



## Comment on Federal Reserve Analysis of Home Mortgage Disclosure Act Data

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Center for Responsible Lending Comment on:

*Robert B. Avery, Glenn B. Canner, Robert E. Cook, "New Information Reported Under HMDA and Its Application in Fair Lending Enforcement" Federal Reserve Bulletin pp344-394 (Summer 2005).*

URL at: <http://www.federalreserve.gov/pubs/bulletin/2005/3-05hmda.pdf>

### Summary

For the first time in 2004, lenders were required to report information to the federal government concerning the annual percentage rate (APR) charged borrowers on higher-cost home loans. The same data, collected under the requirements of the Home Mortgage Disclosure Act (HMDA), also detail several aspects of the loan transaction and the identity of the borrower, including race, ethnicity, sex, and income. In this review, we both summarize and comment on a portion of the first report based on the new data that was written by Federal Reserve Board of Governors' researchers. In general, the Federal Reserve Bulletin article provides a helpful overview of the new HMDA data. We raise the following key points of interest:

#### About the Center for Responsible Lending

The Center for Responsible Lending (CRL) is a national 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](http://www.responsiblelending.org).

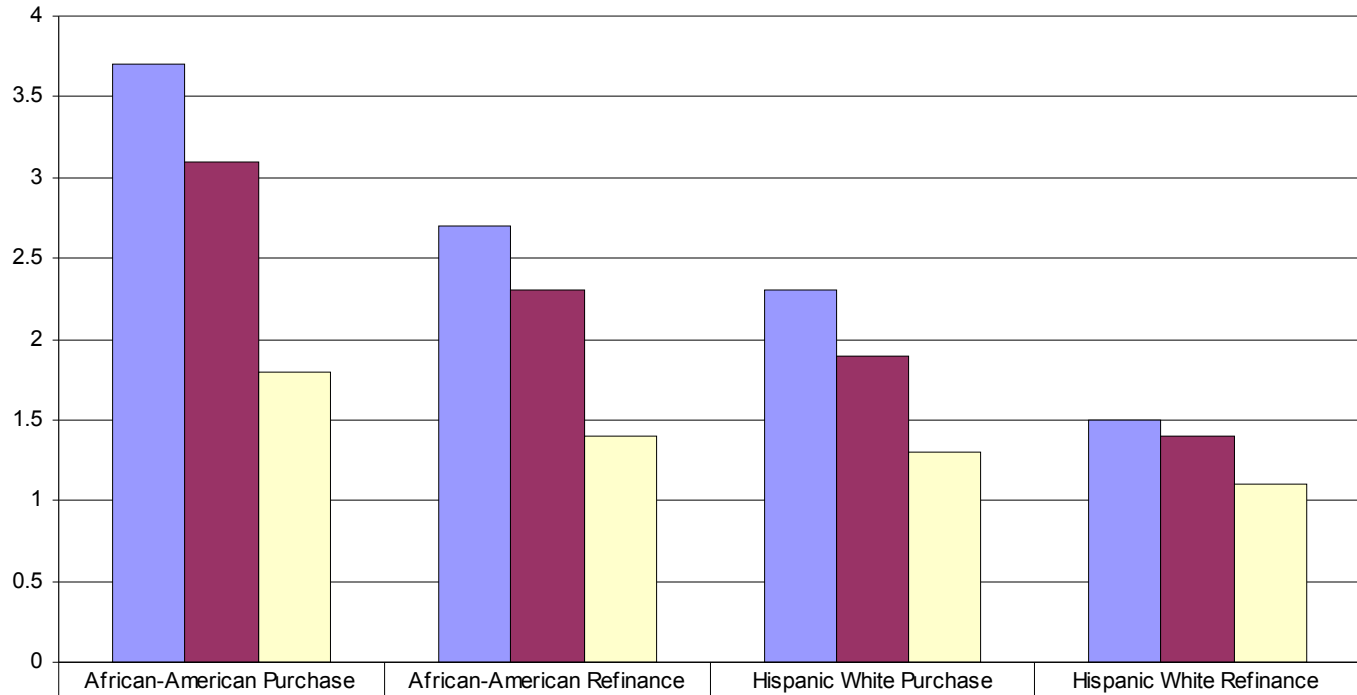
- 1. National data confirm initial estimates that African-American and Hispanic whites continue to be much more likely to receive a higher-cost subprime home loan than Non-Hispanic white borrowers.** Among borrowers who took a conventional loan to finance the purchase of a home, African-Americans were 3.7 times more likely to receive a higher-cost loan than Non-Hispanic whites. Hispanic white borrowers are 2.3 times more likely than Non-Hispanic white borrowers to receive such a loan.

