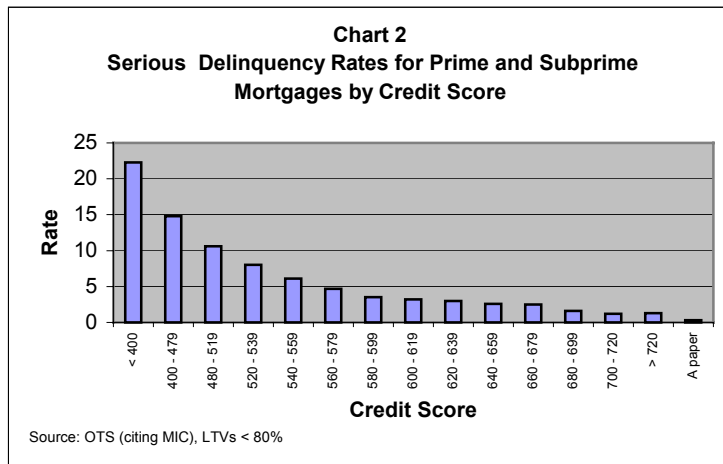
	All Prime Conventional	FHA
Share of All 2001 1-Family Mortgage Originations *	82.32	9.43
30-Year, Fixed APR Interest Rate**	6.14	6.11
Serious Delinquency Rate ***	0.55	4.45
Loss Rate (% of original UPB) ****	0.01	0.29

Source: Data collected and assembled by Cutts and Van Order (citing B&C Lending Loan Performance, and Inside Mortgage Finance.) Notes following are edited version of Cutt's & Van Order's. * Share of all mortgages based on 2001-dollar volume of originations. Inside B&C Lending (2/11/02), Inside Mortgage Finance (1/25/02). ** Interest rates are from Inside Mortgage Finance for the week ended 9/6/2002. Rates are APRs calculated using average points and fees with simple interest rate using the standard APR formula. *** Delinquency rates from Loan Performance, San Francisco, CA as of June 30, 2002. ****Loss rates based on Freddie Mac experience for conventional conforming loans; FHA loss rates from are from Weicher (2002). Loss rates are total net cumulative losses.

[§] Banking regulators generally designate a "subprime" borrower as having one of the following characteristics: two or more 30-day delinquencies in the last 12 months; one or more 60-day delinquencies in the last 24 months; judgment, foreclosure, repossession, or charge off in the prior 24 months; bankruptcy in the last 5 years; a high default probability as measured by a credit score of 660 or below; or a debt service-to-income ratio of 50% or greater. (See OCC Bulletin 2001-6.) Generally, a credit score of 680 qualifies a borrower for consideration for a prime loan, whereas a score below 620 virtually eliminates the possibility.

highly competitive with a strong correlation between price and borrower risk.²⁶ The empirical evidence shows that as interest rates on subprime loans rise the probability of default and the probability of loss given default also increase.

For example, the data demonstrate that subprime mortgages have significantly higher delinquency rates than prime mortgages. As illustrated in Table 1, serious delinquency rates for subprime mortgages in the aggregate were 10.44% in late 2002 (seriously delinquent are the percentage of loans that are over 90 days past due or in foreclosure). This is far above the serious delinquency rate for all prime conventional mortgages of 0.55% (Table 2).



In addition, delinquencies increase steadily with paper grade in the subprime market. As illustrated in Table 1, for subprime loans issued in 2002, AA+ subprime credit** was associated with serious delinquency rates of 1.36%. AA, A, B, C and CC subprime credit were associated with steadily rising serious delinquency rates of 5.88%, 10.19%, 15.83%, 21.00% and 23.56% respectively.

Moreover, as illustrated in Chart 2, based on data assembled by OTS from the

Mortgage Information Corporation (MIC) database,²⁷ the relationship between credit score and serious delinquency rates is similar to that between paper grade and delinquency rates, with a steady rise in delinquencies as credit score decreases.^{††}

Similar to delinquencies, losses on subprime loans are also higher than on prime loans. As illustrated in Tables 1 and 2, the average loss rate for subprime loans in 2002 was 1.10% versus 0.01% for all conventional prime loans. That these loss rates appear low can be deceptive. Loss rates on residential

** Mortgage underwriting guidelines differ among lenders. Within the subprime sector, borrowers are often graded from the least risky “A minus” borrower to the most risky “D” grade borrower. However, these grades are not well defined across the industry. Mortgage Information Corporation (MIC) defines “A minus” as the least risky of its subprime grades. By contrast, Option One Mortgage Corporation, the source for the subprime data used in Table 1, relies on its own unique subprime classification system. Option One’s AA+, AA and A grades are similar to what are typically referred to as Alt-A and A-minus subprime grade loans, and their CC grade loans are similar to what are typically referred to as “D” grade subprime loans in the mortgage industry. [Information on Option One from “On the Economics of Subprime Lending,” by Amy Crews Cutts and Robert Van Order, March 2003, p.4, footnote 6.]

†† Although there is a close overall relationship between paper grade and credit score, there is also considerable variability of credit scores among subprime mortgages in each grade level. In the MIC database, for example, the median “A-” subprime mortgage had a credit score of 630, although scores ranged from a high of 670 to a low of 590. The median B subprime mortgage had a credit score of 570, with scores ranging from a high of 610 to a low of 550. Under the Option One system, the A credit grade is associated with credit scores ranging from 660 to 560. The B grade with 640 to 540. [Information on Option One from Cutts and Van Order, appendix Table 4. Information on MIC from, “What About Subprime Mortgages,” Mortgage Market Trends, Research and Analysis, Office of Thrift Supervision, Washington, DC. Volume 4, Issue 1, June 2000, p.10.]

portfolios are generally subdued compared with other lending areas since they are collateralized. A loss rate on a residential portfolio of 1.10% is considered high. Loss rates among B and C grade subprime loans in the Option One sample (Table 1) actually averaged around 2.2% in 2002.

Table 3
Percentage Distribution of Subprime and Prime Mortgage Originations By Year (By \$ Volume)

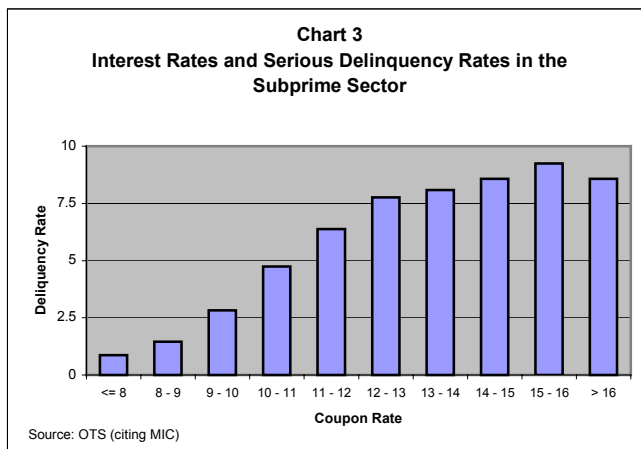
	<u>Subprime Mortgages</u>	<u>Prime Mortgages</u>
1999	33.3%	19.2%
1998	36.2%	30.8%
1997	16.6%	10.0%
1996	7.1%	7.3%
1995	2.8%	5.2%
1994	1.6%	5.5%
1993	0.9%	11.9%
Pre-1993	1.6%	10.2%

Source: OTS (citing MIC)

In addition, the loss rates reported in Table 1 tend to understate the severity of risks in the subprime area. High volume growth has repressed aggregate loss rates throughout the residential market in general (loss rates on recently originated loans are generally low relative to more mature loans). In addition, the average age of outstanding subprime loans is lower than in the prime area (Table 3). This tends to “cover up” the severity of losses in the subprime relative to the prime area when judged by the average cumulative loss rate figures presented in Tables 1 which encompass all vintages. Examination of cumulative loss rates for earlier vintages of subprime loans provides a more revealing picture. According to data from Moody’s, while cumulative loss rates on the 2001 and 2002 vintages of subprime loans currently are just 0.84% and 0.1% respectively, cumulative losses on the 1996, 1997 and 1998 vintages are a far higher 4.78%, 4.49% and 4.77%.

The higher losses associated with subprime lending suggest that this is a much riskier undertaking than the prime area. This does not imply, however, that profits in the subprime sector should necessarily be below those in the prime sector. In order to offset the greater risk, as well as the higher servicing and other costs associated with subprime lending, providers charge higher interest rates. In fact, according to traditional investment theory, subprime lending should provide higher expected returns than prime lending specifically due to the higher risk.²⁸

Table 1 contains 30-year fixed interest rates for subprime loans issued in 2002 by paper grade. As expected, interest rates on lower quality loans are higher than those for the better quality subprime mortgages. While the average 30-year fixed interest rate for all conventional prime loans in the aggregate was 6.14%, AA+, AA, A, B, C, and CC subprime loans carried rates of 7.2%, 9.1%, 9.4%, 10.6%, 11.8% and 12.75% respectively.²⁹



The relationship between interest rates and delinquencies paints a similar picture. As illustrated in Chart 3, serious delinquency rates on subprime loans climb fairly steadily for loans with higher interest rates. These data support the view that subprime lenders are charging higher rates to riskier borrowers. (The decline in serious delinquency rates for the highest interest rate category is probably not meaningful. According to OTS, only one percent of loans in the MIC sample data carry a coupon of over 16 percent. This makes it difficult to draw any solid conclusions.)³⁰

Issue # 5: Is The Structure of Interest Rates Among Subprime Credit Grades Similar To That Within the Speculative Grade Corporate Bond Market?

