



Borrowers in Higher Minority Areas More Likely to Receive Prepayment Penalties on Subprime Loans

A research report by the
Center for Responsible Lending

Principal Investigators: Debbie Gruenstein Bocian and Richard Zhai

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Introduction

Unlike borrowers in the prime mortgage market, borrowers with less-than-perfect credit typically receive subprime mortgage loans that come with a significant penalty for paying off the loan early. In fact, while only two percent of loans in the prime market contain prepayment penalties, these penalties are found in up to 80 percent of subprime mortgage loans.¹ The widespread use of prepayment penalties in the subprime mortgage market raises major issues for borrowers, particularly homeowners in communities of color. **This report finds that borrowers in minority neighborhoods face greater odds of receiving a subprime prepayment penalty by a statistically significant margin.**

This finding has important implications for homeownership in communities of color and the ability of minority borrowers to build wealth. Two-thirds of the net wealth held by African Americans and Latinos consists of home equity.² Prepayment penalties threaten these savings by putting families in a no-win situation. First, for homeowners who improve their credit position enough to refinance into a cheaper prime mortgage product, prepayment penalties act as just that – penalties. The equity savings accumulated by these families are eroded when they must pay a substantial fee -- typically three to five percent of the total loan amount -- to escape their subprime mortgage loan. Second, if this prepayment penalty is too large, these families are effectively trapped in high-interest loans, when otherwise their credit would enable them to refinance at a lower rate.

In a companion study published today by the Center for Responsible Lending (CRL), we find that prepayment penalties, despite assertions by the mortgage industry, do not provide a benefit to borrowers in the form of a lower interest rate. Given the role of home equity in establishing economic security, the detrimental effects of prepayment penalties, and the importance of homeownership to minority wealth creation, CRL investigated whether these penalties have any disparate impact on minority communities.

Key Findings

To analyze this issue, CRL researchers Debbie Gruenstein Bocian and Richard Zhai examined the incidence of prepayment penalties in zip code areas with defined concentrations of minority residents. This study is based on a nationwide sample of 1.8 million loans originated from January 2000 to July 2004.

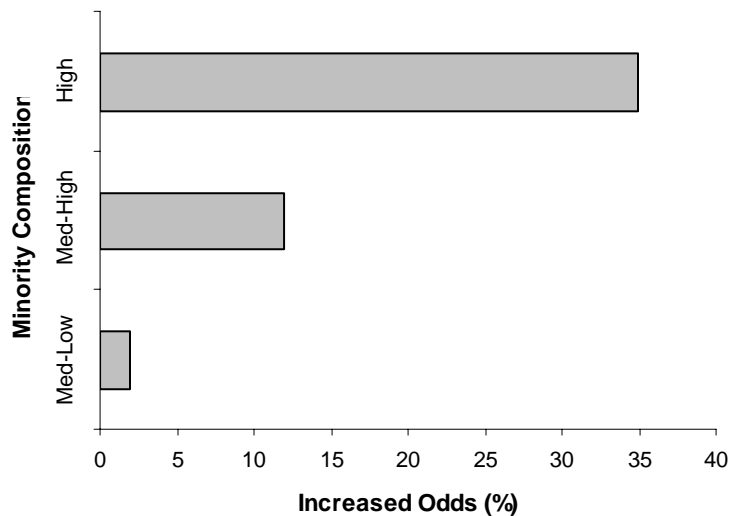
This analysis shows that borrowers in minority neighborhoods receive a disproportionate number of loans with prepayment penalties. For borrowers living in zip code areas where more than half of residents represent minority groups, the odds of receiving prepayment penalties are 35 percent higher than those of similarly situated borrowers in zip codes where minorities comprise less than ten percent of residents. The odds of borrowers receiving prepayment

penalties are consistently and positively associated with minority concentration, and the differences are statistically significant.