2. **These disparities remain large even after accounting for borrower traits such as income, loan amount, location of the property, presence of a co-applicant and sex.** For example, African-American borrowers who took a loan to purchase a home are still over three times (3.1) more likely to receive a higher-cost home loan compared to Non-Hispanic white borrowers even after accounting for the contribution of these factors.
3. **The identity of the originating lender explains more of the disparities relating to whether a loan is higher-cost than do borrower traits such as income or loan amount.** As noted by the article's authors, this finding is consistent with three scenarios. One of these scenarios has minority borrowers being unfairly steered into higher-cost home loans. While existing evidence along these lines is not conclusive, the strong disparities evidenced in the data should compel policymakers and all concerned to reexamine whether minority borrowers are being steered and whether sufficient consumer protections are in place to prevent this predatory practice.
4. **Partial results presented from an analysis of eight unidentified subprime lenders conducted by Georgetown University's Credit Research Center are not informative.** The data likely used is limited in ways that make their applicability to concerns raised by HMDA of questionable value. Even recognizing such limits, the partial results presented do not add much to the understanding of the role of race and ethnicity in the pricing of mortgages in the market.
5. Finally, the article discusses methods enforcement authorities could apply to utilize the new HMDA data to identify potential discrimination in the market. **However, while useful for reviewing individual lenders, we find that the discussed methods are incomplete with respect to the need to tackle potential incidences of discriminatory steering in the home loan market generally or within complex corporate entities with different affiliates in particular.**

**Chart 1: Disparities in Higher-Cost Home Lending**

Source: Avery, Table 10, p377.

Times More Likely than Non-Hispanic whites to Receive a Higher-Cost Home Loan



	African-American Purchase	African-American Refinance	Hispanic White Purchase	Hispanic White Refinance
■ Unadjusted	3.7	2.7	2.3	1.5
■ Borrower Adjusted	3.1	2.3	1.9	1.4
■ Borrower & Lender Adjusted	1.8	1.4	1.3	1.1

## I. INTRODUCTION

Before commenting on the portions of the Federal Reserve article listed above that focus on disparities in the distribution of higher-cost subprime loans among borrowers of different racial and ethnic identities, we review the data generally, discuss concerns that have been linked closely to the fast-growing subprime home loan sector, and provide a brief digest of recent research that used HMDA data to ask similar questions about the market.

### ***About HMDA***

Enacted in 1975 and subsequently amended, the Home Mortgage Disclosure Act (HMDA) requires lenders to collect and publicly disclose information about housing-related loans and applications for such loans.<sup>1</sup> HMDA requires covered institutions to annually compile and disclose data about applications for, originations of, and purchases of home purchase loans, home improvement loans, and refinance loans. Institutions report information about each application or loan, and about each applicant or borrower.

This year, for the first time, HMDA regulations required lenders to include additional data when they filed their loan application registers for 2004, including which first mortgage loans had annual percentage rates (APRs) that were 3% higher than yields on comparable U.S. Treasury securities, a dynamic rate below that found in many subprime loans.<sup>2</sup> Because it includes information about the APR of loans with higher rates, the new HMDA data permits detailed lender-by-lender and aggregated analyses of the distribution of subprime home loans by race and ethnicity of borrowers and within geographic areas of interest.

In addition, the new HMDA data also allows researchers to explore subprime home lending by institutions that are predominantly prime lenders. Previously, analyses could only differentiate between lenders that were predominately prime and lenders that were predominately subprime. Many lenders actually make both types of loans through either a single entity or multiple units, and the new data offers the opportunity to consider the distribution of different types of loans by race, ethnicity, and geography.

