

SOCIAL IMPACT RESEARCH CENTER A HEARTLAND ALLIANCE PROGRAM

Report Information

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Authors: Lindy Carrow, Sean Hudson, and Amy Terpstra

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KEY FINDINGS: RACIAL DISPARITIES IN CREDIT

This report examines an important aspect of economic racial disparity—disparity in credit scores. The relationship between credit scores and minority presence illustrates a clear racial disparity in credit in Illinois. Though many related factors help to explain some variability in credit scores, even when controlling for them, racial differences in credit persist.

Having a credit score is important for gaining access to things like education, better jobs, homeownership—the very things that feed financial and social opportunity. While credit disparities exist in large measure due to the same historic policies that have limited access to broader financial opportunities for minorities, credit scores are particularly important to consider because they also impact individuals' *future* financial opportunities. In effect, credit scores can create a trap, one that minorities are more likely to fall into, thereby feeding the continued growth of income and wealth disparities.

KEY FINDINGS

- 1 Illinois communities with higher minority presence have lower (worse) average credit scores.
- 2 Communities of color fare worse than white communities on many social and economic elements, all of which play into the cyclical relationship between race and credit scores.
 - Strong relationships among education levels, student loan debt, credit, and race tell a story of unequal access for minorities to the resources needed to afford the higher education that in turn helps build credit and wealth.
 - The relationships among race, employment, income, and credit scores show that more individuals of color are trapped in a career and credit cycle that is preventing them from getting firm footing on the path to economic security.
 - Strong relationships among homeownership, home loan debt, credit, and race illustrate that homeownership is not an equally-accessible asset. Despite the promise of wealthbuilding that homeownership holds and despite policies intended to curb abuse, home buying has a long history of intentional racially discriminatory activity by lenders, brokers, and communities that continue to influence home buying for families of color.

- Relationships among late payments, retail debt, financial institutions, credit, and race illustrate that differences persist in terms of the types of financial products either available in or used in different communities.
- 3 Even when controlling for related social characteristics, racial differences in credit persist. This means that all else being equal, race itself is associated with credit scores, and thus communities of color face some of the most challenging barriers in trying to achieve financial security.

BACKGROUND: DATA SOURCES, DEFINITIONS, AND METHODOLOGY

This report explores the relationship between race and financial well-being. The findings are based on an analysis of the relationships and the strength of the relationships among the share of the population that is racially or ethnically minority, other demographic indicators, and various indicators of financial well-being in zip codes throughout the state of Illinois. This exploration provides a look into if and how credit scores differ based on the racial composition of communities and how other factors may play into that relationship.

Data Sources

Demographic data come from the U.S. Census Bureau's American Community Survey 2011 5-year estimates program. We explored the relationships between a large number of demographic variables and credit scores. We included in the final analysis only those variables with a demonstrable relationship to credit scores, which includes race and ethnicity, educational attainment, employment status, income level, and homeownership.

Credit and debt data come from a large national credit bureau. These data reflect a point-in-time, 100 percent selection from the credit bureau's June 2012 database of consumer credit scores and tradeline indicators. The database draws on information collected from over 60,000 contributors that furnish information across a broad range of industries, with updates on a daily basis. Variables from this source include credit scores, debt, and late payments.

Financial institution data were gathered from a number of sources:

Locations of FDIC-insured bank branches: FDIC's institution directory available at http://www2.fdic.gov/idasp/main.asp

Locations of credit unions: Illinois Department of Financial & Professional Regulation's licensee database available at http://www.idfpr.com/dfi/cud/Charters/CreditUnionList.pdf

Locations of auto title lending stores: Illinois Department of Financial & Professional Regulation's licensee database available at http://www.idfpr.com/dfi/LicenseeSearch/frmSearchLicensees.asp

Locations of pawn shops: Pawnshoplistings.com's online listing available at http://www.pawnshoplistings.com/results.asp?s=Illinois&p=2&x=42&y=21

Locations of payday lending stores: Illinois Department of Financial & Professional Regulation's licensee database available at http://www.idfpr.

Definitions

Demographic data

Highly educated: The share of individuals age 25 and older with a bachelor's degree or higher.

Homeownership rate: The share of occupied housing units that are owner-occupied.

Lower income: The share of the population with annual family incomes between 100% and 200% of the federal poverty threshold.

Minority presence: The share of individuals in a community identifying as Hispanic/Latino or Black/African American, American Indian and Alaskan Native, Asian, Native Hawaiian and other Pacific Islander, some other race, two or more races, two races including 'some other race,' two races excluding 'some other race,' or three or more races.

Unemployment rate: Individuals age 16 and older without a job, actively seeking work, as a share of the total civilian workforce.

Credit and debt data

Credit score: A credit score is a number, which is calculated based on information in a person's credit report. Credit reports include things like payment history, amounts owed, length of credit history, new credit, and types of credit used. Lenders use the score to assess the credit risk someone poses and the interest rate they will offer if they agree to lend that person money. People with higher credit scores are considered lower risk, and vice versa—people with lower scores are deemed riskier borrowers.

Debt: Debt is a measure of how much a consumer owes on an account, which is called a tradeline. Any given consumer may have multiple tradelines even within the same category (e.g., having three different student loans); debt levels, then, reflect the amount per tradeline, not per consumer. Debt is analyzed within the following tradeline categories:

Auto bank: Auto loans opened through a bank or credit union.

Auto finance: Auto loans opened through a dealer or auto finance company.

Bankcard: Unsecured or secured credit cards issued by a bank, national card company, or credit union; includes revolving and open type accounts.

Consumer finance: Revolving or installment loans opened through a sales finance company, bank, credit union, or finance company identified as revolving; exclusive of Home Equity Installment.

First mortgage agency: Mortgage Ioans with the Federal Housing Administration (FHA), the Federal National Mortgage Association (FNMA, or Fannie Mae), Federal Home Loan Mortgage Corporation (FHLMC, or Freddie Mac), or the Government National Mortgage Association (GNMA, or Ginnie Mae); exclusive of Home Equity Revolving and Home Equity Installment.

First mortgage non-agency: Mortgage loans with a private/bankowned mortgage or real estate company, bank, credit union or finance company; exclusive of Home Equity Revolving and Home Equity Installment.

Home equity installment: Installment loans with a mortgage or real estate company, bank, credit union or finance company identified as home equity; exclusive of First Mortgage and Home Equity Revolving.

Home equity revolving: Revolving loan with a mortgage or real estate company, bank, credit union or finance company identified as revolving; exclusive of Home Equity Installment.

Other: Primarily installment loans/credit not otherwise classified (i.e., not auto, first mortgage, home equity, or student loan).

Retail: Includes retail credit opened with a clothing company, department or variety store, mail order catalog (including the Internet), grocery store, home furnishing store, jewelry or camera store, building or hardware store, oil company, sporting goods store, farm or gardening supply store, other retailer, or charge card/revolving trade with an auto company.

Student loan: Student loan from a bank, credit union or finance company, or the government.

Late payment rate: The share of accounts that are not paid by their due dates (e.g., being late on a credit card payment), measured by the severity of their past due status, commonly: past due 30 days, past due 60 days, past due 90 days, past due 120 days, severe derogatory (past due 150 days), in foreclosure (home loans only), and in bankruptcy.

Financial institution data

Auto title lending stores: Lenders that offer mostly small-dollar secured loans with high interest rates where the borrower surrenders the title to his or her car as collateral for the loan.

Credit unions: Member-owned financial cooperatives that are democratically controlled by their members and provide multiple financial services to members, including credit and loans.