The corporate bond market is highly competitive. Yield spreads between bonds with varying credit ratings tend to accurately reflect differences in underlying risk. The data show that spreads between adjacent credit grades in the subprime market are generally analogous to those between ratings categories

in the speculative grade corporate market. This suggests that interest rates in the subprime market also accurately account for differences in risk between credit grades.

As illustrated in Table 4, the spread between AA+ and AA subprime mortgage loans in the Option One sample (from Table 1) was 190 basis points in September of 2002. Meanwhile, the spread between BBB and BB+ corporate bond

Table 4
Spreads in the Subprime Mortgage and Speculative Grade Corporate Bond Markets

	<u>Corporate</u>	<u>Subprime</u>	<u>Corporate</u>	<u>Subprime</u>
	<u>BBB BB+</u>	<u>AA+ AA</u>	<u>BB+ BB/BB-</u>	<u>AA A</u>
Spread (bps)	246	190	23	30

Source: S&P, Haver, Cutts (citing Option One), our calculations.

yields was a similar 246 basis points at that time. Spreads on corporate bond yields are fairly volatile over the course of the business cycle relative to those in the subprime lending area, so a spread of 246 basis points could be considered generally in the same range as the 190 basis point spread observed in the subprime market. In the corporate bond area, BBB is the lowest rating within the investment grade category, while BB+ represents the first rung of the speculative category. These two bond rating categories can be considered as more or less analogous to the Option One AA+ and AA subprime categories. Meanwhile, the 23 basis point spread between BB+ and BB/BB- rated corporates is also within the same general range as the 30 basis point spread between AA and A subprime loans.

Admittedly, the subprime and corporate markets are very different structurally. In addition, as mentioned above, cyclical factors that have short-term impacts on corporate bond yields, especially macroeconomic shocks that can spark rapid flights to quality, add a great deal of volatility to corporate yield spreads that is often less pronounced in the subprime mortgage market (the period encompassing the financial market turmoil in the late 1990s was a notable exception). However, the general correspondence between spreads in the speculative corporate bond market and those in the subprime area provide some additional evidence that the subprime market is well functioning and competitive.

Issue #6: Are Elevated Risks In The Subprime Relative To The Prime Market Simply A Matter of Degree, Or Is There Also A Difference in Kind?

Empirical evidence suggests that subprime loans are different from prime loans in terms of the variety and complexity of risks, not simply in terms of the degree of risk, and this also probably impacts pricing. As discussed in the previous section, subprime loans default far more frequently than prime loans. In addition, however, subprime loans prepay both when interest rates decline and when credit worthiness improves. Prepayment risk is, therefore, greater for subprime loans. Cumulative monthly prepayment rates for subprime loans are typically 1.5 to 2 times higher than those for prime loans during periods of stable interest rates. (During periods when interest rates have fallen sharply, prime prepayment rates have risen above those in the subprime sector. However, these periods have tended to be brief.)³¹ In addition, unlike prime mortgages, more mature subprime mortgages tend to be riskier. This is the case because, in the absence of other factors atypical in the prime market, such as prepayment penalties, they might have prepaid had the borrower’s creditworthiness improved. In addition, prepayments of subprime mortgages are more difficult to predict than those of prime mortgages.

Moreover, in the prime market, as the loan-to-value ratio decreases (i.e., as equity increases) the rate of serious delinquency decreases. This is the expected relationship. In the subprime market, by contrast, LTVs have little relationship with loan performance. For example, as illustrated in Table 5, for *prime* borrowers in the highest-risk category, delinquency rates are 12.49% when LTVs are above 90%. With LTVs under 70%, (in other words, with increased equity), the delinquency rate for prime borrowers falls dramatically to 4.2%. By contrast, the highest-risk subprime borrowers show a 27.39% delinquency rate with LTVs above 90%. However, when LTVs fall below 70%, delinquency rates in the subprime market

remain high, in this case at 28.07%. This pattern is repeated for both prime and subprime borrowers in each risk category.³²

Table 5

Prime and Subprime Loan Performance by FICO Score and LTV (Percent of Loans Ever 90+ Days Delinquent)								
LTV	Prime Market				Subprime Market			
	FICO Score				FICO Score			
	<u>Low</u>	<u>Medium</u>	<u>High</u>	<u>Very High</u>	<u>Low</u>	<u>Medium</u>	<u>High</u>	<u>Very High</u>
G.T.	12.49	5.28	2.11	0.68	27.39	13.15	8.27	3.51
90%								
80%-90%	8.41	4.37	1.64	0.47	24.12	14.74	9.45	4.56
70%-80%	6.01	3.02	1.00	0.23	27.42	15.52	11.01	7.39
L.T.	4.20	2.00	0.64	0.15	28.07	12.01	7.25	3.16
70%								

Source: Cutts and Van Order (citing Loan Performance, San Francisco, CA) Data is for areas of medium home price appreciation. FICO score category: Low (<620); Med (620-660); High (660-720); Very High (>720). Table format based on display by Cutts and Van Order.

By contrast, higher FICO scores remain excellent predictors of delinquency patterns in both the subprime and prime markets. As illustrated in Table 5, delinquencies decline as FICO scores increase (i.e. as credit worthiness increases) for every LTV category. This suggests a difference in the structure of risk between the two markets. In other words, differences in risk between prime and subprime borrowers cannot be accounted for simply with reference to the traditional stratification of credit scores and other underwriting criteria. Since greater equity does not appear to help subprime borrowers stave off financial difficulties, this further increases the

disparity in risks between the two markets from the point of view of lenders. Therefore, pricing discrepancies between the two markets also cannot be expected to conform solely to differences in traditional risk measures.³³ As underscored by recent failures of subprime providers, success in subprime lending requires more effective internal controls and risk management expertise than in the prime area.

Issue #7: To What Extent Do Higher Servicing and Other Costs Account For The Level Of Subprime Interest Rates?

Some economists and lenders also argue that loans to borrowers with blemished credit records, lower income and cash flow concerns are more costly to service and originate than the relatively commoditized mortgage loans extended to prime borrowers due to lack of standardization in underwriting.³⁴ They assert that this, in addition to higher risks, also accounts for the higher interest rates on subprime loans. Currently, servicers typically charge 50 basis points for servicing subprime portfolios. The going rate for servicing prime portfolios is generally around 25 basis points. This implies that it costs 25 basis points more to service a subprime portfolio than a prime portfolio.

However, this figure may be somewhat low. Because the subprime industry is still relatively young, firms continue to wrestle with the proper figure for servicing costs. Soon after mortgages are originated, 50 basis points may indeed cover all servicing costs of a subprime portfolio. However, as the portfolio matures and delinquencies rise, servicing costs inevitably increase. Subprime portfolios are of much more recent vintage than prime portfolios (Table 3) due to the more recent development of the industry. As discussed earlier, since loans closer to origination have lower loss rates (Table 6), the rapid growth of subprime loan volume has held down losses as a percentage of overall loans outstanding. This could be holding down actual servicing costs in the short term. Therefore, it is possible that 50 basis points may underestimate the true long-term cost of servicing these portfolios. Market participants generally agree that the industry continues to grapple with establishing an accurate estimate of long-term servicing costs.

³⁴ The typical subprime median refinance loan amount of \$63,000 is also smaller than the \$98,000 for the median prime loan. This makes the associated fees higher as a percentage of the loan amount.

Separately, in a published interview on the topic of subprime lending, the CEO of Union Acceptance Corp. estimated that it costs 225 basis points to service a subprime portfolio of auto loans.³⁴ According to

Table 6

Cumulative Loss Rates							
Subprime Sector							
Months From Origination	Vintage						
	1996	1997	1998	1999	2000	2001	2002
11	0.04%	0.06%	0.07%	0.09%	0.07%	0.08%	0.10%
22	0.46%	0.65%	0.83%	0.79%	0.78%	0.84%	
34	1.58%	2.11%	2.27%	2.10%	2.06%		
46	2.83%	3.31%	3.61%	3.31%			
58	3.73%	4.22%	4.77%				
62	3.99%	4.49%					
78	4.78%						

Source: Moody's, OCC.

Union's CEO, this is three times greater than the 75 basis point cost of servicing Union's prime portfolios (i.e. an additional 150 basis points to service the subprime portfolio). Union is an auto lender that used to be engaged in subprime lending but recently exited the market. Although Union's assessment referred to subprime auto loans, it nevertheless is suggestive that a subprime portfolio may be more costly to service than current industry estimates.