As a sample, the chart to the right depicts our findings for penalty terms effective for three years or longer. Each result represents increased odds of receiving a prepayment penalty compared to residents in zip code areas with a “low”* concentration of minority residents. The chart shows that borrowers who live in zip code areas with a “medium-low” concentration of minority residents have slightly increased odds (about two percent) of receiving a prepayment penalty. The odds rise to 11.9 percent greater for borrowers in zip code areas with medium-high concentrations of minorities, and for those in high-concentration areas, the odds are nearly 35 percent greater.

Subprime Mortgages

Increased Odds of Receiving a 36+-Month Prepayment Penalty Compared to Low-Minority Areas* (in percentages)



* Minority concentration was defined as “low” (less than 10 percent of zip code residents); “medium-low” (10 – 24 percent); “medium-high” (25 – 49 percent); and “high” (greater than or equal to 50 percent).

CRL recently published a study that showed a similar preponderance of prepayment penalties in rural communities.³ Specifically, that analysis revealed that borrowers in rural communities are more likely than similar urban borrowers to receive subprime mortgages with prepayment penalties that have terms of three years or longer. Given the relatively low levels of wealth held by residents in rural and minority areas, the two studies reveal that prepayment penalties are disproportionately stripping away savings from already disadvantaged communities.

Background

The wealth gap between whites and people of color is well established and growing. According to a recent report by the Pew Hispanic Center,⁴ in 2002 African Americans and Latinos had a median net worth of \$5,998 and \$7,932, respectively, compared to white Americans' median net worth of \$88,651. In other words, white families' median net worth is about 11 times greater than Latinos' and nearly 15 times greater than the median net worth held by African Americans. Moreover, these figures represent a **decline** from median net worth held by minority families in 2000, which was \$7,500 for African Americans and \$9,750 for Latinos, compared to an increase from \$79,400 for white Americans. Among African American and Latino homeowners, the median family in each group held 88 percent of its total wealth in the form of home equity. These figures illustrate that home equity is a critical factor in determining economic progress among these populations.

When prepayment penalties are imposed, the equity drained from a borrower's home can be significant. A typical penalty is equal to six months' interest on any prepayment greater than 20 percent of the mortgage balance. In the context of a subprime loan with an interest rate of 10 percent, this penalty amounts to approximately four percent of the loan balance. For example, a borrower with a \$150,000 mortgage would incur a \$6,000 fee for prepaying this loan -- more than the median level of wealth owned by African-American families. Also, because penalty amounts increase as interest rates climb, many borrowers with adjustable-rate mortgages face higher penalties at precisely the time they might otherwise realize greater benefits from refinancing.

Borrowers refinance for many reasons, including family emergencies, tapping into equity for important investments such as education, or to obtain a less costly loan. Prepayment penalties in the subprime market may harm these borrowers in several ways:

1. Draining equity. Many homeowners with subprime loans have worked hard for years to accumulate equity in their homes. A prepayment penalty, routinely amounting to thousands of dollars, directly drains home equity when a borrower refinances and must pay the penalty.
2. Creating a high-cost trap. Sometimes borrowers simply cannot afford the cost of the prepayment penalty. In such cases, they may be forced to continue paying a higher interest rate when they could otherwise refinance and qualify for a more affordable loan.
3. Providing an incentive for kickbacks. When brokers deliver loans at a higher interest rate than the lender requires, the lender typically pays the broker a kickback, known as a "yield spread premium." Because lenders want to recoup the cost of the kickback even if the borrower pays off early, they are more willing

to pay yield spread premiums on loans with prepayment penalties. For this reason, prepayment penalties facilitate brokers charging higher interest rates for borrowers who could otherwise qualify for lower rates.

Prepayment penalties have become increasingly common in the subprime market in recent years, at a level far out of proportion to the prime mortgage market. The wide disparity between the two markets raises substantial doubts as to whether consumer choice explains the prevalence of prepayment penalties in the subprime market, especially given subprime borrowers' incentive to build a good credit history and refinance as soon as feasible.