FDIC-insured banks: Financial institutions insured by the Federal Deposit Insurance Corporation (FDIC).

Pawn shops: Stores that offer secured loans, using borrowers' personal

property as collateral.

Payday lending stores: Establishments that offer payday loans, or payday advances, which are small, short-term, unsecured loans with high interest rates, with only the requirement of a payroll or employment record.

Methodology

The following steps were taken to conduct this analysis:

- 1. Determine the share of the population in each Illinois zip code that is minority.
- 2. Divide zip codes into quartiles based on minority presence—the share of the population that is something other than white, non-Hispanic/ Latino. Only zip codes in the quartile with the highest proportions of minority presence were used for this analysis because so many zip codes in Illinois have too low a proportion of minorities to be instructive in this type of analysis. There are 348 zip codes in the top quartile, with minority presence ranging from 16.5 percent to 100 percent of the population.
- 3. Run bivariate correlation analyses to assess if relationships exist between minority presence and the different demographic, credit and debt, and financial institution variables in the included zip codes.
- 4. Assess the strength of relationships that are found by determining the correlation coefficient, or Pearson's r, which is an indicator of the strength of the relationship between any two variables.
- 5. Run regression analysis, controlling for other related variables, to estimate how much other factors may contribute to the relationship between race and credit scores.

FINDINGS AND IMPLICATIONS: THE

INTERSECTION OF RACE AND CREDIT SCORE

everyone deserves the opportunity to build financial security for themselves and their families. Ensuring that everyone has an equal chance at forging their own economic path is central to America's core values.

However, contrary to those values, U.S. policies have historically stripped people of color of their assets or severely restricted them from building assets. As a result, a vast financial gap has emerged between whites and people of color. White Illinoisans have nearly twice the median household income that African American Illinoisans have, and Latino households also have significantly less than their white counterparts. White households' median wealth is 20 times greater than African American households' and 18 times greater than Latinos.

Racial disparities, so prevalent in a variety of social and economic indicators, play out in dramatic fashion in the world of credit.

Not only is this gap very large, but it is still growing. The difference in access to wealth-building opportunities plays out over time: over 25 years, for every \$1 increase in income, white households are able to generate about \$5 in additional wealth, whereas households of color are only able to generate 69 cents of additional wealth.³

As this report shows, racial disparities, so prevalent in a variety of social and economic indicators, play out in dramatic fashion in the world of credit (as seen in the table below). These findings are based on an analysis of the relationships and the strength of the relationships between the share of the population that is racially or ethnically minority, other social indicators, and various indicators of financial well-being in zip codes throughout the state of Illinois. This analysis explores if and how credit scores differ based on the racial composition of communities.

DISPARITY IN ILLINOIS NEIGHBORHOODS

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ST	LOU	IS /	AREA
• • • • • • • • • • • • • • • • • • • •			

Eact St. Louis

	Lincoln Park	Englewood	Difference	Belleville, IL	(Washington Park)	Difference
ZIP CODE	60614	60621		62223	62204	
Minority presence	17%	99%	- 82%	22%	98%	- 76%
Unemployment rate	5%	24%	- 19%	6%	26%	- 20%
% Highly educated	82%	7%	75%	32%	4%	28%
Homeownership rate	47%	31%	16%	77%	46%	31%
% Low Income	8%	22%	- 14%	12%	25%	- 13%
Average credit score	734	603	131	707	600	107
% Payments late	2%	11%	- 9%	3%	10%	- 7%
Average retail debt	\$279.71	\$440.64	- \$160.93	\$293.58	\$428.68	- \$135.10
Average student loan debt	\$9,602.35	\$5,089.13	\$4,513.22	\$6,578.59	\$4,481.51	\$2,097.08
Average home loan debt	\$236,977.17	\$109,990.33	\$126,986.84	\$97,863.13	\$46,038.16	\$51,824.97

MINORITY PRESENCE AND CREDIT SCORE 100% 80% 40% 40% 20% Average credit score

FIGURE 2 EDUCATION AND CREDIT SCORE



FIGURE 3 EDUCATION AND MINORITY PRESENCE

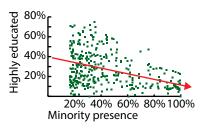
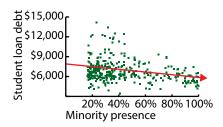


FIGURE 4
STUDENT LOAN DEBT
AND CREDIT SCORE



FIGURE 5 STUDENT LOAN DEBT AND MINORITY PRESENCE



Race and Credit

There is a clear relationship between credit scores and minority presence in communities in Illinois.

High minority presence has a strong negative correlation with credit scores—in communities with a larger share of people who are minority, average credit scores are lower (Figure 1).

Many financial indicators have strong relationships with credit scores and also have strong, but opposite, relationships with minority presence—in communities with higher levels of "good" debt and lower levels of "bad" debt, average credit scores are higher. And these financial indicators are, on average, worse in communities of color.

Indicators of well-being are strongly correlated with credit scores and strongly negatively correlated with minority presence—in communities where educational attainment, employment rates, income, homeownership rates, and indicators of financial opportunity are higher, average credit scores are also higher. Communities of color, however, have worse rates of well-being by these measures.

In short, communities of color are less likely than white communities to have elements that are associated with better credit scores. And since good credit scores are an important aspect of gaining access to those elements, such as higher education, better jobs, and homeownership, a cycle emerges where low credit scores feed decreased financial and social opportunity, which in turn feeds low credit scores. The following sections delve deeper into these elements associated with credit and race.

Education

Both educational attainment and student loan debt are closely tied to both credit score and minority presence in Illinois communities.

High educational attainment has a strong positive correlation with credit scores—in communities with a larger share of people with a bachelor's degree or higher, average credit scores are higher (Figure 2).

High educational attainment has a strong negative correlation with minority presence—in communities with a larger share of people with a bachelor's degree or higher, there are smaller shares of people of color (Figure 3).

High student loan debt has a strong positive correlation with credit scores—in communities with higher average student loan debt, average credit scores are higher (Figure 4).

High student loan debt has a strong negative correlation with minority presence—in communities with higher average student loan debt, there are smaller shares of people of color (Figure 5).

These relationships between education levels, student loan debt, credit, and race tell a story of unequal access to the resources needed to afford the higher education that in turn helps build credit and wealth. This disparity in access begins early—minority students disproportionately attend lower-performing elementary and high schools in areas of concentrated poverty.⁴ Due to the fact that Illinois schools are heavily funded by local property taxes, schools in poor areas tend to have fewer resources for their students, and therefore minority students receive fewer academic services in preparation for college—less access to advanced placement classes, college guidance counseling, after-school tutoring, and information related to college—which contributes to a pattern of low minority high school graduation rates.⁵

After high school, the gap continues to widen because of further access disparities. Although the number of minorities pursuing and completing postsecondary education has increased over the years, the share of minorities possessing a bachelor's degree or higher is still lower than their white counterparts.⁶ This is likely due to the lower incomes and asset holdings of minority families. In fact, after controlling for income and asset differences in black and white households, educational attainment of black and white children is not statistically different.⁷ In addition to lower income and assets, higher rates of unsecured debt for minority families appears to be hindering them from being able to save and pay for college.⁸

The lack of opportunity for racial minorities to save can have a substantial impact on long-term education outcomes. Children with even a small amount of money saved (under \$500) are 2.5 to 3 times more likely to enroll in and graduate from college than those without an account, and those with savings specifically for school are 4.5 times more likely to attend and graduate than those with only basic savings. Unfortunately, some families may not have the resources to save specifically for college, and the racial wealth gap of one generation is likely fueling the growth of the gap for the next generation.