In September 2002, the interest rate on prime conventional mortgages with 80% LTVs was 6.14%. The interest rate on subprime mortgages for borrowers with 680 FICO scores and 80% LTVs was 8.1% (these rates include average points and fees). A subprime borrower with a 680 FICO score would be among the lowest risk applicants receiving a subprime mortgage. (Borrowers with FICO scores of 680 often qualify for prime mortgages.) Therefore, these 80% LTV mortgage products extended to conventional prime borrowers and 680 subprime borrowers can be considered as roughly similar.

The difference or spread between the mortgage rates on these prime and subprime loans is 196 basis points. In 1997, Freddie Mac estimated the difference between A- prime and A- subprime rates as 215 basis points, based on their own internal data and analysis.³⁵ Since interest rate spreads between the prime and subprime markets have narrowed a bit since that time, our estimate of a 196 basis point spread seems reasonable.

Given that the spread between prime and subprime rates is 196 basis points, and assuming that it costs 40 basis points more to service a subprime portfolio than a prime portfolio (this estimate of 40 basis points seems reasonable given the foregoing discussion), then this leaves an additional 156 basis points in spread (196 - 40 = 156) as being attributable to the greater risks inherent in subprime lending and other factors other than servicing costs.

Of this 156 basis points residual, we estimate that approximately 111 basis points is due specifically to differences in risk. As calculated from Table 1, the average jump in interest rates between various grades of subprime loans, which, as discussed earlier, is strongly related to increases in risk alone, is 111 basis points. This 111 basis points is also a reasonable estimate of the portion of the prime/subprime spread attributable just to differences in risk (interestingly, this estimate is similar to those published by Freddie Mac³⁶ using a more accounting-based approach).

Together, the 40 basis points attributable to the greater servicing costs of subprime credit plus the additional 111 basis points attributable to higher risk amounts to 151 basis points. This is just 45 basis points less than the 196 basis point interest rate spread between 80% LTV conventional prime mortgages and 80% LTV subprime mortgages to borrowers with 680 FICO scores. Although this is admittedly a very rough calculation, it nevertheless suggests that in the aggregate, the gap between prime and subprime rates is largely explained by differences in risk and servicing costs between the two markets and that subprime rates therefore do not appear to be particularly out of line with underlying risk and cost considerations.

In addition, there are other factors besides risk and cost that can impact mortgage pricing. These could also account for a substantial portion of the remaining 45 basis points in spread between subprime and prime interest rates that is not explained by differences in risk and servicing costs. For example, borrower demand for subprime credit has been strong and has probably been outstripping supply. This could also be supporting stronger pricing in the subprime market (this issue is taken up more fully under Issue #9).

Issue #8: What Is the Evidence For Lack of Competition and Pricing Inefficiency in the Subprime Market?

For most subprime borrowers and lenders, the subprime market is a legitimate channel to make credit available at a return commensurate with the risk undertaken. If subprime markets are competitive, the higher interest rates charged by lenders may be justified, given the additional risks and costs involved. At the same time, some view the subprime market as suffering from pricing inefficiency and less than full competition where lenders make excessive profits.

One widely cited study regarding the issue of inefficiency and abnormal returns in the subprime market was performed by Lax, Manti, Raca and Zorn at Freddie Mac (2000). For the study, Freddie Mac designed and commissioned a survey that was performed by the Gallup Organization from a sample of borrowers who obtained mortgages between January 1996 and June 1997. The borrower sample was obtained from DataQuick. The survey responses, which included the type of mortgage held by the borrower (prime or subprime) and borrower demographics, were supplemented with individual credit histories such as payment histories and FICO scores, which Freddie compiled separately from a credit depository. The Freddie Mac study examines three separate findings in concluding that there are inefficiencies in the subprime relative to the prime market:

- The first finding is that risk, while by far the single most important factor in determining if an individual ends up in the subprime market, is not the only factor. Other borrower characteristics such as age, level of education, being less familiar with mortgage types, searching little for the best rates and responding to an offer of “guaranteed” loan approval all also played some role in determining whether a borrower ended up in the subprime market. The study asserts that the market justification for the subprime sector is to fund higher-risk mortgages. Therefore, the study’s finding that factors other than risk are significant in explaining why borrowers end up with subprime mortgages is an indicator of some market inefficiency.³⁷
- Second, the study questions subprime borrowers as to their satisfaction with their mortgages and the service they receive from subprime lenders. The survey found that subprime borrowers were generally less satisfied customers than prime borrowers. This was also taken as an indicator of reduced efficiency relative to prime lending.³⁸
- Third, the study attempts to determine to what extent increased risk and costs account for the difference between mortgage interest rates in the prime and subprime sectors. (This is similar to the analysis we performed in the previous section although our assumptions and methodology were slightly different). Using 1997 interest rate data, Freddie Mac researchers found that A-mortgage rates in the subprime sector averaged 215 basis points above A- rates in the prime sector. (The prime loans included in the analysis are mortgages purchased by Freddie Mac and scored as A- through an internal underwriting model. The subprime loans are mortgages included in subprime pools purchased by Freddie Mac that were scored A- by the subprime lenders originating the mortgages. All loans consisted of first-lien, 15-year, fixed rate financings.) The Freddie study asserts that roughly 90 basis points of the 215 b.p. spread can be accounted for by differences in risk. They base this 90 b.p. figure on their finding that among similarly graded

loans from prime and subprime lenders, loans from subprime lenders often default at rates three to four times those from prime lenders. This is similar to the 111 basis point figure we arrived at by observing the average jump in interest rates between various grades of subprime loans, which as we point out, is highly correlated to increases in delinquency rates and risk.

The authors then estimate that servicing costs for subprime loans are an additional 25 basis points more than those for prime loans. They base this on their conversations with industry experts, and as mentioned in the previous section, this figure represents a generally accepted rule of thumb within the industry. This is slightly lower than the 40 basis point figure for additional servicing costs that we used in our analysis. Freddie then sums the factors for risk and servicing costs which amounts to 115 basis points. Since the spread between prime and subprime rates calculated by Freddie earlier was 215 basis points, this means that risks and servicing costs do not explain 100 basis points of the prime-subprime spread. The authors of the Freddie study conclude that this 100 basis points of unexplained spread represents a measure of subprime inefficiency.³⁹

The authors of the Freddie Mac analysis concede that none of these three studies of efficiency are conclusive alone and each has its flaws. In combination, though, the evidence adds up, according to the analysis, to a strong case for inefficiency. However, it is useful to examine some of the potential issues with each of the findings. In the first study, for example, the measure of risk employed does not precisely capture the role that risk plays in allocating borrowers between the prime and subprime markets (this is pointed out by the authors themselves). The study places its emphasis on default risk. However, as discussed in a previous section, prepayment rates are on average much higher in the subprime market.^{§§} As pointed out by the Freddie analysis, this is an element of risk to lenders and investors not addressed in the study. In addition, underwriters typically examine a whole range of factors not considered by the Freddie study when assessing risk. Therefore, the risk factors used by Freddie may underestimate the risks inherent in subprime lending (a point also conceded by the authors of the analysis).⁴⁰

Moreover, in its attempt to explain the gap between subprime and prime mortgage rates by estimating risk and servicing costs, the Freddie Mac study does not consider the impact of demand factors on these spreads. As analyzed in the following section, demand may be outstripping supply for subprime credit and this could be playing a considerable role in pricing in this area. In addition, the Freddie study's estimate of servicing costs may be a bit low in light of the data on cumulative loss rates that we examined earlier.

Issue # 9: What Is The Evidence That Subprime Providers Earn Excess Profits?

A common assertion in some quarters is that subprime providers earn abnormally high profits. However, the empirical evidence suggests that in the aggregate the earnings of these firms appear to be in line with underlying supply and demand fundamentals. Indeed, the evidence that subprime lenders earn abnormally high profits (also known as economic rents) tends to be anecdotal. In the Freddie Mac study discussed in the previous section, the authors assert that while some analysts suggest that the subprime sector is highly competitive, discussions with focus groups of market participants indicate that the competition is in reality more for customers than over rates and fees. According to the authors of the Freddie Mac study, these same focus groups noted that subprime lenders spend a great deal of money originating mortgages through sales calls, direct mail, advertising and brokers fees. The Freddie analysis concludes that combined with the history of market entry and consolidation around the time of the study,

^{§§} There are also prepayment penalties in much of the subprime market. However, subprime lenders don't collect their origination fees upfront but build them into the loan amount. So, if a borrower refinances shortly after origination, lenders absorb the cost. This is the reason for the prepayment penalties.

this provides additional circumstantial indications that, at least in 1997, the subprime sector generated excess profits or economic rents.⁴¹

However, the Freddie Mac study does not attempt to demonstrate directly that these rents actually exist. In fact, the authors concede that it is difficult, if not impossible, to accurately assess the competitive nature of an industry solely on the basis of focus groups and surveys, such as those employed in their study. In addition, as pointed out in the study, since the survey was taken, the subprime industry has been buffeted by financial turmoil, bankruptcies and consolidations and the profits of some of the remaining firms have come under pressure.