Concurrently with the present analysis, the Center for Responsible Lending (CRL) is releasing research showing that homeowners receive no interest rate benefit on refinanced subprime mortgages with prepayment penalties, and homebuyers actually pay a higher interest rate than similarly situated borrowers for subprime purchase loans.⁵ This research refutes the claim made by many subprime lenders who assert that their borrowers accept prepayment penalties in return for a lower interest-rate than otherwise would be available.

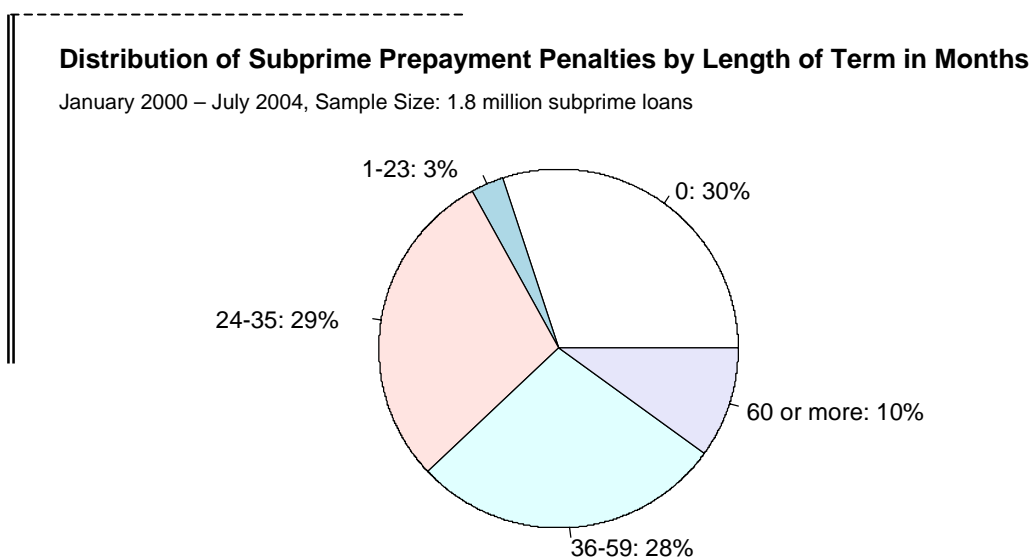
Data and Methodology

This study employed multivariate regression models to examine the effects of living in zip code areas of various minority concentrations on the odds of receiving a prepayment penalty. A geographic proxy was used because direct information on borrower demographics was not available. The analysis relies on logistic regressions performed on 1.8 million loans from the Loan Performance Asset-Backed Securities database of securitized subprime loans.⁶ The results estimate the odds that subprime borrowers in neighborhoods with different racial compositions will receive prepayment penalties, controlling for a host of borrower, property and loan characteristics, as shown in Appendix 1. Appendix 2 displays the regression results for various prepayment penalty terms.

Reflecting general trends in the subprime mortgage market as a whole, 70 percent of loans carried a prepayment penalty.⁷ More than 65 percent of the sample loans had a prepayment penalty term of at least two years. One in ten loans included a prepayment penalty with a term of five years or longer. Appendix 3 displays a cross-tabulation of the data by minority concentration in zip code areas and prepayment penalty terms.

Database Characteristics	
Number of loans examined	1.8 million
Origination period	January 2000 – July 2004
Refinances	68%
Single-family residences	84%
Average loan amount	\$115,266
Adjustable rates	52%
Loans with prepayment penalties	70%

The figure below shows the percentage breakdown of the loans by prepayment term.



Findings

As shown in the chart below, subprime borrowers who live in zip code areas with a higher-minority concentration have a greater chance of receiving a prepayment penalty than similarly situated subprime borrowers who live in lower minority areas.