Though associated with higher credit scores, student loan debt, whether federal or private, also has its dangers. The burden of student loan debt has been shown to incur lifetime wealth loss, and this wealth loss is greater for students of color and for students at for-profit schools—both of whom tend to have higher student loan debt burdens. One types of student loan debt can also be more dangerous than others—private student loans offer less flexibility for repayment than federal loans, and interest rates are often based on the borrower's and/or cosigner's credit rating, which can be limiting for borrowers/cosigners without a good credit history.

The accessibility of higher education is essential to wealth- and credit-building. Earning at least a bachelor's degree is associated with having lower unemployment rates and significantly higher income than having lower educational attainment levels. Therefore, the more educated someone is, the more likely they are to have a job that may offer them important wealth-building opportunities like access to a 401(k) retirement account or pension. These wealth-building opportunities are closely tied with the ability to build and keep good credit.

Because education level, student loan debt, and credit scores are closely related, individuals of color will routinely lose out on employment and wealth and credit-building opportunities.

FIGURE 6 UNEMPLOYMENT AND CREDIT SCORE

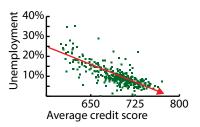


FIGURE 7
UNEMPLOYMENT
AND MINORITY PRESENCE

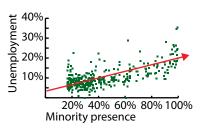


FIGURE 8
LOW INCOME

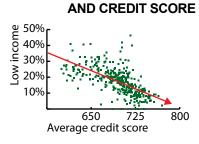
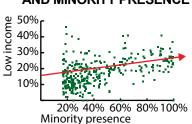


FIGURE 9 LOW INCOME AND MINORITY PRESENCE



Because education level, student loan debt, and credit scores are closely related, individuals of color will routinely lose out on employment and wealth and credit-building opportunities. The barriers that prevent minorities from attaining higher education also feed the disparity in credit scores.

Employment and Income

Unemployment rates and lower incomes also have strong relationships with both credit scores and minority presence in Illinois.

Higher rates of unemployment have a strong negative correlation with credit scores—in communities with higher unemployment rates, average credit scores are lower (Figure 6).

Higher rates of unemployment have a strong positive correlation with minority presence—in communities with higher rates of unemployment, there are larger shares of people of color (Figure 7).

Higher rates of lower incomes have a strong negative correlation with credit scores—in communities with higher rates of low-income households, average credit scores are lower (Figure 8).

Higher rates of lower incomes have a strong positive correlation with minority presence—in communities with higher rates of low-income households, there are larger shares of people of color (Figure 9).

The illustrated relationships give some insight to the employment and credit trap that many people of color are likely falling into. Employment and income are both precursors to good credit since a large part of having good credit is about having enough money to manage debt by paying bills consistently and on time. However, good credit, in many cases, may be a necessary precursor to employment as well—some employers check job applicants' credit reports, leading to applicants with blemished credit histories being passed over for jobs. ¹³ This and the relationships between credit, employment, and income shown above illustrate the complex cyclical relationship between employment and credit—having a good job can help you build credit, since you are more able to pay off bills in a timely manner, but having bad credit can prevent you from getting a good job. In short, having bad credit can be a barrier to building good credit.

This is of particular interest and concern for communities of color because of the substantial racial inequities in employment and income:

- In 2012, white Illinoisans had an unemployment rate of 7.6%; African Americans had a rate of 22.4%, and Latinos had a rate of 12.0%.¹⁴
- White Illinoisans have nearly twice the median household income that African American Illinoisans have, and Latino households also have significantly less than their white counterparts.¹⁵
- African American Illinoisans are also over three times more likely to be

HOMEOWNERSHIP AND CREDIT SCORE

Solution 100%
40%
40%
20%
Average credit score

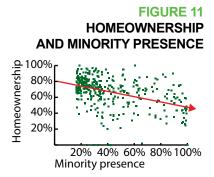
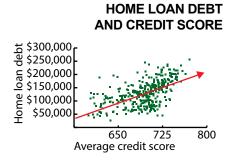
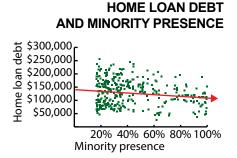


FIGURE 12

FIGURE 13





living in poverty than white Illinoisans, and Latinos are about twice as likely. 16

 A comparison of child poverty is even more stark—African American Illinoisans under the age of 18 are about 4 times more likely to be living in poverty than white Illinoisans, and Latinos are about twice as likely (the African American child poverty rate is 45%, white is 11%, and Latino is 28%).¹⁷

As already discussed, disparities in access to education have a tremendous impact on the racial income and subsequent wealth gap. Beyond that, economic factors have also been very influential: The Great Recession had a much stronger impact on communities of color, and the recovery is happening much more slowly, if at all, in those communities. African Americans in particular have been hit incredibly hard and are not seeing many of the opportunities for advancement that others are in the recovery. African Americans and Latinos are still suffering much higher unemployment rates than other groups, and when employed they generally earn less and are more likely to earn minimum wage.¹⁸

What this complex relationship between race, employment, income, and credit scores means is that more individuals of color are trapped in a career and credit cycle that is preventing them from getting firm footing on the path to economic security.

Homeownership

Rates of homeownership and levels of home loan debt are also strongly related to credit scores and minority presence.* This is very important because a home is the largest asset most people attain, and traditionally, purchasing a home is a long-term investment that appreciates over time, often serving as a stabilizing asset for families. The ties between homeownership and home loan debt and credit and race illustrate a much more complicated reality for people of color.

Higher rates of homeownership have a strong positive correlation with credit scores—in communities with higher rates of homeownership, average credit scores are higher (Figure 10).

Higher rates of homeownership have a strong negative correlation with minority presence—in communities with higher rates of homeownership, there are smaller shares of people of color (Figure 11).

High home loan debt has a strong positive correlation with credit score—in communities with higher average home loan debt, average credit scores are higher (Figure 12).

High home loan debt has a strong negative correlation with minority presence—in communities with higher average home loan debt, there are smaller shares of people of color (Figure 13).

^{*}Home loan debt here refers to first mortgage agency debt, as defined in the Definitions section.

Like education and employment, homeownership and home loan debt are complexly interrelated with credit and race. Perhaps the relationships can be explained by the simple fact that credit plays a big role in your ability to obtain a home loan, and thus, own a home. In other words, people below a certain credit score threshold may not be able to buy a home, so the relationship could simply exist because a high score is often one criterion to homeownership. However, when you also consider the relationship with race, it becomes much more complicated since minorities are more likely to have worse credit scores and therefore less access to home loans. Homeownership, therefore, is not an equally-accessible asset—African Americans in Illinois are almost three times more likely than white Illinoisans to rent rather than own their homes, and Latinos are twice as likely (75% of white Illinoisans own their homes, while only 39% of African Americans and 52% of Latinos do).¹⁹

Though good credit is often a necessary precursor to homeownership, owning a home can also impact credit—it is a two-way relationship. The Great Recession and the housing crisis disproportionately impacted communities of color and essentially doubled the wealth gap between whites and African Americans when you take home equity into account.²⁰ The racial wealth gap today is the largest it's been in the last 25 years and is twice what it was prior to 2009.²¹ The recent jump is credited to the housing market crash of 2007 to 2009, which had a larger impact on African American and Latino households. Latino and African American homeowners were twice as likely to experience foreclosure as white homeowners.²² This was partially due to the fact that minorities who did own homes invested a greater share of their overall wealth solely in their homes than white homeowners—because white households simply have more overall wealth.²³

African American and Latino home loan borrowers also pay more for their loans than white borrowers, regardless of their credit history.²⁴ This suggests that minority borrowers are steered toward, or only have the opportunity to borrow, higher cost subprime loans.²⁵ In 2006, high-risk lenders were most active in minority neighborhoods—even more so than in low-income neighborhoods—which put these communities at the highest risk to take the brunt of the housing crash and to suffer the biggest losses.²⁶ This illegal and unethical lending practice caused the disproportionate loss of wealth and foreclosures in communities of color, even after controlling for differences in income.²⁷

All told, despite the promise of wealth-building that homeownership holds and despite policies intended to curb abuse, home buying has a long history of intentional racially discriminatory activity by lenders, brokers, and communities that continue to influence home buying for families of color.²⁸

Financial Opportunity and Well-Being

There are a variety of other important indicators of financial well-being and opportunity where racial disparities persist. Late payments and retail debt have strong relationships with both minority presence and credit score. Differences

Despite the promise of wealthbuilding that homeownership holds and despite policies intended to curb abuse, home buying has a long history of intentional racially discriminatory activity by lenders, brokers, and communities that continue to influence home buying for families of color.