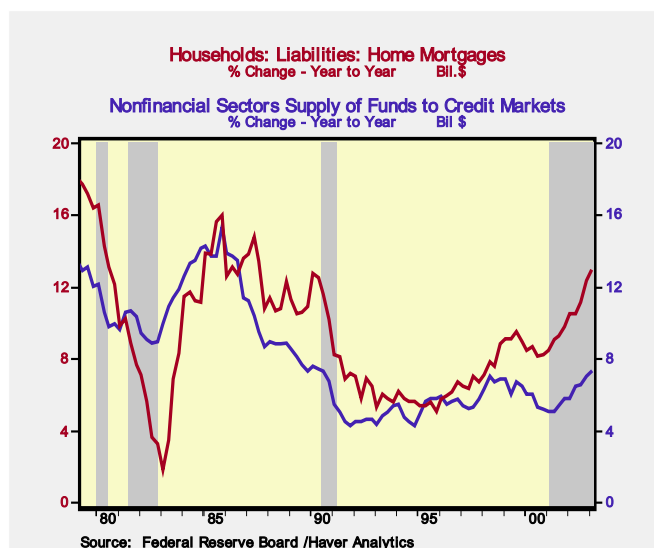
In any case, as a relatively new market, it would not be surprising that high returns might prevail in the short term. However, as the subprime business matures, as appears to be occurring rapidly, pricing would be expected to become increasingly competitive. Indeed, this seems to be the case. Interest rate spreads in the subprime market have been compressing since 1993. For example, the spread between prime mortgage rates and A- rated subprime mortgages, was some 250 basis points in the early 1990s. These have narrowed and at present are around 175-200 basis points.⁴²

As discussed earlier, the risks and costs associated with subprime lending are significantly higher than those in the prime sector. These factors account for the lion's share of the pricing differential between subprime and prime mortgages. In addition, there are indications that demand for subprime credit is currently outstripping available supply. While perhaps a temporary phenomenon, this could also be propping up subprime margins and interest rates. Since mid-2000, the sharp decline in interest rates has propped up demand for overall home mortgage credit in both the prime and subprime areas. Since the second quarter of 2000, the 10-year Treasury yield has fallen from 6.44% to 3.57%, or 35.7%. Correspondingly, aggregate net household home mortgage borrowing has surged by a similar 32.2%.

As illustrated in the inset to the right, the present cycle has been an unusual one in that growth in aggregate household home mortgage borrowing has far outstripped the increase in aggregate supply of funds to credit markets. In prior periods of economic weakness, the overall supply of funds to credit markets softened. However, demand for home mortgage credit contracted even more sharply.

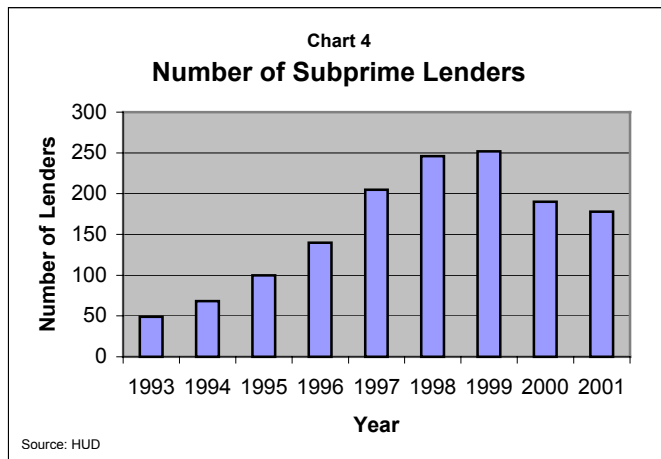
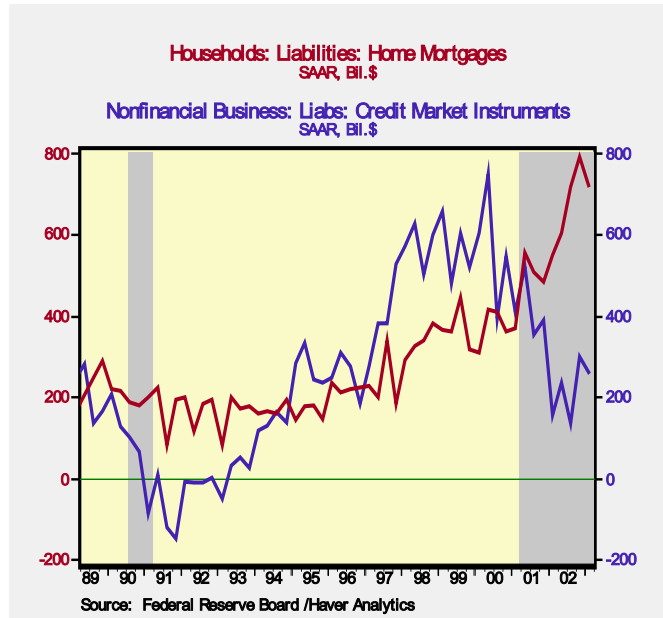
However, this cycle has also been unusual in that the recession has largely been the result of a collapse in business capital spending. This has resulted in an unusually large decline in the business demand for funds. As illustrated in the inset on the next page, which contains actual dollar flows, the collapse in the business demand for funds has freed up sufficient funds to accommodate the unusually large surge in household demand for mortgage credit. This is an important reason, in addition to Fed easing, why prime mortgage rates have come down so sharply despite the surge in household demand for mortgage credit.

However, while the overall supply of credit to U.S. mortgage markets has kept pace with surging demand, this has probably not been the case in the subprime sector. The sharp decline in U.S. interest rates has



propped up demand in the subprime and prime markets about equally. From 2001 to 2002, subprime originations grew 22.9%, slightly faster than prime originations which advanced 22.3%.

However, according to HUD, at present, there are only 178 lenders engaged primarily in supplying subprime mortgage credit out of a total of over 7,000 total bank and nonbank home mortgage lenders. Moreover, since 1999, the number of subprime lenders has actually declined by 74, due to a string of bankruptcies and consolidations in the industry (Chart 4). These disruptions to the marketplace raise the possibility that the supply of subprime credit may not be keeping pace with the unusual surge in demand and this may be keeping subprime rates slightly higher than otherwise would be the case. Recall, that by our calculations, differences in risk and cost explain all but 45 basis points of the spread between subprime and prime mortgage rates. This residual could easily be explained by even a slight imbalance between the supply and demand for subprime funds.



Therefore, the empirical data do not support the contention that subprime providers are earning economic rents. In fact, the general low rate environment which has boosted demand and allowed lenders to spread their costs over more units of production is probably temporary. As mentioned earlier, the present housing cycle is highly unusual. In the periods leading up to previous recessions, as well as during the earlier stages of those prior recessions, Fed tightening typically resulted in sharp contractions in housing starts and home mortgage demand (first inset on previous page). By contrast, the present cycle has been characterized by persistent Fed rate

cuts which have bolstered housing demand throughout the past several years in an effort to counter the depressive effects of the collapse in capital spending (and other depressive influences such as the widening trade imbalance). This has also resulted in continued strong increases in home prices in comparison with past recessionary episodes when home prices decelerated sharply.

However, if rates should back up at some point up, or if the employment situation should deteriorate further, it is possible that housing prices could pull back. Consumer balance sheets, especially among lower income and riskier borrowers, could also deteriorate and subprime losses could jump placing subprime lenders under financial pressure. There are tangible risks in making the blanket assertion that the subprime sector is earning abnormal returns, as even the current rate of profitability in the industry could easily dry up under less favorable economic circumstances.

Issue #10: Do Anti-Predatory Laws Effectively Restrain Abusive Lending?

Proponents of anti-predatory measures stress that there is substantial evidence that such legislation inhibits predatory lending tactics and that these measures do not impede legitimate credit flows. A recent analysis by Quercia, Stegman and Davis (2003) on the impact of the North Carolina law examined changes in subprime lending activity before and after the statute was implemented.^{***} The study was based on an analysis of 3.3 million subprime loans covering 1998-2002 supplied by Loan Performance Inc. (LP). Overall, the study concludes that, after the law was fully implemented, the subprime market in North Carolina behaved “essentially as the law intended -- there was a reduction of loans with predatory terms without a restriction in access to or increase in the cost of loans to borrowers with blemished credit.”⁴³

In particular, the study found a reduction in subprime originations from 1999 to 2000 due to a decline in the number of refinance originations (these types of loans, according to the authors, are most often associated with predatory abuses), not loans for purchase, with most of the decline associated with loans having terms specifically defined as abusive or predatory by the new law. The analysis reports an overall reduction of about 5,300 subprime loans between the pre- and post-implementation periods. From this perspective, according to the study, the observed decline cannot be considered undesirable or unanticipated by policymakers.⁴⁴

In addition, the study reports that loans to borrowers with credit scores below 580 in North Carolina have actually increased by almost one-third since the law was fully implemented. This growth is consistent with that in neighboring states (except Tennessee). This demonstrates, according to the authors, that changes in North Carolina’s regulatory environment have had no detrimental impact on the supply of subprime credit to these high-risk borrowers.⁴⁵

