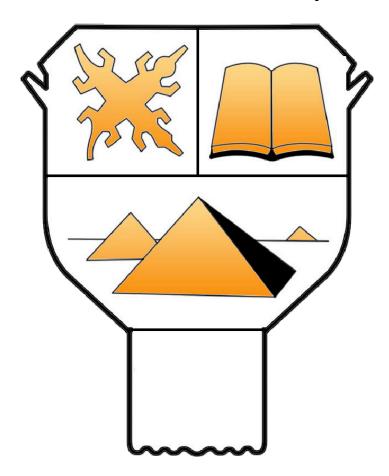
### Borrowing While Black: National Trends in Home Purchase Mortgage Market

A Report Prepared By: The National Urban Research Group



### Borrowing While Black: National Trends in Home Purchase Mortgage Market

### Introduction

This analysis is part of a continuing sequence of case studies conducted by the National Urban Research Group examining *Borrowing While Black* racial disparities in the allocation of higher cost subprime mortgage products. Utilizing mortgage data supplied by the Home Mortgage Disclosure Act (HMDA), the National Urban Research Group conducted cross-sectional descriptive analysis on home purchase mortgage lending, from the years 2004 to 2008. While the share of subprime mortgages has grown rapidly in all racial categories, the empirical evidence documents a clear *Borrowing While Black* effect. Results confirm the magnitude of subprime concentration in loans to African Americans and the negative effects such high-cost loans had on households and communities. The data contained information on every applicant for a home purchase mortgage made in the United States over this four-year period.<sup>1</sup>

### Borrowing While Black Key Findings

- 1. Home purchase mortgages, as reported in HMDA, confirm that considerable growth in the market share of subprime mortgages occurred between 2004 and 2006 increasing from 10.4 percent to 21.0 percent. The collapse of the subprime mortgage sector starting in 2007 led to major declines in subprime market shares, declining to just 5.7 percent by 2008. Higher cost subprime volumes increased from over a half a million in 2005, diminishing to 211,474 mortgages in 2007, and just 60,719 higher cost subprime home purchase mortgages by 2008.
- 2. African American borrowers are nearly four times more likely to purchase a home with a higher cost subprime mortgage product that white borrowers. African American borrowers received 9.3 percent of all home purchase loans (959,461 out of 10.3 million mortgages), but represented 26.9 percent of all households who purchased a home with a mortgage lender specializing in higher cost subprime mortgages (423,442 of 1.5 million home purchase loans). In terms of the market share, African Americans were 3.6 times more likely to purchase a home with a high-cost subprime mortgage product than white applicants (44.1 percent compared to 12.1). In terms of APR market share, African Americans were 3.5 times more likely to purchase a home with APR spread rates

<sup>&</sup>lt;sup>1</sup> The original HMDA records contained 148.1 million records. In order to make the data manageable for analysis, we selected applications from African American and white borrowers who applied for the mortgage and the mortgage was originated, the mortgage was owner occupied, loan purpose was for home purchase and refinance, conforming mortgage (removing "jumbo mortgage"), conventional mortgages (removing FHA/VA mortgages), loan type was of one-to-four-family dwelling. Applications were race or income are missing are removed from analysis. After applying all filters, the final dataset contains information on approximately 22.9 million mortgages. Of which, 13.3 million was use for refinancing an existing mortgage and 10.3 million for purchasing a one-to-four family home.



existing mortgage ar

between 4 and 4.99 than white applicants (10.2 compared to 2.9); and five times as likely to purchase homes with APR spread rates of 5 or above (22.5 to 4.6).

- 3. Subprime mortgages are more than twice as likely in African American neighborhoods than in white neighborhoods. Borrowers in predominately African American neighborhoods were more than two times more likely to purchase a home with a high-cost subprime mortgage compared to borrowers in white neighborhoods.<sup>2</sup>
- **4.** A "Borrowing While Black Disparity Ratio" (*BWB Ratio*) compares the market share of high cost mortgages made to African Americans and whites borrowers. A ratio of 1.0 indicates no racial lending disparity, a *BWB ratio* above 1.0 indicates that African Americans are receiving a higher proportion of high cost mortgages than whites. At each income category, African Americans are more likely to purchase a home with a high cost mortgage. Overall, 44.0 percent of African Americans households purchased their homes with a higher cost subprime mortgage product compared to a 12.1 percent market share for similar incomes whites—a racial disparity of 2.9. The *BWB ratio* between lower income African Americans and white borrowers was 2.8 (46.9 to 17.8 percent), moderate income 3.1 (46.9 to 15.1 percent), middle income 3.6 (44.2 to 12.3 percent), and 4.4 for higher income African American and white borrowers (38.1 to 8.6 percent).
- 5. BWB disparity ratios remain even after accounting for income and family status, remain even after accounting for income and family status. The greatest BWB disparity ratio is between higher income African American and white couples, at 5.2. In other words, African American couples with higher incomes purchased a home with subprime mortgage products at *five times* the rate of similar income white couples. Racial disparities are such that African American couples at the *highest income level* purchased their homes with high cost mortgage products more often than did white couples with the *lowest income level* (28.0 percent versus 14.0 percent), a BWB ratio of 2.0