FIGURE 14 LATE PAYMENTS AND CREDIT SCORE

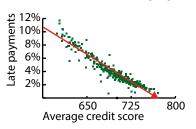


FIGURE 15 LATE PAYMENTS

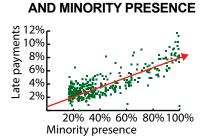


FIGURE 16 RETAIL DEBT

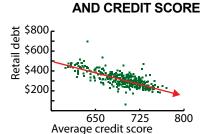


FIGURE 17 RETAIL DEBT

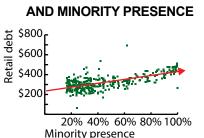
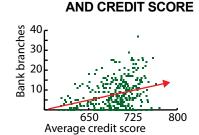


FIGURE 18 BANK BRANCHES



in rates of late payments and levels of retail debt show the financial well-being of different communities and may indicate a lack of certain financial opportunities available in those communities. The use of retail debt could indicate a lack of access to small dollar loans, and late payments may indicate a lack of financial education related to credit, or again, a lack of access to small dollar loans with feasible terms. It could also mean that incomes are too low to make ends meet.

Higher rates of late payments have a strong negative correlation with credit scores—in communities with higher rates of late payments, average credit scores are lower (Figure 14).

Higher rates of late payments have a strong positive correlation with minority presence—in communities with higher rates of late payments, there are larger shares of people of color (Figure 15).

It is not surprising that late payments are almost perfectly negatively correlated with credit score—they are actually an element that is factored into a credit score. The strong relationship with minority presence, however, seems indicative of economic hardship in those communities.

High retail debt has a strong negative correlation with credit scores—in communities with higher average retail debt, average credit scores are lower (Figure 16).

High retail debt has a strong positive correlation with minority presence—in communities with higher average retail debt, there are larger shares of people of color (Figure 17).

Retail debt is not in and of itself bad for a person's credit. If managed well, it can help a borrower build credit. However, if not managed well (like any other debt), it negatively impacts a score. The strong relationship between retail debt and credit indicate that it is one type of debt that is frequently mismanaged—whether because borrowers are not adequately educated on the terms, or because borrowers simply use it for things they cannot afford and aren't able to keep up with payments. Retail debt also typically does not appreciate or gain value as home loan debt or investment in an education historically has. The strong relationship with minority presence, however, may be indicative of the targeted marketing of predatory products or the need for small dollar loans in these communities.

The presence of different types of financial institutions may serve as an indicator of financial opportunity, but without more knowledge of the institutions' policies, practices, and products, the implications are somewhat unclear. There is a relationship between the number of financial institutions in a community and that community's average credit score, but there is not a statistically significant relationship between these variables and minority presence.

Larger numbers of FDIC-insured banks have a positive correlation with credit scores—in communities with more banks, average credit

FIGURE 19
BANK BRANCHES
AND MINORITY PRESENCE

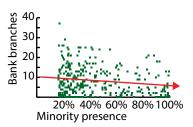


FIGURE 20
ALTERNATIVE FINANCIAL
INSTITUTIONS
AND CREDIT SCORE

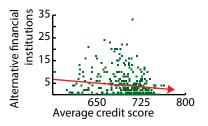
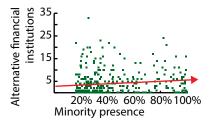


FIGURE 21
ALTERNATIVE FINANCIAL
INSTITUTIONS
AND MINORITY PRESENCE



scores are higher (Figure 18).

Larger numbers of FDIC-insured banks have a weak negative correlation with minority presence—in communities with more banks, there are smaller shares of people of color (Figure 19).

Larger numbers of alternative financial institutions have a negative correlation with credit scores—in communities with more payday lenders, auto title lenders, pawn shops, and credit unions, average credit scores are lower (Figure 20).

Larger numbers of alternative financial institutions have a weak positive correlation with minority presence—in communities with more payday lenders, auto title lenders, pawn shops, and credit unions, there are larger shares of people of color (Figure 21).

The presence of different types of financial institutions and their mostly weak relationship to race and credit points to a complicated story. On the surface, it seems to indicate that there is not much difference in the type of financial institutions available in communities of color. And this might be true. However, it is becoming increasingly clear that the presence of FDIC-insured banks does not automatically equal "good, safe financial products" and alternative financial institutions do not automatically equal "undesirable and unwanted financial products." Before the housing crisis, many of the sub-prime mortgage loans that people of color were targeted for were made by FDIC-insured banks. The presence of banks does not always mean positive financial opportunity and outcomes. On the flip side, alternative financial institutions may be providing sorely needed financial services to individuals who are not comfortable or prepared to utilize a big bank. The relationship between communities of color and financial institutions is a very complicated piece of the bigger picture.

Understanding Complex Relationships

Our findings thus far have illuminated the complex interrelatedness of demographic and financial indicators. We can easily observe that many financial indicators have strong relationships with credit scores and also have strong, but opposite, relationships with minority presence. At the same time, indicators of well-being are strongly correlated with credit and strongly negatively correlated with minority presence (Figure 22). However, to gain a deeper understanding of the intersection of these variables, another layer of analysis is necessary. Through regression analysis, we know that:

- Controlling for a number of demographic variables (education, employment, income, and homeownership), the relationship between race and credit scores persists—there is still a statistically significant relationship. However...
- These additional variables do contribute to variance in credit scores. In a bivariate regression, 65% of variability in average credit score can be explained by minority presence. When demographic, economic, and social variables (education, employment, income, and homeownership) are

added to the model, 83% of variation in average credit score is explained.

What this means is that although many demographic variables are associated with credit scores, controlling for them does not erase the relationship between race and credit scores. These findings show that the highly interrelated variables present in communities of color are all important to consider when trying to understand the disparity in credit scores and when looking for effective solutions to the problem. People living in communities of color are facing some of the harshest barriers in trying to achieve financial security.

FIGURE 22 CORRELATION COEFFICIENTS

	Correlation with credit score (Pearson's r)	Correlation with minority presence (Pearson's r)
Credit score	1	808**
Minority presence	808**	1
Late payments	947**	.808**
Retail debt	704**	.663**
Low income	639**	.472**
High education	.628**	374**
Unemployment	551**	.555**
Home loan debt (first mortgage agency)	.532**	203**
Student loan debt	.524**	273**
Homeownership	.415**	388**
FDIC-insured bank branches	.307**	103
Alternative financial institutions	143**	075

^{**}Correlation is significant at the .01 level (2-tailed).