The findings in Quercia, Stegman and Davis appear to contradict some of the assertions of earlier analyses of the North Carolina Law performed by Keith Harvey and Peter Nigro (2002) and Elliehausen and Staten (these are analyzed in the following section). However, much of the disagreement with other analyses is largely definitional. Some of these issues include:

- The study defines a predatory loan simply as a loan having the presence of the terms listed in the law. Since the North Carolina law prohibits these terms, it would be expected that the number of loans containing these terms would be reduced. However, as discussed earlier, there is substantial debate over what a predatory loan actually is.
- The study notes that out of the reduction of 5,300 subprime loans from the pre- to post-implementation period, there were 2,800 fewer loans with prepayment penalty terms, 1,600 fewer loans with balloon payments and 650 fewer loans with combined LTVs over 110%. However, the study does not calculate the degree of overlap of these terms. A single loan could contain one, two, or all three terms. This means that the total reduction in loans with some kind of predatory term could range from 2,800 to 5,050. If there was a good deal of overlap, this could mean that

^{***} The North Carolina law was enacted in stages beginning in July 1999. The law’s anti-predatory features included a HOEPA-like trigger mechanism for classifying closed-end mortgage loans as “high-cost” loans. The law was enacted in two phases. In October of 1999, three features of the law took effect. First, prepayment penalties were prohibited for loans up to \$150,000. Second, permissible classes of fees were defined for loans secured by real property and for fees to be paid to third parties in association with the loan. Finally, consumer home loan refinancing transactions were prohibited where they failed to provide a borrower with a *reasonable, tangible net benefit* (the “no flipping” provision). The remaining requirements of the law took effect on July 1, 2000.

the law did restrain a substantial number of legitimate loans even by the study's criteria. If there was 100% overlap, this would mean that 47.2% of the decline in lending was non-predatory by the authors' definition of the term.

- The study's conclusion that there was no reduction in access to mortgages among borrowers with blemished credit in North Carolina following implementation of the state's anti-predatory law is based in large part on how it defines the issue. In defining *high-risk* or *blemished credit*, Quercia, Stegman and Davis consider only those borrowers with identified FICO scores below 580. These are indeed very high-risk applicants and originations to these borrowers did increase following enactment of the law according to the Loan Performance Inc. (LP) data used in the study. However, loans to borrowers identified as having such low FICO scores represented only 21.2% of all subprime originations in North Carolina at the time of the law's implementation according to the LP data.

The study does not provide results for borrowers with FICO scores in the 580-660 range, which encompasses the largest category of subprime borrowers and represents the heart of the industry. Rather, it only considers the smaller below 580 and above 660 categories. Borrowers with FICO scores between 580 and 660 are also considered as having blemished credit. All of the major bank regulatory agencies define borrowers with FICO scores of 660 or below as having, "a relatively high default probability."⁴⁶ At the very least, the bottom half of the 580-660 range (i.e., 580-620), is generally acknowledged as denoting high risk by the standards of many market participants. Lenders often will not even consider a score below 600, some as high as 620. The study indicates that overall subprime loans in North Carolina dropped by 17.0% following implementation of that state's anti-predatory law, and suggests that much of that decline comes from the 580-660 range.

- Weaknesses in the data structure complicate interpretation of the Quercia, Stegman and Davis study. As pointed out by the authors,^{†††} the Loan Performance database used in the analysis expanded its coverage from 41 percent to 50 percent of the total subprime market over the period encompassed by the study. In addition, LP improved its data reporting. Between 1998 and 2001, there was a reduction of over 50 percent in the number of records in the database with missing FICO scores. Therefore it is risky to draw conclusions about division of changes in lending by FICO scores because it is not known how reduction in missing FICO scores is distributed across the ranges. For example, the increase in originations among borrowers with identified credit scores below 580 noted by Quercia, Stegman and Davis may simply be due to changes to the coverage in the LP database during the study period. It is possible that credit scores in the under 580 category are over-represented among the missing data.⁴⁷ This would have made it appear that originations to these borrowers grew relatively more strongly than was actually the case.

Indeed, Elliehausen and Staten (2002), relying on the American Financial Services Association (AFSA) database that included loan information from nine major finance companies encompassing a substantial component of the subprime lending business, report different findings than Quercia, Stegman and Davis. The AFSA database did not expand or alter its data reporting over the pre-and post enactment periods of the North Carolina law, but continued to encompass the same group of nine firms. In contrast to Quercia, Stegman and Davis's conclusions, Elliehausen and Staten suggest that lending to borrowers in North Carolina with FICO scores

^{†††} Our comments on the database are adapted from those provided by Quercia, Stegman and Davis, footnote 8, p. 18.

below 580 actually weakened more than to any other credit group after the law began to be implemented.⁴⁸ Therefore, rather than having no impact on borrowers with blemished credit, the evidence suggests that lending to high-risk borrowers declined significantly following implementation of the North Carolina law.

Issue #11: What Is The Evidence That Anti-Predatory Laws Restrain Legitimate Lending?

There is a good deal of empirical evidence to suggest that anti-predatory statutes impede the flow of mortgage credit, especially to low income and higher-risk borrowers, and any reductions in predatory abuses resulting from these measures is probably achieved at the expense of many legitimate loans .

There are three primary means through which anti-predatory lending measures can potentially impede the flow of legitimate credit to homebuyers:

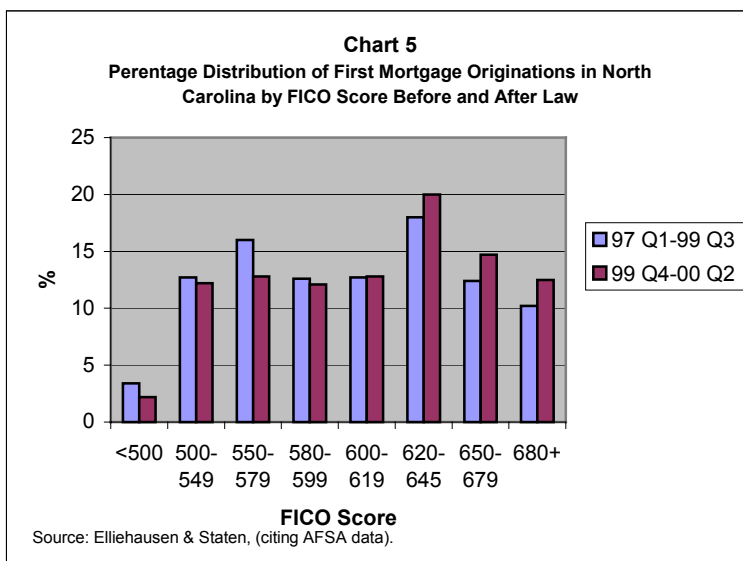
- First, lenders may simply be reluctant to extend credit in jurisdictions covered by these laws due to the increased legal risks they entail. For example, some of the documentation requirements of the new laws may impose unacceptable risks of legal liability for creditors (predatory and legitimate) active in the high-cost mortgage market. Thus, these measure risk restricting credit beyond those loans offered by predatory lenders. The Georgia predatory lending law which took effect on October 1, 2002 raises the potential for large punitive damages. The law also requires lenders to document that a refinancing of a loan less than five years old provides a “net tangible benefit” to the borrower. The *American Banker* reported that this provision convinced Ameriquest Mortgage Co. (Orange, CA), the nation’s seventh-largest subprime originator, to stop making all subprime loans in Georgia.
- As mentioned in the previous section, another way that anti-predatory laws can impede credit flows is by hindering the ability of lenders to sell loans originated in that jurisdiction into the secondary market. This can prompt lenders to cut back their loan originations in that jurisdiction. As mentioned in the summary to this piece, the GSEs have taken a number of steps to reduce the possibility that they will purchase predatory loans. These actions further reduce the liquidity of these mortgages by restraining demand for such loans in the secondary market. Although the GSEs are much smaller participants in the subprime market than the non-agency aggregators, Fannie Mae and Freddie Mac have shown increasing interest in the subprime business in recent years either through direct purchases of subprime loans or through purchases of non-agency mortgage-backed securities. The GSEs are also involved in guaranteeing repayment of securities issued by the private aggregators.
- Finally, anti-predatory lending measures can reduce lenders willingness to extend loans in a jurisdiction due to the increased costs of complying with the provisions of the law or decreased profit margins resulting from the law. In general, these laws increase underwriting costs since lenders must institute additional controls and procedures to ensure that they do not make loans that fall into the high cost category. Even apart from their higher rates, subprime loans are more likely to trigger the high-cost tripwires contained in anti-predatory measures. On average, loans in the subprime mortgage market are smaller than loans in the prime market. Partly as a result, subprime loans tend to have significantly higher fees and rates than for prime loans. However, even if the fees were the same for prime and subprime loans, since subprime loans generally are smaller than prime loans, the fees would be higher as a percentage of the loan amount.⁴⁹ (The North Carolina law also expanded the legal and reputational liability of lenders.)

