Metropolitan Policy Program
The Brookings Institution

Credit Scores, Reports, and Getting Ahead in America

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"The expansion of consumer credit has created a windfall of benefits to both economies and consumers, but that growth has paralleled a substantial increase in the financial insecurity of Americans."

Findings

Consumer credit reports and scores play a growing role in the ability of families to get ahead, now influencing prices for loans and insurance and efforts to get jobs and rent apartments. An analysis of a quarterly sample of 25 million anonymous consumer credit reports and scores for every U.S. county between 1999 and 2004 reveals that:

- **Consumer credit scores widely vary across counties, with the South having the highest concentration of consumers with weak credit scores.** In 2004, among all consumers, the average score on a credit score index maintained by one of the major bureaus was 656, out of a scale that ranges from 350 to over 850. Meanwhile, the average credit score in the South was 635, and more than one in five borrowers in a typical Southern county have scores that suggest they are very risky borrowers.

- **Between 1999 and 2004, most counties with weak consumer credit scores saw declines in the average consumer credit score, while counties with strong scores generally experienced modest gains.** Nationwide, credit scores only modestly fell during this period, but the average Southern county experienced a larger decrease.

- **Counties with relatively high proportions of racial and ethnic minorities are more likely to have lower average credit scores.** *This evidence does not suggest that a bias exists, or that there is a causal relationship between race and credit scores, raising questions for future research.*

- **High homeownership rates and county per capita income are strongly associated with high consumer credit scores.** The average county with a low, mean credit score had a per capita income of $26,636 and a homeownership rate of 63 percent in 2000. Meanwhile, the typical county with high average credit scores had higher per capita incomes ($40,941) and higher shares of homeowners (73 percent).

- **Financial insecurity, primarily measured by the frequency of loan delinquencies, rose between 1999 and 2004.** Over those five years, the proportion of mortgage borrowers 60 or more days late in their mortgage payments increased by 108 percent, from one out of every 106 borrowers to one out of every 51. About one out of every 21 borrowers had at least one credit-bearing account 60 or more days past due in 2004.

Consumer credit reports and scores are playing a growing role in the economic mobility of consumers today. But rising consumer debt and loan delinquencies mandate that government leaders, with their private sector partners, pursue a series of reforms to increase consumer education and responsibility, market accountability, and accuracy.

Introduction

Everyday, more than 27,000 employees in the credit bureau industry walk into over 1,000 locations around the country and process over 66 million items of information.[1] Out of this massive churning of activity, credit bureaus produce consumer credit reports and scores, two of the most powerful determinants of modern American consumer life.[2]

Among their many applications, credit reports and scores now help determine if a family can borrow money to buy major necessities like homes and cars; they affect the prices businesses charge for such products as mortgages and auto insurance; reports and scores are used by an increasing number of employers to assess job applicants; they are used by landlords to evaluate prospective renters; and a growing number of utilities are using credit reports and scores to price deposits for numerous services.[3] In short, both the access and terms of access to an increasing array of basic necessities, including jobs, housing, insurance, energy, and communications, are now influenced by an individual's consumer credit report and scores.[4]

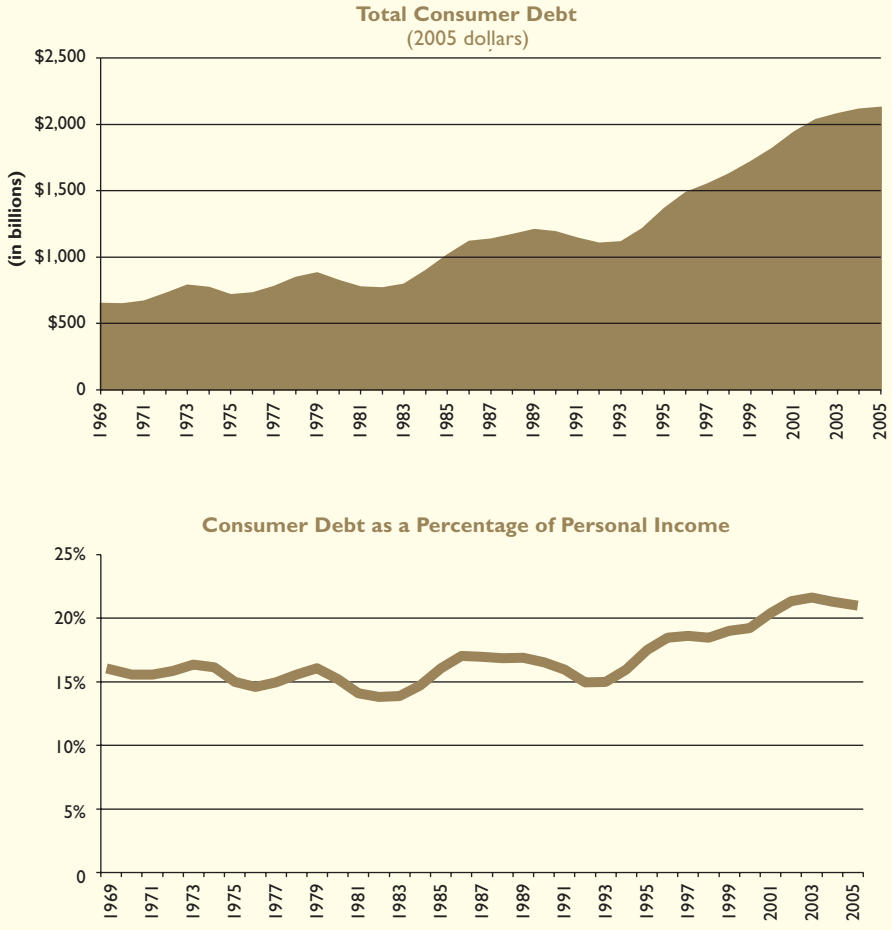
Among other effects, the growing availability of credit has contributed to the recent surge in consumer debt (Figure 1). Businesses have substantially expanded access to loan products among consumers as a result of the capacity credit reports and scores give businesses to predict lending risks.[5] Among other benefits, this has increased access to assets like houses, given consumers more choices about market products, and spurred economic development in neighborhoods once ignored by creditors and insurance companies.