For borrowers in medium-high minority areas, the odds of receiving prepayment penalties of two years or more is 10 percent greater than that of similarly situated borrowers in low minority areas. The increase in odds rises to 12 percent and 17 percent for prepayment penalties of three or more years and five or more years, respectively. Even more striking, the odds of borrowers in high minority areas receiving any prepayment penalty (of at least two years) are more than 30 percent higher than those in low-minority areas.⁸

Subprime Mortgages

Increased Odds* of Receiving Prepayment Penalties with Various Terms in Zip Code Areas Characterized by Concentration of Minority Residents (in percentages)

Penalty Term	Minority Concentration		
	Med-Low	Med-High	High
24+ months	0.3**	10.4	35.3
36+ months	1.9	11.9	34.9
60+ months	3.4	17.0	32.7

* Compared to residents in areas with "low" minority populations. Minority concentration was defined as "low" (less than 10 percent of zip code residents); "medium-low" (10 – 24 percent); "medium-high" (25 – 49 percent); and "high" (greater than or equal to 50 percent).

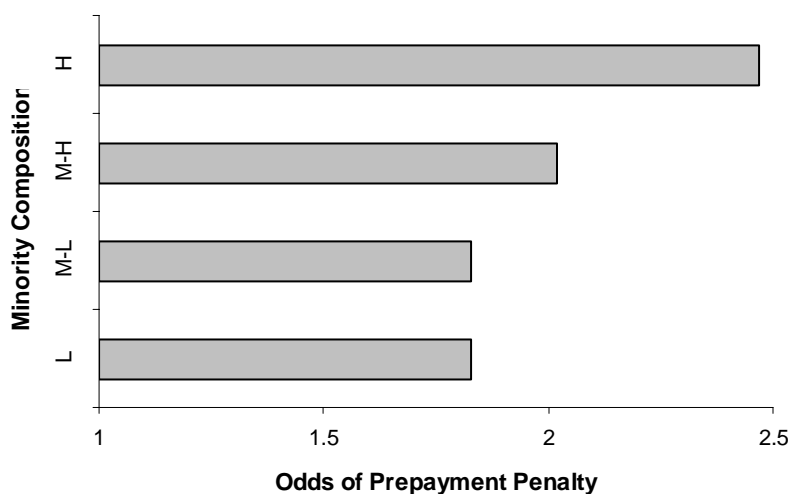
** All results are statistically significant (p<0.001) except this cell.

It is important to emphasize that this analysis compares *similarly situated* borrowers -- i.e., we controlled for key borrower, property and loan characteristics, such as borrower credit scores -- to ensure that the results were not based on differences in risk factors. By isolating the effects of minority concentration in a large sample of zip codes, the study uncovered a statistically significant disparity in the incidence of prepayment penalties between areas with predominantly white residents and those with higher concentrations of racial and ethnic minorities.

To extend this analysis, we also examined the absolute odds of receiving a prepayment penalty for a typical subprime borrower in 2004.⁹ The analysis attributed a uniform set of properties to a single borrower based on median values for key dataset characteristics such as loan-to-value, loan amount, debt-to-income and FICO score. Through this method, we were able to estimate the odds of receiving a prepayment penalty for a borrower with no relevant distinguishing factors except neighborhood racial composition. The chart on the following page displays the results.

Subprime Mortgages

A Typical Borrower's Odds of Receiving a Prepayment Penalty by Racial Composition in Zip Code Area (Loans originated in 2004)



As shown above, for a typical borrower living in a low or medium-low minority area, the odds of receiving a prepayment penalty are essentially the same.¹⁰ For every subprime borrower in lower minority areas without a prepayment penalty, 1.8 typical subprime borrowers in the same areas will receive one. The similar result for both of the lower minority categories reflects the general high prevalence of prepayment penalties in the subprime market. However, in areas with a medium-high concentration of minority residents, the odds increase to two borrowers with the prepayment penalties for every borrower without one. For typical borrowers in communities with the highest portion of minority residents, the odds of receiving a prepayment penalty are the highest, showing 2.5 typical borrowers with prepayment penalties for every borrower without one.