<sup>1</sup> Whether an institution is covered by HMDA generally depends on its asset size, location, and whether it provides credit in urban areas.

<sup>2</sup> The new data elements that are available this year include:

- pricing information in the form of a rate spread between the loan's APR and the yield on Treasury securities having comparable periods of maturity for (1) first liens with a rate spread of 3% or more and (2) subordinate liens with a rate spread of 5% or more;
- whether an originated or purchased loan is subject to the Home Ownership and Equity Protection Act of 1994 (HOEPA);
- modified race/ethnicity data
  - Race and ethnicity are now captured as two separate fields per Office of Management and Budget standards
  - Applicants can select up to 5 race categories in addition to an ethnicity category;
- lien status information;
- information on "requests for pre-approval" for home purchase loans;
- whether the application or loan involves a manufactured home; and
- revised geographic information.

As of March 1, 2005, each covered lender was required to make a redacted version of its loan information available to the public within 30 days of a request. On September 13, 2005, the Federal Financial Institutions Examination Council (FFIEC) also made available a series of tables based on the data for 2004 and the Federal Reserve Board issued a report with its own analysis of the national data (Avery).

### ***About Subprime Mortgages and Predatory Lending***

Subprime mortgage lending is intended to serve borrowers who do not qualify for prime loans because of credit problems or a limited credit history. Based on third-party estimates of the subprime mortgage market, about half of all subprime lending appear to have been captured by HMDA's new rate-spread threshold. For example, the 2004 HMDA data reports \$254 billion in loans having higher-rates while the *2005 Mortgage Market Statistical Annual* reported an estimated total 2004 subprime lending market volume of \$530 billion. Subprime loans are likely to be undercounted in at least two ways. First, the threshold was intentionally set to ensure prime loans were excluded, so the threshold may actually be higher than needed to avoid capture of prime loans. Second, even within the subprime segment, adjustable rate loans and other alternative products may have rates relatively low for the subprime market and consequently not be identified as higher-cost within HMDA.

Most abusive lending takes place in the subprime market, where unscrupulous lenders frequently target people with weak or blemished credit records. Predatory lending can take different forms, but includes steering borrowers into a higher priced loan when they could qualify for a loan on better terms, stripping equity from a borrower by including exorbitant fees or unnecessary products in a loan and financing the costs, and engaging in practices that spur foreclosure, such as making a loan without regard to the borrower's ability to repay the mortgage.

A typical predatory mortgage is a refinance of an existing loan that is packed with excessive or unnecessary fees and provides no net tangible benefit to the borrower. Unfortunately, many of these loans are perfectly legal, and too often they are targeted at the most vulnerable borrowers. Predatory mortgage lending drains wealth from families, destroys the benefits of homeownership, and often leads to foreclosure. The Center for Responsible Lending has estimated that predatory mortgage lending costs Americans more than \$9.1 billion each year (Stein).

### ***Previous findings from the HMDA research***

Three recent efforts illustrate what researchers working with HMDA data have tended to find in recent years concerning the distribution of higher-cost subprime loans. In 2004, a paper by Calem, Hershaff, and Wachter used a list developed by the U.S. Department of Housing and Urban Development to determine whether minority borrowers were more likely to receive a loan from a higher-cost subprime lender (Calem). In that effort, the researchers concluded that minority status of both borrowers and neighborhoods were both positively correlated and statistically significant predictors of the likelihood of a loan being subprime. The study included

a number of innovative methods to account for the neighborhood effects of “aggregate levels of credit risk” and “equity risk” posed by potential over-valuation of housing stock.

Two recent papers have used slightly different samples of the 2004 HMDA data obtained prior to the recent federal release. In the first of these efforts, by the National Community Reinvestment Coalition, the researchers found that “[m]inorities, women, and low- and moderate-income borrowers across the United States of America receive a disproportionate amount of high cost loans.” (NCRC). In the second, the Consumer Federation of America found that the portion of all loans that were subprime varied greatly across metropolitan statistical areas and that “African American borrowers were nearly three times as likely as whites to receive a subprime loan and Latinos were 30% more likely to receive a subprime refinance mortgage than whites.” (Fishbein).