Conclusion

While the magnitude of the issue and the complexity of interrelatedness of the factors involved may make the problem seem overwhelming, the bottom line is that without attention and efforts to develop meaningful solutions, the racial disparity in credit scores will only become more entrenched. The relationship between credit scores and minority presence illustrates a clear racial disparity in credit in Illinois. Though many related variables help to explain some variability in credit scores, even when controlling for them, racial differences in credit persist.

Like the income and wealth gaps between whites and people of color, the credit disparity is both indicative of other barriers to access and is a barrier in and of itself. Communities of color likely have lower average credit scores because of the same barriers that contribute to higher poverty rates in those communities: lower investment in schools, fewer jobs within the communities, and a lack of affordable housing. In turn, low credit scores then serve as barriers to those same opportunities—bad credit histories and poor credit scores make obtaining loans for education and a home more difficult and expensive and can prevent someone from getting a job.

The complex and interrelated relationships among credit, race, and indicators of future financial growth and financial well-being point to the fact that credit scores are both a product of and a contributor to racial disparity because of structural racial discrimination and exclusion. In other words, the observed credit gap is not only a facet of, but is actually feeding, the growth of racial disparity due to a disparity in access between white communities and communities of color.

LIMITATIONS: UNEXPLORED AVENUES

There are many variables and aspects of the issue of racial disparity that we were unable to address in our analysis. The following are limitations that we recognize as highly relevant to the discussion, but were unable to fully explore. The format of the data on debt, lack of data on people with no credit score and incarcerated individuals, and the probable differences among people in different ethnic groups all presented limitations to what this study could analyze.

Tradeline vs. Consumer Data

Since data on debt were available only by tradeline, not by consumer, it was not feasible to analyze how many tradelines—in essence, how much total debt—each individual consumer may have. Analyzing the total debt that individuals have could lend insight into if there are differences between minorities and non-minorities in the number of tradelines and total debt carried.

People with No Credit Score

This analysis relies on a dataset with universe of people defined as those having a credit report. This leaves out an important group: people with no credit score. We do know that people with no credit score face unique barriers to wealth building. As mentioned, credit scores are often necessary for financial opportunities, such as obtaining loans, but also in renting a home or getting a job. Without a credit score, people may be forced to turn to alternative financial services and products that are often less secure and more costly. Many people without credit scores are also likely unbanked, which introduces additional challenges and barriers. This missing data on people with no score could skew this analysis somewhat if certain communities are home to large numbers of people with no score.

Incarcerated Individuals

People who are incarcerated are not counted by the in U.S. Census Bureau in their home neighborhood; rather they are counted in the area where they are incarcerated. This basically makes them missing people in our analysis of their home communities. Since we do not have data on these individuals, our analysis may be skewed in the areas where they come from. This is significant because incarcerated individuals are very disproportionately from communities of color. They also face a plethora of challenges when they reenter their communities—some related to the decimation of their credit during their time in prison, since incarcerated individuals are particularly vulnerable to identity theft while incarcerated.²⁹

Differences in Race/Minority Groups

By combining all non-white race groups into one 'minority' group, we do not account for what may be important intragroup differences. Different race groups have faced very different barriers and racially targeted policies that have stripped them of their assets or barred them from building assets throughout their history in the United States. The very small numbers of many of the race groups in most Illinois communities would have made this analysis infeasible necessitating that we looked at minorities as one group.

ENDNOTES

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APPENDIX I: DATA BY COUNTY

DEMOGRAPHIC DATA

	MINORITY PRESENCE: Percentage of population that is not white, non-Hispanic	EDUCATION: Percentage of population age 25 and older with a bachelor's degree or higher	UNEMPLOYMENT RATE: Percentage of civilian workforce that is unemployed	LOW INCOME: Percentage of population with annual incomes between 100% and 200% of poverty line	HOMEOWNERSHIP: Percentage of housing units that are owner- occupied
ILLINOIS COUNTY	36.1%	30.7%	9.3%	16.9%	68.7%
Adams County	6.9%	21.2%	6.3%	18.8%	74.9%
Alexander County	39.1%	7.9%	12.2%	27.1%	67.4%
Bond County	11.2%	22.8%	9.4%	21.4%	80.2%
Boone County	24.5%	19.8%	11.8%	18.2%	83.2%
Brown County	25.1%	10.7%	7.2%	22.1%	73.3%
Bureau County	9.8%	16.3%	7.6%	20.9%	75.7%
Calhoun County	1.8%	13.9%	6.8%	17.9%	79.8%
Carroll County	5.1%	16.2%	8.5%	18.4%	76.1%
Cass County	19.5%	13.1%	6.3%	22.9%	70.8%
Champaign County	28.7%	42.1%	7.4%	16.4%	54.6%
Christian County	4.4%	12.8%	6.9%	19.7%	74.5%
Clark County	2.5%	17.4%	7.5%	21.6%	77.2%
Clay County	3.0%	13.6%	9.5%	22.8%	75.8%
Clinton County	7.8%	19.5%	5.5%	15.5%	80.6%
Coles County	8.4%	24.2%	11.8%	19.0%	62.4%
Cook County	55.9%	33.7%	10.8%	18.5%	59.8%
Crawford County	8.1%	14.8%	14.6%	18.4%	79.8%
Cumberland County	2.2%	12.7%	8.8%	20.8%	81.2%
De Witt County	4.1%	17.0%	6.6%	17.1%	77.5%
DeKalb County	20.0%	28.2%	10.2%	15.4%	62.8%
Douglas County	7.9%	14.7%	6.8%	21.5%	78.2%
DuPage County	29.2%	45.6%	7.7%	11.2%	75.9%
Edgar County	2.5%	17.2%	9.2%	22.5%	76.0%
Edwards County	2.5%	12.5%	8.6%	25.8%	78.8%
Effingham County	3.3%	19.3%	5.3%	17.4%	79.5%
Fayette County	3.4%	13.7%	8.5%	20.7%	79.2%
Ford County	4.1%	16.3%	9.1%	17.2%	78.8%
Franklin County	3.2%	12.8%	9.9%	25.2%	78.4%
Fulton County	7.2%	14.0%	8.0%	21.7%	76.6%
Gallatin County	2.8%	9.8%	10.2%	21.6%	77.2%
Greene County	2.9%	13.3%	6.5%	22.4%	76.5%
Grundy County	10.9%	18.1%	9.7%	14.6%	75.6%
Hamilton County	2.0%	13.0%	7.8%	22.1%	82.7%
Hancock County	2.5%	18.9%	6.6%	19.9%	80.2%
Hardin County	4.6%	10.6%	8.7%	23.7%	78.3%
Henderson County	6.2%	15.3%	6.7%	16.4%	80.3%