Taken together, both our comparative and “typical borrower” findings show that neighborhood racial composition is a significant factor associated with receiving a prepayment penalty in the subprime market. In the simplest terms, the odds of avoiding a prepayment penalty on a subprime loan are significantly better for borrowers who live in predominantly white neighborhoods.

Conclusion and Comments

The drain on savings caused by prepayment penalties in the subprime market, the lack of compensating benefits, and the disproportionate impact on communities of color combine to create a powerful indictment of a practice that imposes higher costs on citizens who have less access to traditional markets. Given that subprime mortgage lending with prepayment penalties has increased exponentially at the same time as minority family wealth has suffered a historic drop, our findings raise critical questions regarding the preservation of homeownership in minority families.

In order to protect family wealth, policymakers should take steps to ban abusive prepayment penalties in subprime mortgage loans. The problematic nature of subprime prepayment penalties is already widely recognized. Numerous states have passed laws and issued regulations to prohibit or restrict the use of prepayment penalties in the home mortgage market. Currently, laws banning prepayment penalties are effective in at least nine states, including states that allow for limited exceptions.¹¹ Other states have imposed specific limits, including limits on the amount of fees associated with the penalties, permissible loan types, or additional lender disclosure requirements. Freddie Mac and Fannie Mae both have announced that they will not invest in subprime home loans with prepayment penalties that remain in effect for more than three years.¹² Currently, federal law and regulations offer few restrictions on prepayment penalties and enable some mortgage lenders to ignore state law restrictions on prepayment penalties.

Some individual lenders already have taken steps to voluntarily limit the use and scope of prepayment penalties. Responsible subprime mortgage lenders throughout the nation have a strong interest in abiding by fair lending laws and ensuring that loan transactions adhere to those laws both in letter and in spirit. In any case, it is clear that the issue of prepayment penalties in the subprime mortgage market carries major implications for the future economic state of minority communities, and is one to be taken seriously.

For most families, homeownership is a critical component of building assets and securing a more prosperous future. Asset building is even more critical in rural communities and in communities of color, where the overall populations lag far behind both in wealth and ownership. For this reason, the impact of prepayment penalties in subprime mortgage loans is a key issue that has major ramifications for borrowers in disadvantaged groups throughout the country.

About the Center for Responsible Lending

The Center for Responsible Lending is a nonprofit, nonpartisan research and policy organization dedicated to protecting home ownership and family wealth by working to eliminate abusive financial practices. CRL is affiliated with Self-Help, one of the nation's largest community development financial institutions.

For additional information, please visit our website at www.responsiblelending.org.

Notes

¹ See Standard & Poor's, "NIMS Analysis: Valuing Prepayment Penalty Fee Income," at <http://www.standardandpoors.com> (January 3, 2001); *see also* Standard & Poor's, "Legal Criteria Reaffirmed for the Securitization of Prepayment Penalties," at <http://www.standardandpoors.com> (May 29, 2002); "Prepayment penalties prove their merit for subprime and 'A' market lenders," <http://www.standardandpoors.com> (January 3, 2001); *see also* "Freddie offers a new A-, prepay-penalty program," *Mortgage Marketplace*, at 1-2 (May 24, 1999); *see also* Joshua Brockman, "Fannie revamps prepayment-penalty bonds," *American Banker* at 16 (July 20, 1999).

² Rakesh Kochkar, "The Wealth of Hispanic Households: 1996 to 2002" (Pew Hispanic Center, 2004).

³ John Farris and Christopher A. Richardson, "The Geography of Subprime Mortgage Prepayment Penalty Patterns" in *Housing Policy Debate* (Fannie Mae Foundation), vol. 15, issue 3 (2004). Also available at CRL's website at www.responsiblelending.org.

⁴ Kochkar, *ibid.*

⁵ "Prepayment Penalties Convey No Interest Rate Benefits on Subprime Mortgages," CRL report released January 13, 2005. Available at www.responsiblelending.org.

⁶ For more information on this database, see Farris and Richardson, pp. 689-690.

⁷ The results discussed here may be conservative given that the portion of prepayment penalties in the general subprime market is often reported to be considerably higher, representing up to 80 percent of all subprime loans.