Based on an analysis of data from nine major finance companies active in North Carolina and neighboring states, Elliehausen and Staten (2002)⁵⁰ concluded that there was a significant and large decline in the number of closed-end mortgages active in North Carolina as a result of the passage of the state’s anti-predatory lending law. The study does not attempt to disentangle the reasons for the decline in lending. As mentioned above, these laws reduce the availability of credit through a number of channels (greater legal liability, the negative impact on the secondary market for these loans and the increased costs to lenders associated with complying with the laws.) In all probability, all of these factors played a role in the reduction of subprime lending in North Carolina.

The finance company data used in the Elliehausen and Staten study had the advantage that it contained information on borrower risk characteristics. Overall, according to the Elliehausen and Staten data, the number of subprime mortgage originations in North Carolina declined by about 14% as a result of the law. This confirms the decline observed in the broader HMDA data for North Carolina presented previously. In addition, the study also found that significant declines occurred only in North Carolina and only among the lower income borrowers. Neither the higher income borrowers in North Carolina nor borrowers in a comparison group of states not affected by the law experienced significant declines.⁵¹

Moreover, the Elliehausen and Staten analysis demonstrates that the declines in closed-end subprime mortgage lending in North Carolina counties were found only in the higher-risk segment of the market. Chart 5 contains the percentage of subprime loans within each risk-score category that were originated in North Carolina during the pre-enactment period. It also contains the percentage of loans within each risk category in the period following enactment of the initial prohibitions of the law on October 1, 1999 through just before the final implementation date on July 1, 2000.⁵² In the period after the first phase of the law became effective, there was a clear decline in the percentage of loans originated in the higher-risk (lower FICO score) categories. The lower-risk (higher FICO score) categories, by contrast, experienced an increase in the percentage of originated loans.⁵³

In addition, the annual interest rates on loans before and after passage of the North Carolina anti-predatory law broadly reflected the loans’ risks, according to the study. Table 7 presents the average risk premium on mortgage loans originated in North Carolina by the nine finance companies under review (risk premium is defined as the difference between the interest rate on mortgage loans and the interest rate of a Treasury security of comparable maturity) for a range of FICO score categories. The data suggest a strong relationship between credit risk and risk premiums both before and after the North Carolina law began to be implemented. Borrowers with higher incomes and



higher FICO scores generally paid lower interest rates. If the law had indeed driven out predatory lending in the state, as suggested by proponents of the legislation, then subprime pricing after enactment should have shown a stronger relationship with borrower risk than before enactment of the law. However, these data do not suggest that the fundamental pricing structure of subprime loans in North Carolina was altered. According to the authors of the study, the data suggest that the North Carolina statute did impede

the flow of mortgage credit to higher-risk borrowers, and any reductions in predatory lending were probably achieved at the expense of fewer legitimate loans.⁵⁴

Table 7

Average Risk Premiums in North Carolina by FICO Score		
FICO Score	Risk Premium (%)	
	Before Enactment	After Enactment
680+	6.1%	5.7%
650-679	6.4%	6.4%
620-645	6.7%	6.7%
600-619	6.9%	6.9%
580-599	7.2%	7.1%
550-579	7.3%	7.2%
500-549	7.5%	7.3%
500	7.9%	7.2%

Source: Elliehausen and Staten (citing AFSA); Risk premium is the difference between interest rate on loans and rate on comparable maturity Treasury security. Before enactment period is from Q1 97 to Q3 99. After enactment is from Q4 99 to Q2 2000.

The study does have a number of shortcomings, however. The authors maintain that the data used in the analysis are highly representative of the subprime mortgage market in general and that the volume of subprime lending activity captured by their data is a substantial component of all subprime lending. However, while these data do indeed contain information on borrower risk characteristics, they do not cover the entire market, as does the HMDA data. It is also a smaller sample than covered by the LP database. In addition, the nine finance companies used in the Elliehausen and Staten study are the largest in the marketplace and therefore probably receive the most scrutiny from the government. So, these firms may not be the worst offenders as far as predatory lending tactics are concerned.

In addition, the AFSA database used in the study only covered loan originations through June of 2000, one month prior to the final implementation date of the law. Some of the law's prohibitions were enacted in late 1999. So, the database did

cover this period. Elliehausen and Staten assert that since lenders had full knowledge of all of the law's final provisions ahead of time, they would have adjusted their lending behavior in advance of the final implementation date. However, this remains an open question at this juncture.⁵⁵

A study by economists Harvey and Nigro that used the broader HMDA data examined the effects of predatory lending laws enacted by the cities of Chicago and Philadelphia. The results tended to compliment those of the Elliehausen and Staten analysis. The Chicago law focuses on banks. Specifically, it bars the City of Chicago from placing any of its \$1 billion in municipal funds at banks with predatory loans (defined as mortgages with interest rates five percentage points or more higher than the yield on U.S. Treasury securities of comparable maturity). The Philadelphia law, which was subsequently preempted by a state law, imposed an escalating series of limitations and sanctions on all mortgage lenders, based on the spread between the mortgage rate and comparable Treasury securities. The analysis concludes that although it is likely that the state and city predatory lending laws may have reduced or eliminated some predatory practices, the results suggest that policymakers need also be concerned about their impact on legitimate subprime lending. The reduction in subprime lending after the passage of the laws was significant and it is likely that a good portion of this was not predatory in nature.⁵⁶

Issue #12: Is the Pattern of Subprime Lending Activity in Lower Income and Minority Locales Different Than That In Higher Income Areas?

Studies by HUD and other researchers have documented the high rates of subprime lending in low-income and minority communities. Each year HUD identifies a list of lenders that are engaged in predominantly subprime lending (50% or more). The lists are updated each year based on conversations with lenders and information obtained from HMDA data analysis, trade publications, and lenders websites. According to the HMDA data from 2001, minority borrowers represent 17.5% of all borrowers in the prime segment of the mortgage market. However they account for more than 36% of borrowers in the subprime segment. Low-and moderate-income borrowers also are disproportionately represented in the subprime market. Roughly 39% of prime borrowers have low to moderate incomes while 54.3% of subprime borrowers have low to moderate incomes.

In 2000, HUD issued a report entitled “Unequal Burden: Income and Racial Disparities in Subprime Lending in America” documenting the concentration of these lenders in low-income and minority communities in five cities including Atlanta, Los Angeles, Baltimore, New York and Chicago. They found that subprime loans were three times more likely in low-income neighborhoods than in high-income neighborhoods and five times more likely in black neighborhoods than in white neighborhoods.⁵⁷ More recently, a study prepared by Calvin Bradford (2002) on subprime lending patterns in all of the nation's 331 metropolitan areas, states that there are "widespread" racial disparities in subprime lending activity nationwide and that African Americans and Latinos have a disproportionately representation in the subprime lending market and that these patterns persist across all income levels and throughout the nation.⁵⁸

Issue # 13: What Issues Are Raised By These Disparities?

These disparities raise the specter that lower income and minority groups are more often the victims of predatory lending or at the very least are being poorly served by the industry. According to the Bradford study, the racial disparities in levels of subprime lending do not, in and of themselves, constitute conclusive proof that there is widespread discrimination in the subprime lending markets. However, Bradford asserts that these disparities do raise serious questions about the extent to which risk alone could account for such patterns. He argues that the issue of whether there is racial exploitation in the subprime markets essentially rests on two issues. First, are the disparities in subprime lending related to race? Second, can these disparities be fully explained by legitimate risk factors?⁵⁹

In the view of many community groups active in the predatory lending debate, as well as of some researchers, risk alone does not explain the racial disparities. They point to the absence of active mainstream prime lenders in minority markets which they assert has increased the chances that borrowers in these communities paying higher interest rates. For example, the assertion by Bradford that racial disparities actually increase as income increases suggests that a portion of subprime lending is occurring with borrowers whose credit histories would qualify them for lower-cost, conventional, prime loans. In addition, the level of disparity presented in studies which showed African American households had more credit problems than majority households was not equal to the level of disparities seen in subprime lending.⁶⁰

Issue# 14: What Is The Quantitative Evidence Regarding The Percentage Of Subprime Borrowers Who Could Have Qualified For A Prime Loan?

In a 1996 release, Freddie Mac estimated that from 10% to 35% of borrowers who obtained mortgages from the subprime market could have qualified for a conventional loan through Loan Prospector (Freddie Mac's automated underwriting system).⁶¹ These and other similar statistics have been viewed by some as evidence of steering or some other form of predatory practice.

As discussed earlier, risk plays a dominant role in determining whether or not a borrower ends up in the subprime market. Table 8, which was assembled by OTS, shows the percent of subprime mortgages in the MIC database within specific credit score categories. These data generally support the case that less creditworthy borrowers receive the great majority of subprime mortgage loans, as 81% of subprime loans have credit scores below 660.⁶² As discussed earlier, all of the major regulatory agencies use 660 as the cutoff point to denote borrowers that are at high risk of default. In addition, many prime lenders generally regard 680 as the point at which a borrower comes into consideration for a prime loan. Over 88% of the MIC subprime mortgages are associated with credit scores below 680.