COUNTY	MINORITY PRESENCE: Percentage of population that is not white, non-Hispanic	EDUCATION: Percentage of population age 25 and older with a bachelor's degree or higher	UNEMPLOYMENT RATE: Percentage of civilian workforce that is unemployed	LOW INCOME: Percentage of population that earns between poverty line and 200% of poverty line	HOMEOWNERSHIP: Percentage of housing units that are owner- occupied
COUNTY	0.40/	20.20/	F 00/	40.70/	70.00/
Henry County	8.4%	20.3%	5.9%	16.7%	78.3%
Iroquois County	7.6% 24.1%	13.7%	8.2%	20.0% 18.7%	75.8%
Jackson County	1.9%	35.6% 15.1%	9.3% 7.7%	24.9%	54.4% 82.6%
Jasper County Jefferson County	1.9%	15.1%	9.9%	19.1%	74.0%
Jersey County	3.0%	16.6%	5.5%	17.6%	80.5%
Jo Daviess County	4.4%	23.3%	5.3%	18.4%	78.4%
Johnson County	15.1%	13.0%	8.7%	20.6%	82.0%
,	40.2%	31.8%	8.7%	16.5%	76.6%
Kane County Kankakee County	26.2%	17.3%	10.7%	19.2%	69.9%
Kendall County	25.5%	33.7%	7.0%	10.7%	86.2%
Knox County	14.7%	16.2%	8.9%	19.5%	68.2%
Lake County	34.3%	41.5%	8.6%	12.8%	77.6%
LaSalle County	11.5%	15.9%	9.8%	18.1%	76.5%
Lawrence County	18.7%	10.5%	5.9%	23.9%	70.5%
Lee County	11.4%	15.4%	9.0%	19.6%	74.7%
Livingston County	10.3%	13.7%	7.5%	17.8%	75.8%
Logan County	14.9%	16.8%	5.6%	16.6%	74.1%
Macon County	21.2%	20.8%	8.9%	19.0%	70.1%
Macoupin County	3.0%	15.3%	7.4%	18.4%	77.8%
Madison County	13.2%	23.3%	8.0%	15.7%	74.4%
Marion County	7.6%	13.6%	10.5%	23.7%	74.1%
Marshall County	4.0%	16.5%	7.3%	18.6%	82.8%
Mason County	2.5%	15.9%	8.1%	19.8%	79.6%
Massac County	9.9%	15.6%	8.1%	19.3%	77.6%
McDonough County	11.2%	33.5%	9.2%	20.1%	60.6%
McHenry County	16.0%	31.9%	8.8%	10.9%	83.8%
McLean County	17.6%	41.1%	6.6%	13.0%	67.8%
Menard County	1.6%	21.2%	4.2%	15.4%	81.5%
Mercer County	3.0%	14.0%	5.7%	17.3%	79.9%
Monroe County	2.8%	23.6%	5.4%	12.6%	81.1%
Montgomery County	7.2%	12.5%	7.4%	19.4%	76.4%
Morgan County	10.0%	20.5%	8.5%	17.9%	70.0%
Moultrie County	2.2%	15.2%	5.4%	20.2%	78.6%
Ogle County	11.1%	19.0%	10.4%	14.6%	74.6%
Peoria County	26.8%	28.3%	8.6%	16.7%	67.6%
Perry County	13.0%	13.9%	8.8%	21.2%	78.5%
Piatt County	2.7%	22.8%	3.7%	15.1%	83.0%
Pike County	3.8%	12.1%	7.0%	21.5%	78.0%
Pope County	8.0%	10.7%	6.1%	19.3%	76.0%
Pulaski County	36.0%	11.2%	12.8%	29.0%	77.1%
Putnam County	6.0%	15.1%	10.2%	16.1%	78.2%
Randolph County	13.6%	11.6%	7.2%	19.7%	76.2%
Richland County	3.5%	18.9%	5.8%	20.1%	76.8%
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	MINORITY PRESENCE: Percentage of population that is not white, non-Hispanic	EDUCATION: Percentage of population age 25 and older with a bachelor's degree or higher	UNEMPLOYMENT RATE: Percentage of civilian workforce that is unemployed	LOW INCOME: Percentage of population that earns between poverty line and 200% of poverty line	HOMEOWNERSHIP: Percentage of housing units that are owner- occupied
COUNTY					
Rock Island County	23.9%	22.0%	7.7%	20.5%	71.2%
Saline County	7.7%	14.0%	9.1%	25.8%	73.7%
Sangamon County	17.1%	31.2%	7.5%	15.6%	70.9%
Schuyler County	4.8%	17.8%	5.1%	19.0%	79.5%
Scott County	2.0%	18.3%	4.9%	19.0%	74.4%
Shelby County	2.1%	14.5%	6.3%	22.1%	80.4%
St. Clair County	36.7%	24.3%	9.2%	17.7%	67.4%
Stark County	2.9%	14.3%	7.7%	20.4%	80.1%
Stephenson County	14.4%	17.8%	10.4%	18.6%	71.8%
Tazewell County	4.9%	23.5%	6.2%	15.0%	78.0%
Union County	7.5%	18.6%	10.2%	21.3%	74.1%
Vermilion County	19.5%	14.0%	11.0%	20.9%	71.1%
Wabash County	3.7%	16.0%	6.5%	20.0%	79.6%
Warren County	11.4%	18.6%	7.8%	24.8%	72.8%
Washington County	3.1%	18.1%	4.4%	19.0%	81.8%
Wayne County	2.5%	12.5%	6.6%	25.7%	77.0%
White County	2.7%	12.7%	7.4%	23.1%	79.6%
Whiteside County	13.8%	15.6%	8.0%	21.7%	75.3%
Will County	32.2%	31.3%	8.6%	12.1%	84.5%
Williamson County	8.3%	22.0%	8.6%	19.6%	72.3%
Winnebago County	27.0%	21.2%	11.0%	18.2%	69.0%
Woodford County	3.5%	24.3%	5.5%	13.1%	83.8%

FINANCIAL INDICATOR DATA

	AVERAGE CREDIT SCORE	Payments: Percentage of tradelines past due	AVERAGE HOME LOAN DEBT: First Mortgage Agency - Mortgage trades with FHA, Fannie, Freddie, or GNMA	AVERAGE RETAIL DEBT: Tradelines with retail stores	AVERAGE STUDENT LOAN DEBT: Student loan from a bank, credit union or finance company, or the government
ILLINOIS COUNTY	705	3.3%	\$144,655	\$294	\$7,055
Adams County	717	3.0%	\$81,270	\$234	\$5,742
Alexander County	665	4.7%	\$62,367	\$331	\$5,388
Bond County	712	3.0%	\$95,561	\$254	\$5,947
Boone County	704	3.2%	\$116,691	\$296	\$6,513
Brown County	715	2.8%	\$92,403	\$259	\$5,394
Bureau County	718	2.7%	\$82,328	\$286	\$6,090
Calhoun County	727	2.3%	\$93,978	\$219	\$5,440
Carroll County	724	2.6%	\$81,450	\$271	\$5,910
Cass County	700	3.3%	\$63,056	\$259	\$5,168