## II. RACE, ETHNICITY, AND PRICING

### *Raw Disparities*

In line with other HMDA studies from prior years and those conducted based on a sample of the 2004 data, the Federal Reserve article finds that African-American and Hispanic white borrowers are substantially more likely to receive a higher-cost subprime home loan than white borrowers. For example, Figure 1 shows that one in three (32.4%) home purchase loans to African-Americans were higher-cost. This proportion was 3.7 times higher than that of Non-Hispanic white borrowers (8.7%).

**Figure 1:** Disparities in incidence of higher-cost loans among owner-occupied, site-built, conventional first lien home loans

<b>Borrower Race/Ethnicity</b>	<b>Purpose</b>	<b>Portion All Loans Higher-Cost</b>	<b>Ratio to Non-Hispanic White Portion Higher-Cost</b>
<b>Black or African-American</b>	Purchase	32.4%	3.7
<b>Black or African-American</b>	Refinance	34.6%	2.7
<b>Hispanic White</b>	Purchase	20.3%	2.3
<b>Hispanic White</b>	Refinance	19.3%	1.5
<b>Non-Hispanic White</b>	Purchase	8.7%	1.0
<b>Non-Hispanic White</b>	Refinance	12.9%	1.0

Source: Avery Table 10, p.377.

Similar disparities were detected when borrowers were grouped by relative income. Figures 2 and 3 show that the disparities hold at all relative income levels. For example, among higher

income home purchase borrowers, African-Americans were 4.1 times more likely than Non-Hispanic white borrowers to receive a higher-cost home loan. In addition, the disparities are strong even when comparing upper-income minority borrowers to lower-income Non-Hispanic white borrowers. Figure 2 shows that, higher-income African-Americans are almost twice as likely (1.9 times) to receive higher-cost purchase loans compared to lower-income Non-Hispanic white borrowers.

**Figure 2:** Disparities in incidence of higher-cost loans among owner-occupied, site-built, conventional first lien home loans between Black or African-American and Non-Hispanic white borrowers.

<b>Borrower Relative Income</b>	<b>Product</b>	<b>Portion All Loans Higher-Cost to Black or African-American Borrowers</b>	<b>Portion All Loans Higher-Cost to Non-Hispanic White Borrowers</b>	<b>Ratio of Black or African-American to Non-Hispanic White of Same Relative Income</b>	<b>Ratio of Black or African-American to Non-Hispanic White Lower Income</b>
<b>Lower</b>	Purchase	39.2%	12.9%	3.0	3.0
<b>Middle</b>	Purchase	33.9%	9.9%	3.4	2.6
<b>Higher</b>	Purchase	23.9%	5.8%	4.1	1.9
<b>Lower</b>	Refinance	42.1%	19.3%	2.2	2.2
<b>Middle</b>	Refinance	34.8%	14.9%	2.3	1.8
<b>Higher</b>	Refinance	26.0%	9.0%	2.9	1.3

Source: Avery, Table 11, p.380.

**Figure 3:** Disparities in incidence of higher-cost loans among owner-occupied, site-built, conventional first lien home loans between Hispanic white and Non-Hispanic white borrowers.

<b>Borrower Relative Income</b>	<b>Product</b>	<b>Portion All Loans Higher-Cost to Hispanic White Borrowers</b>	<b>Portion All Loans Higher-Cost to Non-Hispanic White Borrowers</b>	<b>Ratio of Hispanic White to Non-Hispanic White of Same Relative Income</b>	<b>Ratio of Hispanic White to Non-Hispanic White Lower Income</b>
<b>Lower</b>	Purchase	23.6%	12.9%	1.8	1.8
<b>Middle</b>	Purchase	22.1%	9.9%	2.2	1.7
<b>Higher</b>	Purchase	17.4%	5.8%	3.0	1.3
<b>Lower</b>	Refinance	26.0%	19.3%	1.3	1.3
<b>Middle</b>	Refinance	20.5%	14.9%	1.4	1.1
<b>Higher</b>	Refinance	13.6%	9.0%	1.5	0.7

Source: Avery, Table 11, p.380.