#### Empirical Results

The National Urban Research Group analysis of over 10.2 million home purchase mortgages allocated between 2004 and 2008 documents the evolution and growing influence of the higher cost subprime mortgage sector. One of the most noteworthy aspects of this escalation is the role of race. By far the highest share of subprime home purchase lending is to African

<sup>&</sup>lt;sup>4</sup> Low- income applicants are those with incomes below 50 percent of the median income of all applicants; Moderate-income are those with median incomes between 50 and 80 percent; middle income between 80 and 120; and high-income are those with incomes above 120 percent of the median income for all applicants.



<sup>&</sup>lt;sup>2</sup> Four categories of racial composition are examined (1) less than 10 percent African American; (2) 10 to 19.9 percent African American; (3) 20 to 49.9 percent African American; and (4) over 50 percent African American.

<sup>&</sup>lt;sup>3</sup> The following simple method measures a "BWB Disparity Ratio": BWB Disparity Ratio = African American Market Share/White Market Share.

American borrowers and in neighborhoods where African American comprised a majority of the residents. At each income level, African American households and individuals purchasing a home in majority African American neighborhoods were more likely to purchase a home with a higher cost subprime mortgage product. After controlling for income and family status, the only observed differences in subprime market shares is the race of the applicant or racial composition of neighborhood.

1. Home purchase mortgages, as reported in HMDA, confirm that considerable growth in the market share of subprime mortgages occurred between 2004 and 2006 increasing from 10.4 percent to 21.0 percent.

Between 2004 and 2008, mortgage lender allocated over 10.2 million home purchase mortgages. As shown in **Figure (1)**, overall 15.3 percent of borrowers purchased a home with a higher cost subprime mortgage products. Home purchase mortgages, as reported in HMDA, show that considerable growth in the market share of subprime mortgages occurred between 2004 and 2006, increasing from 10.4 percent to 21.0 percent. The collapse of the subprime mortgage sector starting in 2007 led to major declines in subprime market shares, declining to just 5.7 percent by 2008. **Figure (2)** show, higher cost subprime volumes increased from 243,610 home purchase mortgages in 2004 to over half-a-million (563,107) by 2005 and roughly another half-a-million (492,624) mortgages in 2006, diminishing to 211,474 mortgages in 2007 and just 60,719 by 2008.

2. African American borrowers are nearly four times more likely to purchase a home with a higher cost subprime mortgage product that white borrowers.

As **Figure (3)** show, African American borrowers received 9.3 percent of all home purchase mortgages (959,461 out of 10.3 million mortgages), but represented 26.9 percent of all households who purchased a home with a mortgage lender specializing in higher cost loans (423,442 of 1.57 million purchase loans). Overall, African Americans were 3.6 times more likely to purchase a home with a high-cost loan than white applicants (44.1 compared to 12.1). In regards to APR spread rate, African Americans represented 26.1 percent of higher cost mortgages with spread rates between 4 and 4.99 (97,974 of 374,705) and 32.9 percent of all mortgage with APR spread rates above 5 percent (215,952 of 655,331). <sup>5</sup> In regards to the APR spread rate, see

<sup>&</sup>lt;sup>5</sup> In 2005, a 20-year Treasury security had a rate of 4.3 percent and the average prime mortgage rate was around 5.6 percent. Based on these figures, a lender's 2005 HMDA reports had to disclose an APR on a first mortgage with an APR greater than 7.3 percent, see Board of Governors of the Federal Reserve



**Table (4)**, African Americans borrowers were 3.5 times more likely to purchase a home with APR spread rates between 4 and 4.99 than white applicants (10.2 compared to 2.9); and five times as likely to purchase homes with APR spread rates of 5 or above (22.5 to 4.6).