	AVERAGE CREDIT SCORE	PAYMENTS: Percentage of tradelines past due	AVERAGE HOME LOAN DEBT: First Mortgage Agency - Mortgage trades with FHA, Fannie, Freddie, or GNMA	AVERAGE RETAIL DEBT: Tradelines with retail stores	AVERAGE STUDENT LOAN DEBT: Student loan from a bank, credit union or finance company, or the government
COUNTY					
Champaign County	711	2.9%	\$109,878	\$232	\$6,330
Christian County	707	3.0%	\$71,927	\$235	\$5,555
Clark County	707	2.9%	\$67,601	\$228	\$5,262
Clay County	708	3.2%	\$67,705	\$221	\$5,565
Clinton County	720	2.3%	\$106,906	\$234	\$5,930
Coles County	701	3.3%	\$70,424	\$210	\$5,621
Cook County	695	3.9%	\$161,105	\$311	\$7,501
Crawford County	715	2.5%	\$69,217	\$253	\$6,095
Cumberland County	713	2.6%	\$62,711	\$216	\$5,239
De Witt County	711	2.8%	\$86,477	\$259	\$5,632
DeKalb County	707	3.4%	\$129,976	\$314	\$5,978
Douglas County	714	2.9%	\$74,555	\$257	\$5,641
DuPage County	727	2.3%	\$170,022	\$268	\$7,543
Edgar County	695	3.2%	\$63,917	\$207	\$5,198
Edwards County	718	2.9%	\$69,380	\$237	\$5,603
Effingham County	726	2.2%	\$86,746	\$174	\$5,909
Fayette County	704	3.2%	\$74,037	\$227	\$5,428
Ford County	713	2.8%	\$78,925	\$278	\$5,263
Franklin County	684	3.9%	\$63,491	\$289	\$5,308
Fulton County	710	3.3%	\$69,617	\$265	\$5,709
Gallatin County	699	2.8%	\$61,424	\$287	\$5,394
Greene County	701	3.4%	\$74,696	\$225	\$5,649
Grundy County	711	2.9%	\$134,143	\$286	\$6,133
Hamilton County	711	2.8%	\$75,461	\$233	\$5,032
Hancock County	718	2.7%	\$74,916	\$248	\$5,349
Hardin County	703	3.5%	\$72,570	\$245	\$6,728
Henderson County	710	2.4%	\$66,354	\$296	\$5,390
Henry County	719	2.6%	\$91,973	\$297	\$6,041
Iroquois County	713	3.1%	\$83,614	\$277	\$5,858
Jackson County	693	4.0%	\$83,336	\$268	\$5,775
Jasper County	722	2.5%	\$79,541	\$185	\$5,416
Jefferson County	695	3.6%	\$78,187	\$236	\$5,465
Jersey County	715	2.8%	\$96,287	\$251	\$5,747
Jo Daviess County	735	2.0%	\$108,645	\$236	\$5,848
Johnson County	707	2.9%	\$83,044	\$300	\$5,990
Kane County	711	2.9%	\$161,733	\$311	\$6,973
Kankakee County	694	3.7%	\$109,405	\$351	\$6,236
Kendall County	705	3.2%	\$162,462	\$354	\$6,811
Knox County	711	2.9%	\$70,591	\$302	\$5,964
Lake County	719	2.6%	\$165,298	\$285	\$7,762
LaSalle County	713	2.9%	\$105,350	\$299	\$6,172
Lawrence County	700	3.7%	\$64,007	\$270	\$5,617
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	AVERAGE CREDIT SCORE	PAYMENTS: Percentage of tradelines past due	AVERAGE HOME LOAN DEBT: First Mortgage Agency - Mortgage trades with FHA, Fannie, Freddie, or GNMA	AVERAGE RETAIL DEBT: Tradelines with retail stores	AVERAGE STUDENT LOAN DEBT: Student loan from a bank, credit union or finance company, or the government
COUNTY					
Lee County	713	2.7%	\$84,949	\$262	\$6,342
Livingston County	712	2.9%	\$88,968	\$242	\$5,987
Logan County	705	3.2%	\$74,995	\$249	\$5,792
Macon County	700	3.2%	\$79,185	\$257	\$6,068
Macoupin County	708	3.3%	\$86,307	\$274	\$5,586
Madison County	707	3.0%	\$104,622	\$292	\$6,267
Marion County	692	3.8%	\$69,044	\$258	\$5,807
Marshall County	726	2.6%	\$83,300	\$256	\$5,444
Mason County	706	3.3%	\$74,656	\$253	\$5,390
Massac County	691	3.8%	\$77,397	\$278	\$5,554
McDonough County	714	3.4%	\$87,571	\$249	\$5,580
McHenry County	719	2.6%	\$152,611	\$299	\$7,071
McLean County	718	2.3%	\$117,907	\$247	\$6,205
Menard County	722	2.2%	\$100,652	\$263	\$6,315
Mercer County	720	2.5%	\$84,015	\$301	\$6,049
Monroe County	734	1.9%	\$137,678	\$255	\$6,390
Montgomery County	709	2.9%	\$77,128	\$244	\$5,570
Morgan County	704	3.4%	\$68,923	\$233	\$5,850
Moultrie County	717	2.5%	\$76,306	\$232	\$5,745
Ogle County	713	2.7%	\$102,046	\$282	\$6,070
Peoria County	707	3.3%	\$102,720	\$263	\$6,398
Perry County	703	2.7%	\$69,057	\$251	\$5,198
Piatt County	727	2.4%	\$99,961	\$246	\$5,884
Pike County	706	3.9%	\$81,807	\$264	\$5,766
Pope County	714	2.4%	\$69,955	\$287	\$4,493
Pulaski County	674	3.7%	\$74,997	\$305	\$5,688
Putnam County	727	2.1%	\$81,262	\$287	\$6,213
Randolph County	711	2.9%	\$85,709	\$244	\$5,647
Richland County	715	3.2%	\$74,299	\$232	\$5,661
Rock Island County	709	2.9%	\$87,769	\$306	\$6,038
Saline County	692	3.4%	\$62,261	\$292	\$6,313
Sangamon County	712	2.8%	\$97,899	\$257	\$6,778
Schuyler County	715	3.3%	\$82,075	\$239	\$5,986
Scott County	706	3.5%	\$68,609	\$225	\$5,720
Shelby County	715	3.0%	\$68,419	\$225	\$5,283
St. Clair County	690	3.7%	\$119,638	\$327	\$6,146
Stark County	722	2.4%	\$68,289	\$286	\$5,638
Stephenson County	714	3.0%	\$80,683	\$233	\$6,053
Tazewell County	720	2.7%	\$100,598	\$254	\$6,044
Union County	698	3.1%	\$83,986	\$263	\$5,808
Vermilion County	689	3.7%	\$65,053	\$296	\$5,654
Wabash County	707	3.1%	\$67,104	\$245	\$6,031

	AVERAGE CREDIT SCORE	PAYMENTS: Percentage of tradelines past due	AVERAGE HOME LOAN DEBT: First Mortgage Agency - Mortgage trades with FHA, Fannie, Freddie, or GNMA	AVERAGE RETAIL DEBT: Tradelines with retail stores	AVERAGE STUDENT LOAN DEBT: Student loan from a bank, credit union or finance company, or the government
COUNTY					
Warren County	708	2.8%	\$67,011	\$298	\$5,930
Washington County	715	2.5%	\$86,116	\$230	\$5,951
Wayne County	713	3.5%	\$67,630	\$232	\$5,579
White County	707	2.6%	\$66,357	\$267	\$5,630
Whiteside County	713	2.8%	\$76,499	\$278	\$5,949
Will County	706	3.1%	\$156,503	\$327	\$6,978
Williamson County	699	3.1%	\$86,930	\$283	\$6,190
Winnebago County	701	3.5%	\$91,383	\$279	\$6,214
Woodford County	733	2.0%	\$109,354	\$237	\$6,434

FINANCIAL INSTITUTION DATA

	PAYDAY STORES/ LENDERS	CREDIT UNIONS	AUTO TITLE PAWN STORES/ SHOPS LENDERS		FDIC- INSURED BANK BRANCHES	TOTAL FINANCIAL INSTITUTIONS	
ILLINOIS	496	254	1,082	280	4,695	6,807	
COUNTY							
Adams County	4	6	14	1	38	63	
Alexander County	0	0	0	0	2	2	
Bond County	0	0	0	0	8	8	
Boone County	3	0	6	0	17	26	
Brown County	0	0	0	0	7	7	
Bureau County	0	2	2	2	20	26	
Calhoun County	0	0	0	0	5	5	
Carroll County	0	2	0	0	12	14	
Cass County	0	0	1	0	10	11	
Champaign County	10	7	24	4	84	129	
Christian County	2	2	7	1	19	31	
Clark County	1	0	2	0	12	15	
Clay County	1	0	1	0	13	15	
Clinton County	2	2	10	2	26	42	
Coles County	4	2	15	4	25	50	
Cook County	189	75	323	116	1556	2259	
Crawford County	1	1	1	0	15	18	
Cumberland County	0	0	0	0	6	6	
De Witt County	4	2	8	0	41	55	
DeKalb County	0	0	1	0	8	9	
Douglas County	0	0	0	0	10	10	
DuPage County	25	11	42	12	375	465	
Edgar County	0	2	2	1	11	16	
Edwards County	0	0	1	0	4	5	