### ***Disparities after considering borrower traits***

Next, an analysis accounting for borrower traits, described below, showed only a slight reduction in the observed disparities. In other words, the likelihood that a minority borrower received a higher-cost home loan is still much higher than that of a non-Hispanic white borrower with identical “borrower” traits. In fact, after adjusting for observable factors, over 80% of the disparity observed in the unadjusted data remains unexplained. Figure 4 shows that the African-American to Non-Hispanic white ratio of higher-cost lending incidence drops approximately 15% in both purchase (3.7 to 3.1) and refinance (2.7 to 2.3) loans. For Hispanic whites, the ratio drops 17% (2.3 to 1.9) for purchase loans and only 7% (1.5 to 1.4) in the case of refinance loans.

The article’s authors conducted a series of tests to simultaneously adjust for various “borrower” traits, including “income, loan amount, location (MSA) of the property, presence of a co-applicant, and (in comparisons by race and ethnicity) sex ....” (p. 373, all traits were directly observable in the HMDA data). Essentially, this adjustment estimates what portion of loans to African-Americans or Hispanic whites would be expected to be higher-cost if these observed borrower traits were the same for those groups, on average, as they are for Non-Hispanic whites.



**Figure 4:** Disparities in incidence of higher-cost loans among owner-occupied, site-built, conventional first lien home loans unadjusted and adjusted for borrower traits.

<b>Borrower Race/Ethnicity</b>	<b>Purpose</b>	<b>Unadjusted Ratio to Non-Hispanic White Portion Higher-Cost</b>	<b>Borrower Adjusted Ratio to Non-Hispanic White Portion Higher-Cost</b>
<b>Black or African-American</b>	Purchase	3.7	3.1
<b>Black or African-American</b>	Refinance	2.7	2.3
<b>Hispanic White</b>	Purchase	2.3	1.9
<b>Hispanic White</b>	Refinance	1.5	1.4

Source: Avery Table 10, p377.

### ***Disparities after considering borrower traits and lender***

Perhaps of even greater interest, the authors present findings that suggest that the identity of the originating lender has much more to do with disparities related to whether a loan is higher-cost than does the limited set of borrower traits available in HMDA, such as income or loan amount sought.

Figure 5 shows that the unadjusted disparities drop by an appreciable amount in all cases. For African-American borrowers, the disparity in the incidence of higher-cost loans is cut in half for both purchase (3.7 to 1.8) and refinance (2.7 to 1.4) loans. For Hispanic white borrowers, the reduction in disparities to Non-Hispanic white borrowers is slightly less at 43% (2.3 to 1.3) for purchase loans and 27% (1.5 to 1.1) for refinance loans.

In this part of the study, the authors added an additional control for originating lender in the analysis. Essentially, when they make this adjustment, they ask what proportion of loans to African-Americans and Hispanic whites would be expected to be higher-cost if they received loans proportionally from the same lenders as Non-Hispanic whites. In this adjustment the disparities drop considerably, though significant differences remain. As Figure 5 shows, even after both the borrower and lender adjustments, African-American borrowers remain 40% (1.4 times) and 80% (1.8 times) more likely than Non-Hispanic white borrowers to receive a higher-cost loan for refinance and purchase purposes respectively. Also, for Hispanic whites the corresponding increased likelihoods stand at 10% (1.1 times) and 30% (1.3 times).

**Figure 5:** Disparities in incidence of higher-cost loans among owner-occupied, site-built, conventional first lien home loans unadjusted and adjusted for borrower traits and lender.

<b>Borrower Race/Ethnicity</b>	<b>Purpose</b>	<b>Unadjusted Ratio to Non-Hispanic White Portion Higher-Cost</b>	<b>Borrower and Lender Adjusted Ratio to Non-Hispanic White Portion Higher-Cost</b>
<b>Black or African-American</b>	Purchase	3.7	1.8
<b>Black or African-American</b>	Refinance	2.7	1.4
<b>Hispanic White</b>	Purchase	2.3	1.3
<b>Hispanic White</b>	Refinance	1.5	1.1

Source: Avery Table 10, p. 377.