### 3. Subprime mortgages are more than twice as likely in African American neighborhoods than in white neighborhoods.

Figure (4) examines subprime racial concentrations at the neighborhoods level. Results show the heavy reliance on higher cost subprime mortgage products in predominantly African American neighborhoods. In neighborhoods where the majority of residents are African American, one out of every three borrowers purchased a home with a subprime mortgage product. The results indicate that the likelihood of receiving a higher cost subprime mortgage increases with the percentage of African American population. Neighborhoods less than 10 percent African American had a subprime market share of only 11.5 percent, in areas between 10 and 20 percent the market share is 12.6, neighborhoods between 20 and 50 percent African American resident recoded a market share of higher cost subprime home purchase products of 16.3 compared to 29.4 for areas over 50 percent African American.

4. A "Borrowing While Black Disparity Ratio" (BWB Ratio) compares the market share of high cost mortgages made to African Americans and whites borrowers.

A ratio of 1.0 indicates no racial lending disparity, a ratio above 1.0 indicates that African Americans are receiving a higher proportion of high cost mortgages than whites.<sup>6</sup> Overall, 44.1 percent of African Americans purchased their homes with a high cost mortgage compared to a 12.1 percent market share for similar incomes whites—a racial disparity of 3.6.

**Table (1)** controls for the race and income of the borrower. At each income category, African Americans are more likely to purchase a home with a high cost mortgage. The *BWB disparity ratio* increases with income levels. The *BWB ratio* for lower income African American was 2.8 (46.9 to 17.8 percent), moderate income 3.1 (46.9 to 15.1 percent), middle income 3.6 (44.2 to 12.3 percent), and 4.4 for higher income applicants (38.1 to 8.6 percent).

5. BWB disparity ratios remain even after accounting for income and family status, remain even after accounting for income and family status.

System Statistical Release (2005), available at <a href="http://www.federalreserve.gov/release/h15/20050627/h15.pdf">http://www.federalreserve.gov/release/h15/20050627/h15.pdf</a>

<sup>&</sup>lt;sup>6</sup> The following simple method measures a "BWB Disparity Ratio": BWB Disparity Ratio = African American Market Share/White Market Share.



Based on data from **Tables (2.a to 2.d)** *BWB ratios* are calculated and reported in **Table (3)**. The *BWB ratio* between higher income African American and white couples was 5.2 (28.0 percent versus 5.3 percent), see **Table (3)** number 12. In other words, African American couples with higher incomes purchased a home with subprime mortgage products at *five times* the rate of similar income white couples. Results indicated that racial disparities remain even after controlling for race, income and family status. The *BWB ratio* was **above three** for:

- Lower income African American single females/white single female (Table (3), number 1);
- Moderate income African American single females/white single female (Table (3), number 4);
- Middle income African American single females/white single female (Table (3), number 7); and
- Higher income African American single females/white single female (Table (3), number 10)

**Table (3)** reveals similar racial disparities across all race, income, and family status groupings. Racial disparities are such that African American couples at the *highest income level* purchased their homes with high cost mortgage products more often than did white couples with the *lowest income level* (28.0 percent versus 14.0 percent), a *BWB ratio* of 2.0 (see, **Table (3)** number 15). The African American high income /moderate income white couple *BWB disparity ratio* was 2.1 (28.0 percent compared to 12.9, see **Table (3)**, number 18); and the high income African American/middle income white couple *BWB disparity ratio* was 3.0 (28.0 percent to 9.4 percent, see **Table (3)**, number 21).

### Conclusion

As document throughout this empirical research, African American households, and individuals in African American communities, disproportionately purchasing homes with a higher cost subprime mortgage product. This overextension in the riskier mortgage sector led to perverse market effects, considerable mortgage defaults and foreclosures. Subprime borrowers, particularly those with adjustable-rate mortgage products, often found themselves "underwater," where their outstanding loan amount was more than the property value of their homes. Mortgage delinquency and foreclosure rates in the subprime mortgage sector reached record levels with millions facing the threat of losing their homes. No precise national data exists on what share of subprime mortgages resulted in foreclosures, but evidence suggests that the impact has been staggering. A recent report by the Pew Center placed a national spotlight on the controversial

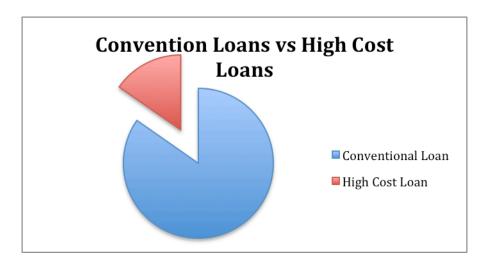


Borrowing While Black attribute of the subprime financial crisis. The Pew Center study, based on information from the Census Bureau longitudinal Survey of Income Program and Participation (SIPP), reveals that the median wealth of white households is 20 times that of African Americans. According to the authors, "the largest since the government began publishing such data a quarter century ago" and almost twice as large as the ratios for the two decades prior to the subprime mortgage crisis. To the extent that home ownership is a vital aspect of wealth and financial stability, the steering of African American borrowers into higher cost subprime mortgage products and the deeply troubling consequences it poses to African American households and communities is a contemporary civil rights issue.