	PAYDAY STORES/ LENDERS:	CREDIT UNIONS:	AUTO TITLE STORES/ LENDERS:	PAWN SHOPS:	FDIC- INSURED BANK BRANCHES	TOTAL FINANCIAL INSTITUTIONS:
COUNTY					210 11101120	
Effingham County	5	1	9	1	20	36
Fayette County	0	0	4	0	12	16
Ford County	0	1	0	0	11	12
Franklin County	1	0	8	4	17	30
Fulton County	1	0	4	1	22	28
Gallatin County	0	0	0	0	2	2
Greene County	0	0	0	0	7	7
Grundy County	1	1	4	0	21	27
Hamilton County	0	0	1	0	4	5
Hancock County	0	0	0	0	15	15
Hardin County	0	0	0	0	2	2
Henderson County	1	0	1	0	7	9
Henry County	1	0	4	0	26	31
Iroquois County	0	0	2	0	23	25
Jackson County	4	1	14	6	28	53
Jasper County	0	0	0	0	4	4
Jefferson County	4	0	14	2	18	38
Jersey County	1	0	4	0	10	15
Jo Daviess County	1	0	2	1	18	22
Johnson County	0	1	0	0	6	7
Kane County	18	7	40	4	142	211
Kankakee County	8	8	13	3	44	76
Kendall County	3	3	6	0	47	59
Knox County	3	2	8	1	22	36
Lake County	13	9	33	5	251	311
LaSalle County	7	10	14	3	62	96
Lawrence County	0	0	1	0	10	11
Lee County	3	0	3	0	20	26
Livingston County	1	1	5	1	27	35
Logan County	1	0	7	0	19	27
Macon County	1	1	5	0	12	19
Macoupin County	0	0	0	0	6	6
Madison County	0	0	1	0	9	10
Marion County	1	1	6	0	4	12
Marshall County	2	1	5	0	20	28
Mason County	9	1	14	2	127	153
Massac County	7	3	19	6	60	95
McDonough County	10	6	21	5	36	78
McHenry County	0	0	0	1	22	23
McLean County	19	16	41	22	95	193
Menard County	0	0	0	0	7	7
Mercer County	0	1	0	0	12	13
Monroe County	1	0	2	0	24	27
Montgomery County	2	0	7	1	24	34

	PAYDAY STORES/ LENDERS:	CREDIT UNIONS:	AUTO TITLE STORES/ LENDERS:	PAWN SHOPS:	FDIC- INSURED BANK BRANCHES	TOTAL FINANCIAL INSTITUTIONS:	
COUNTY							
Morgan County	3	0	10	2	21	36	
Moultrie County	0	0	0	0	7	7	
Ogle County	1	0	3	0	20	24	
Peoria County	15	7	29	6	76	133	
Perry County	2	0	7	1	8	18	
Piatt County	0	1	0	0	10	11	
Pike County	0	0	1	0	15	16	
Pope County	0	0	1	0	1	2	
Pulaski County	0	0	0	0	4	4	
Putnam County	0	0	0	0	3	3	
Randolph County	2	1	4	1	21	29	
Richland County	3	0	6	1	9	19	
Rock Island County	11	9	24	7	54	105	
Saline County	13	8	31	7	84	143	
Sangamon County	0	0	0	0	5	5	
Schuyler County	0	0	0	0	6	6	
Scott County	0	0	1	0	17	18	
Shelby County	13	7	41	11	88	160	
St. Clair County	3	2	10	2	14	31	
Stark County	0	0	0	0	4	4	
Stephenson County	2	2	6	2	27	39	
Tazewell County	9	1	17	6	53	86	
Union County	1	1	4	1	9	16	
Vermilion County	3	7	12	3	30	55	
Wabash County	1	1	2	0	5	9	
Warren County	0	0	0	0	12	12	
Washington County	0	0	0	0	11	11	
Wayne County	1	0	1	1	7	10	
White County	0	0	2	1	7	10	
Whiteside County	5	2	12	0	31	50	
Will County	14	4	25	5	198	246	
Williamson County	4	4	16	3	39	66	
Winnebago County	15	7	35	8	80	145	
Woodford County	0	1	0	0	20	21	
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APPENDIX II: METHODOLOGY DETAIL

The following steps were taken to conduct the regression analysis:

- All models met the assumptions of multiple regression: linearity, independence of errors, homoscedasticity, unusual points, and normality of residuals.
- 2. We established the base model that included only credit scores and minority presence.
- Control variables—educational attainment, unemployment, lowincome, and homeownership—were then added to the model one at a time. The final model consisted of all controlling variables: education, unemployment, low income, and homeownership.
- 4. To interpret the output from the regression model, we observed that in the base model, the adjusted R Square was equal to .651, showing that 65% of variability in average credit scores could be explained by minority presence. As additional variables are added to the regression model, the variability in credit scores can be explained more and more fully by them—approximately 83% with all variables added to the model.
- 5. To determine whether a statistically significant relationship between race and credit scores would persist, even controlling for these variables, we observed the standardized coefficients and noted that the % Minority coefficient was still larger than .3 (-.516), meaning there was still a strong, statistically significant relationship.

MODEL	SUMMARY	\rangle	\rangle	\rangle	\rangle	
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.808ª	.652	.651	21.06671	1.723	

a. Predictors: (Constant), % Minority

b. Dependent Variable: Average credit score

COEFFICIENTS^a

M	odel	Unstanda Coeffic		Standardized Coefficients	t	Sig.	Sig. 95.0% Confidence Interval for B		Correlations	Collinearity Statistics	
		В	Std. Error	Beta			Lower Bound	Upper Bound	Zero- order Partial Part	Tolerance VIF	
	(Constant)	744.505	2.291		325.024	.000	740.000	749.011			
1	% Minority	-1.158	.046	808	-25.355	.000	-1.248	-1.068	808808808	1.000 1.000	

a. Dependent Variable: Average credit score

MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.910ª	.828	.826	14.93243	1.787

 $a.\ Predictors: (Constant),\ \%\ Homeowners,\ \%\ Bachelors\ degree\ or\ higher,\ \%\ Minority,\ \%\ Unemployed,\ \%\ Low\ Income$

COEFFICIENTS^a

Model		Unstandardized Standardized Coefficients Coefficients		3		95.0% Co Interva		ce Correlations		Collinearity Statistics			
		В	Std. Error	Beta			Lower Bound	Upper Bound	Zero- order	Partial	Part	Tolerance	VIF
	(Constant)	692.484	7.235		95.713	.000	678.252	706.715					
	% Minority	746	.044	(516)	-16.889	.000	833	659	813	677	381	.546	1.833
	% Unemployed	912	.191	150	-4.768	.000	-1.289	536	704	251	108	.514	1.946
1	% Low Income	.050	.159	.012	.312	.755	264	.363	647	.017	.007	.369	2.711
	% Bachelors degree or higher	.679	.064	.376	10.543	.000	.552	.806	.629	.498	.238	.402	2.490
	% Homeowners	.334	.052	.175	6.422	.000	.231	.436	.424	.330	.145	.684	1.461

a. Dependent Variable: Average credit score

b. Dependent Variable: Average credit score