The greater reductions in disparities from this analysis are pronounced. As such, the authors' findings are consistent with a highly segmented marketplace in which higher-cost subprime lenders originate loans disproportionately to minority borrowers. There are at least three potential reasons for such market segmentation, as the article's authors observe (pp. 380-81).

First, borrowers may be correctly self-sorting to lenders who specialize in making loans to borrowers with their risk profile. For example, if African-American applicants have more risky credit profiles on average and are aware of this profile, they might be expected to apply to higher-cost lenders to minimize the risk of being turned down for a loan. While this is doubtless true for at least some borrowers in the marketplace, it is somewhat unsatisfactory as a sweeping explanation given recent findings suggesting that, in fact, minority borrowers are less likely to accurately gauge their creditworthiness (Courchane).

Additional reason to question the extent to which desirable self-sorting based on an accurate self-assessment of credit risk is occurring is provided by the article's analysis of denial rates (pp. 373-76). In this section, the authors report that African-American and Hispanic white applicants were more likely to be turned down for a loan. This evidence is consistent with a hypothesis that those applicants were less effectively self-sorting than their Non-Hispanic white counterparts.

Second, prime lenders may be under-serving minority borrowers. In a sense, in this explanation, Non-Hispanic white borrowers receive disproportionately more prime loans not because minority borrowers are targeted for subprime loans, but because they are excluded from prime loans. There is at least some anecdotal evidence that this problem continues to persist in the marketplace. Last year, the U.S. Department of Justice filed two cases against predominantly prime lenders for failing to lend in minority communities.<sup>3</sup>

<sup>3</sup> See e.g., *United States v. First American Bank* (N.D. Ill.) (filed July 13, 2004) and *United States v. Old Kent Financial Corporation and Old Kent Bank* (filed May 19, 2004).

Third, and perhaps most troubling, the findings are consistent with the explanation that minority borrowers are being disproportionately targeted for push marketing and otherwise steered to higher-cost lenders. This scenario has been previously described, and is tied most closely to the observation that mortgage brokers frequently are provided incentives to up-sell borrowers to higher-rate loans than they actually qualify for so that they can maximize their own compensation (CRL). In related research, Professor Jackson has described the mechanics of this payment mechanism, frequently known as a yield spread premium, and has found that minority borrowers were likely to be more greatly disadvantaged by it (Jackson).

In addition, the article's authors present other evidence consistent with a theory of broker steering. Specifically, in an analysis that looked only at lenders affiliated with a bank holding company, the article finds that borrowers whose loans were located close to deposit-taking branches as proxied by an institution's Community Reinvestment Act assessment area (and presumably more likely to be originated through a retail shop) had much lower rates of higher-cost loans than borrowers receiving loans farther away from such branches, who were presumably more likely to get their loans from brokers (p. 382).

### **III. ANALYSIS FROM GEORGETOWN UNIVERSITY CREDIT RESEARCH CENTER**

The article also presents partial results from an analysis of eight unidentified subprime lenders conducted by the Georgetown University Credit Research Center (CRC), a research group that has conducted numerous studies on behalf of the subprime industry. Among these eight lenders, 86% of loans to African-Americans, 73% of loans to Hispanic whites, and 83% of loans to Non-Hispanic white borrowers were higher-cost. Not surprisingly, among this handful of lenders who predominantly make higher-cost loans, the resulting racial and ethnic disparities are markedly lower than in the overall HMDA data.

The analysis was included for the purpose of providing "some insight into how important controlling for these other factors [not found in HMDA] might be in accounting for pricing differences across borrower groups...." (p. 385). However, given limitations in the dataset recognized by the authors and the limited collection of partial data from eight lenders, readers should use caution when interpreting the significance of results presented in this section of the Federal Reserve article. At the onset, they should recognize that the analysis is limited in scope and offers no exploration or justification for whether the interest rates and fees charged by these lenders are, in fact, appropriate.