At the same time, 11.8% of borrowers with credit scores above 680 received subprime mortgage loans. This is at the very low end of the range estimated in the Freddie Mac release. It is probable, therefore, that the Freddie Mac figures represents a substantial overestimate. Indeed, the range estimated by Freddie was made in 1996 when the subprime market was in a significantly less competitive stage of its development. In addition, automated underwriting does not take into account many of the non-quantitative factors that can influence denial rates. The Freddie Mac researchers themselves pointed out that lack of financial sophistication played a large role in the behavior of these borrowers and do not necessarily view these figures as evidence of predatory practices.

Issue# 15: What Other Data Exist On The Issue of Racial Disparities in Subprime Lending?

Empirical studies suggest that the subprime market is highly competitive and that the disparities that do exist are for the most part due to differences in credit risk among groups of borrowers. The widely cited Freddie Mac study of the subprime market discussed under Issue #8 in this piece attempted to look separately at race and ethnicity, in addition to those of borrower risk, educational background, age and effort expended in searching for the best rate on a mortgage loan. As mentioned previously, the study found that borrower risk was by far the most important factor in explaining whether or not an applicant took out a subprime loan. The study also determined that education, age and search effort were significant, though less important factors than risk. However, Freddie Mac also determined that their data provided no evidence that race or ethnicity had any significant independent impact on whether or not a borrower ended up with a subprime loan when statistically controlling for risk, search effort, educational background, age or other demographic factors.⁶³

Other empirical data appear to support this contention. As mentioned earlier, some researchers assert that one of the symptoms of predatory lending in a locale is the lack of a close connection between the interest rates charged on subprime mortgages and borrower risk. They argue that predatory lenders steer less sophisticated applicants into loans that are overpriced relative to the borrower’s risk profile. If this were indeed the case, then a law that eliminates predatory lending should result in the re-establishment of a close relationship between price and borrower risk.⁶⁴

Table 8

<u>Credit Score</u>	<u>Percent</u>
Under 400	0.02%
400 to 479	1.1
480-519	6.2
520-539	7.5
540-559	9.9
560-579	11.2
580-599	11.8
600-619	12.1
620-639	11.5
640-659	9.7
660-679	7.2
680-699	4.8
700-719	3.2
Over 720	3.8

Source: OTS (citing MIC); Percent figures based on \$ volumes.

Table 9

	<u>Total Subprime Origination in North Carolina</u>	<u>Minority Subprime Originations In North Carolina</u>	<u>Percent of Total Subprime Originations In North Carolina</u>	<u>Minority Subprime Originations In Neighboring States</u>	<u>Percent of Total Subprime Originations In Neighboring States</u>
Before Law	41,203	8,482	20.6%	23,653	22.48%
After Law	35,157	7,116	20.24%	27,388	25.38%
% Change	-14.67%	-16.1%		15.79%	

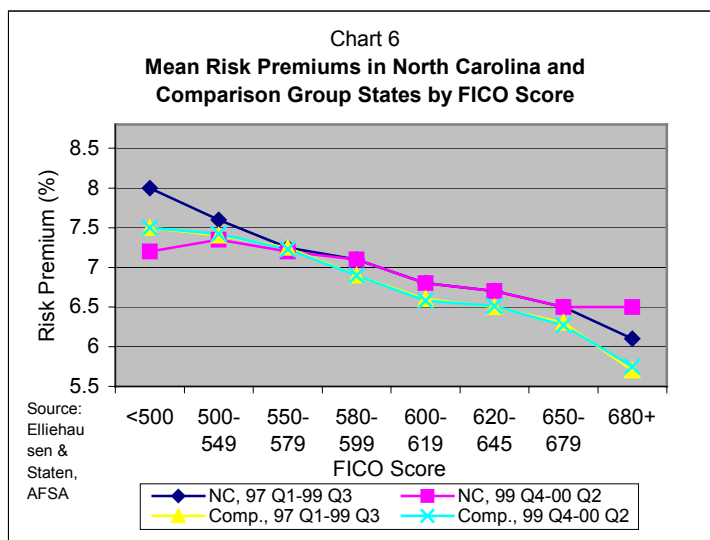
Source: Harvey and Nigro (citing HUD), OCC.

In North Carolina, according to HUD data, minorities represent over one fifth of all subprime borrowers (Table 9). Therefore, these borrowers should figure significantly in the risk/pricing structure observable on subprime loans within the state. As mentioned above, if anti-predatory laws were successfully eradicating this form of lending, then

there should be a shift in the relationship between price and borrower risk on subprime loans following the imposition these statutes resulting in a stronger connection between price and underlying borrower risk.⁶⁵

However, econometric studies do not support this contention. For example, according to Elliehausen and Staten, in North Carolina, the relationship between the average risk premium -- defined as the difference between the mortgage rate and the interest rate for a Treasury security with a comparable term -- and FICO scores of borrowers was very similar both before and after the state's anti-predatory law began to be implemented. Prior to enactment, higher borrower risk (i.e. lower FICO scores) was associated with higher risk premiums. After the law began to be implemented, the relationship between risk premiums and FICO scores of borrowers was very similar. Higher risk borrowers continued to pay virtually the same higher risk premiums. If the legislation actually reduced predatory lending in the state, then there should have been a significant change in the relationship between risk premiums and FICO scores after enactment.

However, this was not the case (Chart 6).⁶⁶



In addition, to the positive relationship between risk and risk premiums in both periods in North Carolina, there was also a similar relationship in a group of surrounding states where no such legislation was enacted. As illustrated in Chart 6, the level of average risk premiums in North Carolina and surrounding states, for loans with scores in the same FICO range, differed by no more than about 50 basis points during the pre- and initial post-enactment periods. Therefore, according to Elliehausen and Staten, the data do not suggest that the relationship between interest rates on subprime loans and borrower risk in North Carolina was altered, relative to the comparison states, as a result of the state's anti-predatory law. This casts further doubt on the view that the decline in lending in North Carolina following the passage of the anti-predatory statutes resulted entirely from eliminating predatory practices.⁶⁷

Issue #16: What is the Role for CRA In Curbing Predatory Lending Abuses?

As it is currently implemented, CRA does not penalize banks that engage in predatory lending, directly or indirectly. Some policymakers and researchers have recommended that CRA be utilized to create disincentives to banks that engage in or provide indirect support for predatory lending. Engel and McCoy (2002) recommend that federal bank regulators use CRA to penalize behavior that could further predatory lending. They identify two justifications for the use of CRA in reining in predatory lending. The first justification stems from CRA's goal of encouraging banks to serve the credit needs of their communities. If CRA is creating incentives for banks to engage in predatory lending, then CRA is actually defeating one of its stated goals according to Engel and McCoy. The second justification, according to the two professors arises from the fact that banks are the recipients of special government privileges in the form of exclusive charters, federal deposit insurance and so forth. These subsidies are considered part of the rationale for imposing CRA obligations on banks. If banks use these privileges to harm the communities they serve, there is a role for CRA in scrutinizing bank activities.⁶⁸

A potential issue with Engel's and McCoy's analysis is that its conclusions rest upon a number of assumptions, each of which is not entirely clear-cut. For example, the two professors state that "predatory lending has surged" and therefore, there is a role for CRA to rein in these abuses. However, as analyzed earlier, while anecdotal evidence suggests that predatory lending is a problem, its magnitude remains unclear, particularly among banks. Moreover, despite the fact that many economists and other researchers have examined the issue, there remains much debate over whether the higher rates and fees charged on many subprime loans are predatory or simply reflect higher borrower risk, servicing costs or demand factors related to the macroeconomy. In addition, Engel's and McCoy's own report points out that predatory lending by banks is probably insignificant due partly to a whole host of disincentives.

Another assumption of Engel and McCoy, is that banks are subsidized by the taxpayer supported deposit insurance system and other factors. They assert that banks receive special government privileges in the form of exclusive charters, federal deposit insurance and so forth. According to Engel and McCoy, these subsidies are considered part of the rationale for imposing CRA obligations on banks.⁶⁹ However, there is actually a good deal of debate among economists as to whether or not banks are actually subsidized. For example, a rough measure of the fair value of deposit insurance is what banks pay customers for uninsured deposits, over and above what they pay customers for insured deposits. Surveys of institutional brokers on Wall Street typically demonstrate that well-capitalized banks typically pay little or no premium for uninsured money. At the same time, banks must pay for deposit insurance and in addition incur considerable expense to comply with a broad array of regulatory requirements.

Endnotes:

¹ U.S. Department of Housing and Urban Development (2000), "Unequal Burden in Atlanta: Income and Racial Disparities in Subprime Lending," Washington, D.C. Companion studies were also performed by HUD for Baltimore, Los Angeles, and New York and Chicago.

² "Risk or Race? Racial Disparities and the Subprime Refinance Market," A Report of the Center for Community Change, prepared by Calvin Bradford, Calvin Bradford & Associates, LTD. May 2002, Executive Summary.

³ "The Impact of North Carolina's Anti-Predatory Lending Law: A Descriptive Assessment," Roberto G. Quercia, Michael A. Stegman, Walter R. Davis, Center for Community Capitalism, The Frank Hawkins Kenan Institute of Private Enterprise, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3440, June 25, 2003.