⁸ Prepayment penalty terms less than 24 months were not needed in the study because of their relatively infrequent occurrence.

⁹ In 2004, our typical borrowers received a 30-year adjustable-rate refinance loan of \$100,000. Other typical characteristics include residence in a large central city, a credit score of 628, a loan-to-value of 85 percent, and a debt-to-income ratio of 40 percent.

¹⁰ Due to rounding, the figures displayed do not show small differences.

¹¹ For example, in North and South Carolina, the ban on prepayment penalties is limited to loan amounts less than \$150,000.

¹² We note that these restrictions have had no discernible effect on the availability of subprime mortgages or the rapid growth of the subprime market. According to *Inside B&C Lending* (Nov. 18, 2004), nearly 21 percent of all mortgage loans are now subprime, more than double the percentage in 2001 – 2003.

APPENDIX 1

Definition of Variables

Variable Name	Description
A_cen	Loans with zip codes in an MSA with population of 1 million or more and in the central city of an MSA
A_ncen	Loans with zip codes in an MSA with population of 1 million or more but not in the central city of an MSA
B_cen	Loans with zip codes in an MSA with population of 250,000 ~999,999 and in the central city of an MSA
B_ncen	Loans with zip codes in an MSA with population of 250,000 ~999,999 but not in the central city of an MSA
C_ncen	Loans with zip codes in an MSA with population of 100,000 ~249,999 but not in the central city of an MSA
D_cen	Loans with zip codes in an MSA with population less than 100,000 and in the central city of an MSA
Rural	Loans with zip codes not included in any MSA
Fico *	Borrowers' credit score at origination
Orig_amt*	Loan origination amount
DTI*	Borrowers' debt to income ratio
LTV*	Original loan to value ratio
Less_30yrs	Loans with term less than 30 years
Refi	Loans for refinance purpose
Low_doc	Loans not clearly indicating that they are full documented
No_doc	Loans under a no documentation program
Condo	Loans with property type as condo
Coop	Loans with property type as coop
Townhouse	Loans with property type as townhouse
PUD	Loans with property type as Planned Unit Development
MH	Loans with property type as manufactured house
ARM	Adjustable rate mortgage
Balloon	Loans with balloon payment
Orig_2001	Loans originated in 2001
Orig_2002	Loans originated in 2002
Orig_2003	Loans originated in 2003
Orig_2004	Loans originated in 2004
AMPTA_rev	Loans originated after 07/01/2003 when the revised Parity Act law enacted
Race_medlow**	Loans originated in areas with minority percentage of 10%~25%
Race_medhigh**	Loans originated in areas with minority percentage of 25~50%
Race_high**	Loans originated in areas with minority percentage greater than 50%

* Denotes continuous numerical variables; all other independent variables are dummy variables.

** Latinos and multiracial individuals are classified as minority even if one of the races they self-identify as is Caucasian.

APPENDIX 2

Output of Logistic Regression Models Predicting the Probability of Receiving Various Prepayment Penalty Terms (2000-July 2004 Originations: ALL LOANS)