Also, before examining results, readers should be cognizant that much is unknown about the data used since the article provides little to no information about the dataset. Past publications from CRC have used a dataset explicitly limited in several ways, including with data restricted to the subprime units of lenders apparently even in instances when those lenders had prime units as well (Elliehausen). As such, it is impossible for researchers to use the data to measure whether rates in these loans were priced fairly with respect to rates borrowers might otherwise have

expected to receive from the prime divisions of the included lenders or the market more generally.

Keeping those cautions in mind, it is nonetheless important to note, as the article's authors did, that the disparities changed almost imperceptibly when control factors beyond those found in HMDA, such as credit score and loan-to-value ratio—two indicators routinely used to measure creditworthiness—were used. This suggests that either the loans in the dataset were too uniform to allow much exploration of variances in incidence of higher-cost loans and pricing or that limitations in the variables available in the data hampered the authors' ability to explain observed disparities.

Unfortunately, the section does not disclose variable specifications or provide results for control variables that would allow for greater insight into these limitations. The latter omission is particularly regretful since a recent paper by CRC based on apparently similar data presented at a Federal Reserve System conference in April 2005 has been critiqued on the grounds that variables such as loan-to-value and loan term had associated results that confound expectations in ways that call into question CRC's data and overall results (McCoy). In any event, the partial results presented here suggest that the analysis does not add much of value to our understanding of the role of race and ethnicity in the pricing of mortgages in the market.

#### **IV. REVIEWING INDIVIDUAL HMDA REPORTERS FOR POTENTIAL DISCRIMINATION**

In the final section of the article, the authors discuss methods for using HMDA data to identify institutions that merit additional scrutiny for potential fair lending violations. We conclude here that the discussed methods, however, are incomplete to the task.

Essentially, the methods discussed involve taking the adjustment methods described above and applying them to individual lending institutions. However, given the implication of the foregoing analysis that discriminatory steering to higher-cost lenders may well be a concern in today's market, a method that focuses on what happens only once borrowers are allocated to their originating lender risks missing the mark considerably.

Such concerns are particularly pronounced in instances in which a bank holding company, for example, has a prime affiliate and a subprime affiliate in different corporate forms with markedly different pricing structures. If one were to imagine the worst-case scenario, one might find that the prime affiliate targeted Non-Hispanic white borrowers and the subprime affiliate targeted minority borrowers for intentionally higher-cost loans, exploiting a perception among these borrowers that they should pay higher rates for credit. Yet, the methods discussed in the paper would be unable to detect this form of market segmentation. In fairness, the authors do allude to alternative methods of using the data and we are hopeful that those other methods will be of more use to this end.

## V. CONCLUSION

The Federal Reserve Bulletin article provides a helpful overview of the new HMDA data. In it, the authors find that the disparities in the incidence of higher-rate subprime lending among African-American and Hispanic white borrowers compared to Non-Hispanic white borrowers continued in 2004. Additionally, they find that adjusting the disparities for observable differences in income and loan amount sought, among other borrower variables, reduces the disparities only slightly. Interestingly, the inclusion of an adjustment for originating lender seems to account for a much greater portion of the disparate incidence of higher-cost loans between racial and ethnic groups than borrower traits. While the data does not prove the existence of discriminatory steering, neither does it discount discriminatory steering as a basis for explaining disparities. This is particularly troubling given the magnitude of the effect of the lender adjustment.

The authors conclude by discussing two additional sets of findings. One, of relatively little value, is an analysis from an outside group of a limited set of loans from eight lenders. In the dataset they find little racial or ethnic disparities among the data set of overwhelmingly higher-rate loans. Perhaps not surprisingly, therefore, when they include control factors unobservable in HMDA, they find little change in the results. Finally, the authors discuss methods for using the new data to screen for potential fair lending violations. Unfortunately, we conclude that the proposed methods are incomplete when measured against the need to investigate the potential discriminatory steering of borrowers to higher cost lenders. The authors do allude to alternative methods of using the data and we are hopeful that those will be of more use to this end.

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