At the same time, consumer credit information has provided businesses with a very sophisticated marketing tool, creating countless new opportunities to target consumer segments with individually tailored products. Pre-approved credit card offers, for instance, are made possible by the readily available information in consumer credit reports.[6]

While this expansion of consumer debt has created a windfall of benefits to both economies and consumers, its growth has paralleled a substantial increase in the financial insecurity of American consumers. As one indication of this, between 1980 and 2004 the personal bankruptcy rate skyrocketed from about one out of every 1,000 individuals to about five out of every 1,000 individuals (Figure 2).[7] At the same time, bankruptcy is affecting a broader cross section of Americans, becoming, some experts say, a "middle class phenomenon."[8]

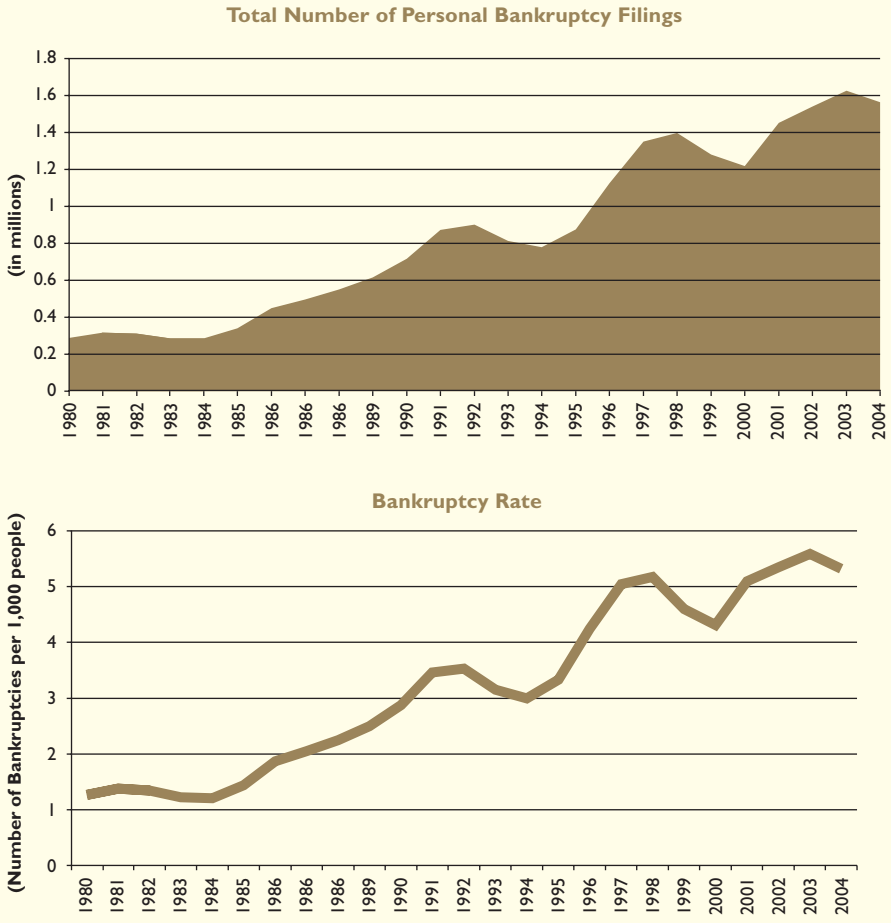
Among the numerous factors contributing to this growing financial insecurity, consumers frequently point to the proliferation of credit offers and to their inability to understand all of the many choices they are now confronted with in the financial services market.[9] Not understanding how to responsibly manage debt has become increasingly costly for families as debt

Figure 1. Consumer Debt Has Substantially Increased Over Time



Source: Author's analysis of data from the Bureau of Economic Analysis, Bureau of Labor Statistics, and the Federal Reserve

Figure 2. Personal Bankruptcy Filings Have Substantially Increased Over Time



Source: Author's analysis of data from the American Bankruptcy Institute

has become more widely available.