	2+ Years PP			3+ Years PP			5+ Years PP		
	A	B	C	A	B	C	A	B	C
Intercept		3.4381			1.1183			1.6042	
a_cen	0.866	-0.1443	***	0.829	-0.1871	***	0.893	-0.1129	**
a_ncen	0.893	-0.1136	***	0.858	-0.1532	***	0.917	-0.087	
b_cen	1.034	0.0332		0.984	-0.0166		1.128	0.1208	**
b_ncen	1.011	0.0112		0.949	-0.0527		1.055	0.0531	
c_cen	1.005	0.00494		0.941	-0.0608	*	1.108	0.1029	*
c_ncen	1.005	0.00464		0.964	-0.037		1.099	0.0948	*
d_cen	1.002	0.00217		1.029	0.0282		1.114	0.108	
rural	1.095	0.0906		1.084	0.0807	**	1.428	0.3564	***
fico	0.995	-0.00549	***	0.999	-0.0009	***	0.997	-0.0027	***
orig_amt	1	0.0000019	***	1	0.0000013	***	1	0.0000024	***
DTI	1.011	0.0107	***	1.007	0.0073	***	1.001	0.00102	***
ltv	0.997	-0.00337	***	0.989	-0.0113	***	0.979	-0.0215	***
less_30yrs	0.498	-0.6969	***	0.545	-0.6075	***	0.824	-0.1931	***
Refi	0.979	-0.0215	***	1.825	0.6016	***	1.95	0.6676	***
low_doc	0.744	-0.2955	***	0.771	-0.2605	***	0.773	-0.2571	***
no_doc	0.541	-0.6149	***	0.792	-0.2334	***	1.05	0.0492	
condo	0.864	-0.1463	***	0.844	-0.1699	***	0.968	-0.0323	**
coop	1.256	0.2278	*	1.198	0.1804		1.172	0.1588	
townhouse	0.897	-0.1085	***	1.26	0.2311	***	1	0.000132	
PUD	0.772	-0.2588	***	0.684	-0.3803	***	0.767	-0.2656	***
MH	0.991	-0.00917		1.191	0.1752	***	1.01	0.0103	
ARM	2.165	0.7726	***	0.291	-1.2329	***	0.203	-1.5928	***
balloon	1.372	0.3161	***	0.78	-0.2482	***	1.088	0.0847	***
orig_2001	1.045	0.0439	***	0.898	-0.1071	***	0.572	-0.5591	***
orig_2002	0.793	-0.2318	***	0.571	-0.5611	***	0.332	-1.1037	***
orig_2003	0.723	-0.3249	***	0.471	-0.7537	***	0.129	-2.0452	***
orig_2004	0.75	-0.2882	***	0.335	-1.0949	***	0.22	-1.5164	***
AMPTA_rev	0.957	-0.0434	***	0.908	-0.096	***	0.654	-0.4251	***
race_medlow	1.003	0.0029		1.019	0.0188	***	1.034	0.0332	***
race_medhigh	1.104	0.0991	***	1.119	0.1124	***	1.165	0.1529	***
race_high	1.352	0.3016	***	1.349	0.2993	***	1.327	0.2827	***
2*Log Likelihood		1712905			2001917			861338	
Cox and Snell R ²		0.2969			0.2002			0.1335	
Nagelkerke R ²		0.4101			0.2736			0.2912	

A Odds ratios
 B Parameter estimates
 C *** Significant at 99% confidence level
 ** Significant at 95% confidence level
 * Significant at 90% confidence level

All models control for fixed state effects through state dummy variables (not shown)

APPENDIX 3

Cross-Tabulation of Subprime Mortgage Loans Analyzed, n=1.8 million
(By Prepayment Penalty Term and Minority Concentration)

PP term in months	Minority Concentration in Zip Code Areas				Total
	<u>Low</u>	<u>Middle Low</u>	<u>Middle High</u>	<u>High</u>	
0	6.36 ¹	8.87	7.51	7.25	30.00
	21.20 ²	29.58	25.04	24.18	
	27.90 ³	34.42	31.99	25.97	
1 - 23	0.81	0.88	0.68	0.89	3.26
	24.74	26.99	21.00	27.27	
	3.53	3.41	2.91	3.18	
24 - 35	5.89	7.06	7.19	9.06	29.20
	20.16	24.18	24.62	31.03	
	25.83	27.39	30.61	32.44	
36 - 59	7.25	6.79	6.07	8.08	28.19
	25.72	23.31	21.54	28.67	
	31.80	8.46	25.86	28.94	
60 or more	2.49	2.18	2.03	2.65	9.35
	26.66	23.31	21.70	28.33	
	10.94	8.46	8.64	9.48	
Total	22.8	25.78	23.48	27.93	100.00

¹ Table percentage.

² Row percentage.

³ Column percentage.