<sup>&</sup>lt;sup>7</sup> Paul Taylor et al, *Twenty-to-One: Wealth Gaps Rise to Record Highs between Whites, Blacks and Hispanics*, Pew Research Center, Washington, D.C. (2011).

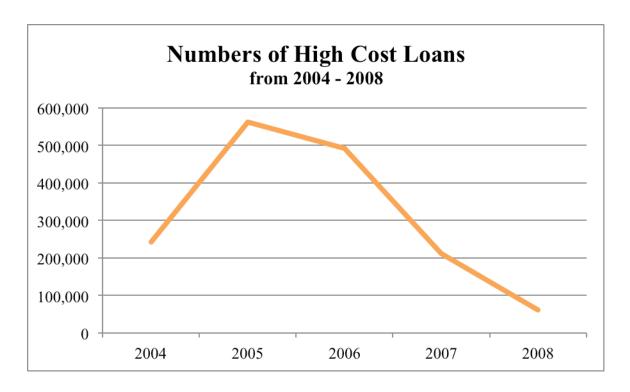


Figure 1: Overall Market share



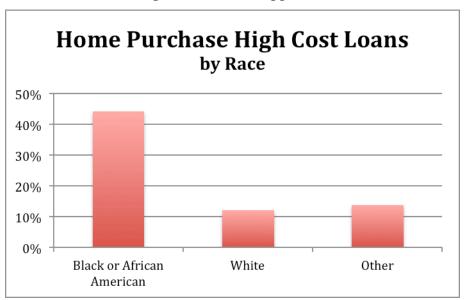
	Conventional Loan	High Cost Loan	Total
Hama Danahasa Laana	8727082	1571534	10298616
Home Purchase Loans	84.7%	15.3%	100.0%

Figure 2: Overall Trends by Year



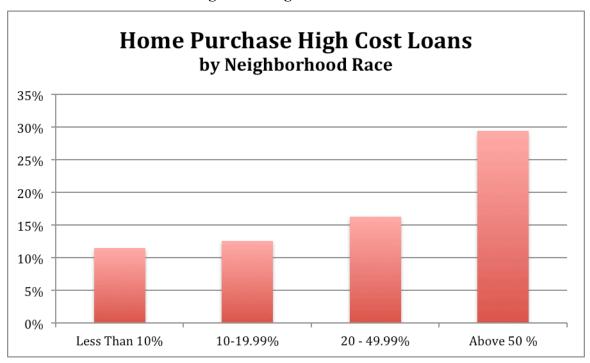
	Conventional Loan	High Cost Loan	Total
2004	2109921	243610	2353531
2004	89.6%	10.4%	100.0%
2005	2119093	563107	2682200
2005	79.0%	21.0%	100.0%
2006	1836982	492624	2329606
2006	78.9%	21.1%	100.0%
2007	1656286	211474	1867760
2007	88.7%	11.3%	100.0%
2000	1004800	60719	1065519
2008	94.3%	5.7%	100.0%

Figure 3: Race of Applicant



	Conventional Loan	High Cost Loan	Total
Black or African	536022	423442	959464
American	55.9%	44.1%	100.0%
White	7370222	1017646	8387868
	87.9%	12.1%	100.0%
Other	820838	130446	951284
Other	86.3%	13.7%	100.0%

Figure 4: Neighborhood Race



	Conventional Loan	High Cost Loan	Total
I TI 100/	3304643	431163	3735806
Less Than 10%	88.5%	11.5%	100.0%
10-19.99%	2257967	325967	2583934
10-19.99%	87.4%	12.6%	100.0%
20 40 000/	2279161	445214	2724375
20 - 49.99%	83.7%	16.3%	100.0%
Above 50 %	885311	369190	1254501
AUUVE 30 %	70.6%	29.4%	100.0%