⁴ "Regulation of Subprime Mortgage Products: An analysis of North Carolina's Predatory Lending Law," by Gregory Elliehausen and Michael Staten, Credit Research Center Working Paper #66, November 2002.

⁵ The before and after periods looked at by Elliehausen and Staten were different than those used in the Quercia, Stegman and Davis study. The pre-enactment period used by Elliehausen and Staten went from the first quarter of 1997 through the third quarter of 1999, immediately prior to the implementation date of the first set of new regulations under the North Carolina anti-predatory statute on October 1, 1999 (essentially the same as the period used in the Quercia, Stegman and Davis study). However, the AFSA database ends its coverage in June of 2000, one month before the final implementation date of the law. Therefore, the second period examined in the Elliehausen and Staten study only includes originations from the fourth quarter of 1999 through the second quarter of 2000. Elliehausen and Staten assert that because the statute was phased in over 12 months, the impact of the North Carolina measure would be seen on originations before the final implementation date (July 1, 2000). He concedes that the window for detecting alterations in lending patterns following passage of the North Carolina law is brief. However, he points out that parts of the statute (most notably the prohibition on prepayment penalties) became effective as early as October 1, 1999 and all of the new regulations were known to lenders as early as July 1999. So, Elliehausen and Staten (p. 10) assert that it is reasonable to expect that creditors would not wait for the law to be fully effective to adjust their lending behavior.

⁶ "Impact of Predatory Lending Laws on RMBS Securitizations," by Christine Lachnicht, Moody's Investors Service, Structured Finance, Special Report, March 26, 2002, pp. 1,5.

⁷ "Predatory Lending," HUD Treasury Special Report, U.S. Department of Housing and Urban Development 451 7th Street S.W., Washington, DC 20410. p. 44.

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- ⁸ HUD Treasury Special Report, p. 44.
- ⁹ “The CRA Implications of Predatory Lending,” Kathleen C. Engel and Patricia A. McCoy, 29 Fordham Urban Law Journal 1571 (2002) forthcoming, p.16.
- ¹⁰ Engel and McCoy, p. 7, footnote (citing HUD).
- ¹¹ Engel and McCoy, p. 19 (citing Robert E. Litan et al., The Community Reinvestment Act After Financial Modernization: A Baseline Report 2 (2000).
- ¹² Engel and McCoy, p. 19 (citing HUD Treasury Report).
- ¹³ HUD Treasury Special Report, p. 30.
- ¹⁴ HUD Treasury Special Report, p. 31.
- ¹⁵ HUD Treasury Special Report, pp. 31.
- ¹⁶ HUD Treasury Special Report, p. 41.
- ¹⁷ Engel and McCoy, pp. 2-3.
- ¹⁸ “Separate and Unequal: Predatory lending In America,” Association of Community Organizations for Reform Now, November 2002, p. 2.
- ¹⁹ Engel and McCoy, p. 7.
- ²⁰ Engel and McCoy, pp.15-17 (citing Litan)
- ²¹ Engel and McCoy, p. 7, footnote (citing HUD).
- ²² Engel and McCoy, p. 19 (citing Litan).
- ²³ Engel and McCoy, p. 19 (citing HUD Treasury Report).
- ²⁴ These data appear in the first appendix table of: “On the Economics of Subprime Lending,” by Amy Crews Cutts and Robert Van Order, March 2003 (obtained from the Freddie Mac Website, <http://www.freddiemac.com/corporate/reports/>).
- ²⁵ These data appear in the first appendix table of: “On the Economics of Subprime Lending,” by Amy Crews Cutts and Robert Van Order, March 2003 (obtained from the Freddie Mac Website, <http://www.freddiemac.com/corporate/reports/>).
- ²⁶ “What About Subprime Mortgages,” Mortgage Market Trends, Research and Analysis, Office of Thrift Supervision, Washington, DC. Volume 4, Issue 1, June 2000, p. 2.
- ²⁷ “What About Subprime Mortgages,” Mortgage Market Trends, Research and Analysis, Office of Thrift Supervision, Washington, DC. Volume 4, Issue 1, June 2000, p. 2.
- ²⁸ Mortgage Market Trends, OTS, p. 11.
- ²⁹ Cutts and Van Order. p. 4-5.
- ³⁰ Mortgage Market Trends, OTS, p. 12.
- ³¹ Based on data appearing in Figure 1 in the appendix of: “On the Economics of Subprime Lending,” by Amy Crews Cutts and Robert Van Order, March 2003. The study cites Loan Performance, and the Freddie Mac Primary Mortgage Market Survey as the original source for the data.

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- ³² Cutts and Van Order, p. 5.
- ³³ Cutts and Van Order, p. 5.
- ³⁴ Specialty Lender Weekly, September 11, 2000.
- ³⁵ “Subprime Lending: An Investigation of Economic Efficiency,” Howard Lax, Michael Manti, Paul Raca, Peter Zorn, Corresponding author: Peter Zorn, Freddie Mac, December 21, 2000, p. 18.
- ³⁶ Lax, Manti, Raca, and Zorn, p. 18.
- ³⁷ Lax, Manti, Raca, and Zorn, p. 22.
- ³⁸ Lax, Manti, Raca, and Zorn, p. 17.
- ³⁹ Lax, Manti, Raca, and Zorn, pp. 17-19. The authors point out that their analysis does not take into account the higher average origination points and fees paid by subprime borrowers. So their figure of 100 basis points may underestimate the degree of inefficiency in the subprime market, according to the study. However, spreads have come down since the time of the study, so this would counter some of that effect.
- ⁴⁰ Lax, Manti, Raca, and Zorn, pp. 12-16.
- ⁴¹ Lax, Manti, Raca, and Zorn, pp. 19.
- ⁴² In Lax, Manti, Raca and Zorn, p. 20, it states: “... Nor is there the overall standardization of products, underwriting and delivery systems that is found among prime lenders. Increasing price competition in the subprime sector is likely changing this, enhanced by the recently more aggressive entry of prime market participants.”
- ⁴³ Quercia, Stegman and Davis, pp. 21-22.
- ⁴⁴ Quercia, Stegman and Davis, pp. 21-22.
- ⁴⁵ Quercia, Stegman and Davis pp. 1-6.
- ⁴⁶ Interagency Guidance on Subprime Lending, originally issued on March 1,1999.
- ⁴⁷ These changes in the database are pointed out in the study, and our comments on the database are adapted from those provided in the study. [See Quercia, Stegman and Davis, footnote 8 on p. 18].
- ⁴⁸ See endnote 5.
- ⁴⁹ Elliehausen and Staten, pp. 13-15.
- ⁵⁰ “Regulation of Subprime Mortgage Products: An analysis of North Carolina’s Predatory Lending Law,” by Gregory Elliehausen and Michael Staten, Credit Research Center Working Paper #66, November 2002.
- ⁵¹ “Regulation of Subprime Mortgage Products: An analysis of North Carolina’s Predatory Lending Law,” Credit Research Center Working Paper #66, November 2002, by Gregory Elliehausen and Michael Staten.
- ⁵² See endnote 5.
- ⁵³ Elliehausen and Staten, p. 14 and appendix Chart 4.
- ⁵⁴ Elliehausen and Staten, pp. 14-15.
- ⁵⁵ See endnote 5.

⁵⁶ Comments from a memorandum by Peter J. Nigro to Jonathan Fiechter entitled: “Summary of Research of Predatory Lending Law. “ The memo summarized an earlier piece entitled: “How do Predatory Lending Laws Influence Mortgage Lending in Urban Areas? A Tale of Two Cities,” by Keith Harvey and Peter J. Nigro, Unpublished Abstract, March 2002.

⁵⁷ U.S. Department of Housing and Urban Development (2000), “Unequal Burden in Atlanta: Income and Racial Disparities in Subprime Lending,” Washington, D.C. Companion studies were also performed by HUD for Baltimore, Los Angeles, and New York.

⁵⁸ “Risk or Race? Racial Disparities and the Subprime Refinance Market,” A Report of the Center for Community Change, prepared by Calvin Bradford, Calvin Bradford and Associates, LTD. May 2002, Executive Summary.

⁵⁹ Bradford, Executive Summary.

⁶⁰ “Regulation of the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac)” 65 Fed. Reg. 65,044, 65,053 (Oct. 31, 2000).

⁶¹ “Automated Underwriting: Making Mortgage Lending Simpler and Fairer for America’s Families,” Freddie Mac, ch. 5 and pp 5-6 (Sept. 1996).

⁶² Mortgage Market Trends, OTS, p. 8.

⁶³ Lax, Manti, Raca, and Zorn, pp. 15.

⁶⁴ Ellichehausen and Staten, pp. 14-15.

⁶⁵ Ellichehausen and Staten, pp. 14-15.

⁶⁶ Ellichehausen and Staten, pp. 14-15.

⁶⁷ Ellichehausen and Staten, pp. 14-15.

⁶⁸ “The CRA Implications of Predatory Lending,” Kathleen C. Engel and Patricia A. McCoy, 29 Fordham Urban Law Journal 1571 (2002) forthcoming.

⁶⁹ Engel and McCoy, pp. 20-23.