**Table 1: Applicant Income and Race** 

#### Home Purchase Low Income

	Conventional Loan	High Cost Loan	Total
Black or African American	77499	75689	153188
	50.6%	49.4%	100.0%
White	739922	160252	900174
White	82.2%	17.8%	100.0%
Other	45788	10345	56133
	81.6%	18.4%	100.0%

### Home Purchase Moderate Income

	Conventional Loan	High Cost Loan	Total
DI I AC: A :	147583	130095	277678
Black or African American	53.1%	46.9%	100.0%
White	1664095	296644	1960739
White	84.9%	15.1%	100.0%
Other	139208	25529	164737
	84.5%	15.5%	100.0%

### Home Purchase Middle Income

	Conventional Loan	High Cost Loan	Total
DI I AC' A '	149245	117988	267233
Black or African American	55.8%	44.2%	100.0%
White	2031006	285891	2316897
White	87.7%	12.3%	100.0%
Other	230037	35463	265500
	86.6%	13.4%	100.0%

### Home Purchase High Income

	Conventional Loan	High Cost Loan	Total
Black or African American	161695	99670	261365
Black of African American	61.9%	38.1%	100.0%
White	2935199	274859	3210058
white	91.4%	8.6%	100.0%
Other	405805	59109	464914
	87.3%	12.7%	100.0%

### Table 2: Market Share of Home Purchase High Cost Loans (Race, Income and Family Status of Applicant)

### 2.A Low Income

	Conventional Loan	High Cost Loan	Total
Single Black Male	24270	26412	50682
Single black wate	47.9%	52.1%	100.0%
Single White Male	271978	71937	343915
Single white Male	79.1%	20.9%	100.0%
Single Black Female	48031	44675	92706
Single Diack Female	51.8%	48.2%	100.0%
Single White Female	337398	66448	403846
Single winte remaie	83.5%	16.5%	100.0%
Black Couple	4043	3568	7611
Black Couple	53.1%	46.9%	100.0%
White Couple	121833	19870	141703
winte Coupie	86.0%	14.0%	100.0%
Single Other Male	18420	4569	22989
Single Other Wale	80.1%	19.9%	100.0%
Single Other Female	18515	4651	23166
Single Other Female	79.9%	20.1%	100.0%
Other Couple	18721	4156	22877
Other Couple	81.8%	18.2%	100.0%

## Table 2: Market Share of Home Purchase High Cost Loans (Race, Income and Family Status of Applicant)

### 2.B Moderate Income

	Conventional Loan	High Cost Loan	Total
Cinala Diada Mala	50376	50463	100839
Single Black Male	50.0%	50.0%	100.0%
Single White Mele	598089	129830	727919
Single White Male	82.2%	17.8%	100.0%
Single Black Female	76968	60796	137764
Single Black Female	55.9%	44.1%	100.0%
Single White Female	553731	89060	642791
Single White Female	86.1%	13.9%	100.0%
D1. 1 C1.	15751	15512	31263
Black Couple	50.4%	49.6%	100.0%
White Couple	482182	71254	553436
winte Couple	87.1%	12.9%	100.0%
Single Other Male	55901	11245	67146
Single Other Male	83.3%	16.7%	100.0%
Single Other Female	47320	9223	56543
Single Other remaie	83.7%	16.3%	100.0%
Other Couple	70568	14885	85453
Other Couple	82.6%	17.4%	100.0%

# Table 2: Market Share of Home Purchase High Cost Loans (Race, Income and Family Status of Applicant)

### 2.C Middle Income

	Conventional Loan	High Cost Loan	Total
Single Black Male	49336	45769	95105
	51.9%	48.1%	100.0%
Single White Male	578894	110617	689511
Single white wate	84.0%	16.0%	100.0%
Cingle Dlask Female	58566	43765	102331
Single Black Female	57.2%	42.8%	100.0%
Single White Female	404643	63378	468021
Single white remaie	86.5%	13.5%	100.0%
Black Couple	32409	23768	56177
Black Couple	57.7%	42.3%	100.0%
White Couple	985445	102665	1088110
winte Couple	90.6%	9.4%	100.0%
Single Other Male	92321	14807	107128
Single Other Male	86.2%	13.8%	100.0%
Single Other Female	60468	11355	71823
Single Other Female	84.2%	15.8%	100.0%
Other Counts	148206	23218	171424
Other Couple	86.5%	13.5%	100.0%

Table 2: Market Share of Home Purchase High Cost Loans (Race, Income and Family Status of Applicant)

2.D High Income

2.D High meone			
	Conventional Loan	High Cost Loan	Total
Single Pleak Mele	46034	39753	85787
Single Black Male	53.7%	46.3%	100.0%
Single White Mole	676524	112151	788675
Single White Male	85.8%	14.2%	100.0%
Single Black Female	40568	31985	72553
Single Black Female	55.9%	44.1%	100.0%
Single White Female	319792	50571	370363
Single white remaie	86.3%	13.7%	100.0%
Dlask Counts	59812	23288	83100
Black Couple	72.0%	28.0%	100.0%
White Couple	1803307	101575	1904882
winte Couple	94.7%	5.3%	100.0%
Single Other Mole	129354	24273	153627
Single Other Male	84.2%	15.8%	100.0%
Single Other Female	75458	17813	93271
Single Other Female	80.9%	19.1%	100.0%
Other Counts	351850	32229	384079
Other Couple	91.6%	8.4%	100.0%

### Table 3: Borrowing While Black Disparity Ratio for Home Purchase Mortgages

### Low-income compared to Low-income

- 1. Low-income African American female compared to Low-income white female, **disparity** ratio 3.0 (48.2 market share compared to 16.5).
- 2. Low-income African American male compared to Low-income white male, **disparity** ratio 2.5 (52.1 market share compared to 20.9).
- 3. Low-income African American couple compared to Low-income white couple, **disparity** ratio 3.3 (46.9 market share compared to 14.0).

### Moderate-income compared to Moderate-income

- 4. Moderate-income African American female compared to Moderate-income white female, **disparity ratio 3.2** (44.1 market share compared to 13.9).
- 5. Moderate-income African American male compared to Moderate-income white male, **disparity ratio 2.8** (50.0 market share compared to 17.8).
- 6. Moderate-income African American couple compared to Moderate-income white couple, **disparity ratio 3.8** (49.6 market share compared to 12.9).

### Middle-income compared to Middle-income

- 7. Middle-income African American female compared to Middle-income white female, **disparity ratio 3.2** (42.8 market share compared to 13.5).
- 8. Middle-income African American male compared to Middle-income white male, **disparity ratio 3.0** (48.1 market share compared to 16.0).
- 9. Middle-income African American couple compared to Middle-income white couple, **disparity ratio 4.5** (42.3 market share compared to 9.4).

### High-income compared to High-income

- 10. High-income African American female compared to High-income white female, **disparity ratio 3.2** (44.1 market share compared to 13.7).
- 11. High-income African American male compared to High-income white male, **disparity** ratio 3.2 (46.3 market share compared to 14.2).
- 12. High-income African American couple compared to High-income white couple, **disparity ratio 5.2** (28.0 market share compared to 5.3).



### Table 3: Borrowing While Black Disparity Ratio for Home Purchase Mortgages

### **High-income** African American compared to **Low-income** white

- 13. High-income African American female compared to Low-income white female, **disparity ratio 2.7** (44.1 market share compared to 16.5).
- 14. High-income African American male compared to Low-income white male, **disparity** ratio 2.2 (46.3 market share compared to 20.9).
- 15. High-income African American couple compared to Low-income white couple, **disparity** ratio 2.0 (28.0 market share compared to 14.0).

### High-income African American compared to Moderate-income white

- 16. High-income African American female compared to Moderate-income white female, **disparity ratio 3.2** (44.1 market share compared to 13.9).
- 17. High-income African American male compared to Moderate-income white male, **disparity ratio 2.6** (46.3 market share compared to 17.8).
- 18. High-income African American couple compared to Moderate-income white couple, **disparity ratio 2.1** (28.0 market share compared to 12.9).

### High-income African American compared to Middle-income white

- 19. High-income African American female compared to Middle-income white female, **disparity ratio 3.3** (44.1 market share compared to 13.5).
- 20. High-income African American male compared to Middle-income white male, **disparity** ratio 2.9 (46.3 market share compared to 16.0).
- 21. High-income African American couple compared to Middle-income white couple, **disparity ratio 3.0** (28.0 market share compared to 9.4).



**Table 4: APR Spread Rate by Race** 

	Conventional	APR Spread 3	APR Spread 4	APR Spread 5	Total
	Loan	to 3.99	to 4.99	and Above	Total
Black or African	536022	109506	97974	215962	959464
American	55.9%	11.4%	10.2%	22.5%	100.0%
White	7370222	387319	243780	386547	8387868
	87.9%	4.6%	2.9%	4.6%	100.0%
Other	820838	44673	32951	52822	951284
	86.3%	4.7%	3.5%	5.6%	100.0%

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