Expanding uses of consumer credit reports and scores have consequently spurred benefits and costs to American consumers and local economies. But, the geographic distribution of these effects is not widely known, stunting the development of appropriate, local policy responses to these market products. Many consumers likely need more information about credit report and scores, for instance, as they grapple with the increasing number of choices made possible by credit reports. Similarly, consumer awareness about their role overseeing the accuracy of their credit report is now more important than ever.

More generally, the lack of visibility of these issues has meant that a research agenda geared toward understanding credit reports and the ways they are used to set prices and inform market decisions is underdeveloped and under-funded. On the most elemental issue about the accuracy of credit reports, for instance, there is a widely held sense that the bill payment information not collected by bureaus drives down the credit scores of millions of borrowers, and drives-up the cost of credit associated with those scores.[10] But, empirical evidence that speaks to that point, and the general distributional effects of nontraditional data on consumer credit scores, is thin.[11] There are also very different assessments about the accuracy of information currently collected by the bureaus.[12]

Also there are important questions left unanswered about the appropriateness of market responses to credit scores. There is no public data available, for instance, that speaks to the optimal level of mortgage price fluctuation across different levels of risk. Put differently, the price-point where higher prices for mortgage borrowers with low credit scores becomes price-gouging rather than just cost-covering is not clear. In a market that functions perfectly, competition would drive prices to that point. But evidence that consumers are under-informed certainly creates an incentive for over-charging.[13] On the other hand, it is not clear that government can (or should) set such a price point.

In short, the amount of information about credit reports, scores, and the market applications of both, is out of step with the importance these market products now play in the lives of consumers.

To begin to address the need for this information, this paper analyzes how information in credit reports, and one of the credit scores that information is used to calculate, varies across the country. We also examine the relationship between those scores and delinquencies and socioeconomic factors. To do this, we use a unique database based on a sample of 25 million consumer reports and scores in every quarter between 1999 and 2004. This information is used to build profiles of consumers in every county in the United States.

We also develop a policy agenda for political and business leaders to respond to the fundamental role that credit reports and scores now play in

the lives of American consumers and the economy. It is time for government leaders, with their private sector partners, to pursue a series of reforms to increase consumer education and responsibility, market accountability, and accuracy.

Methodology

About the Data

Data for this project was obtained from TransUnion's trend database. TransUnion is one of the three major credit bureaus that collect financial information on nearly every consumer in the U.S. that has some type of credit account. All available data in the trend data were aggregated from depersonalized consumer credit reports.[14]

For this analysis, we use an anonymous sample of American consumers that had a credit report on file with TransUnion between 1999 and 2004. In each of the 24 quarters during these six years, a random sample of approximately 25 million borrowers was extracted from the population of American borrowers with a credit report. This sample was used to create national, quarterly estimates related to credit scores and delinquencies in every quarter between 1999 and 2004.[15]

Importantly, some estimates in TransUnion's trend database differ from more readily available estimates. For instance, John M. Barron and his colleagues report that 1998 TransUnion estimates of bankcard delinquencies differ from estimates available from the American Bankers Association, even if the metrics are not identical.[16] Similarly, our own 2004 estimates of bankcard debt differ from other, recent estimates. To date, a full account explaining those differences is not available, although the bureau's much larger population of reporting institutions may play a role in explaining these differences. There are also differences in the metrics used to measure variables. For these reasons, the numbers reported in this analysis should be interpreted as estimates.

Besides the national estimates, we also report estimates for every county in the country. For instance, we report the average consumer credit score in a county, the proportion of consumers in a county that are in different credit score ranges, and the proportion of borrowers in a county who are delinquent on different types of loans.

These county level data allow us to look at how credit scores and information in credit reports varies across the country. At the same time, these data can be linked with socioeconomic information from counties, which gives us the opportunity to analyze how information in credit reports varies with different county socioeconomic profiles. Also, county level data is just the type of local data policymakers need to understand the importance of credit scores in the lives of their constituents.[17]

About Credit Reports and Scores

Credit reports contain four general types of information. First, there is information related to the identity of a consumer, including a consumer's name, address, social security number, and date of birth, among other similar information. Second, credit reports contain information related to an individual's use of credit-based products. For most consumers, this includes information related to mortgages, credit cards, retail credit cards, and auto loans, among others. A growing number of consumers also have their utility payment histories reported and chronicled by credit bureaus, along with nontraditional loans, like payday loans.[18] Third, there is an inquiry history of applications for credit. Finally, public record information related to a consumer's financial health is tracked by credit bureaus. This includes declarations of bankruptcy, along with a range of other related records that are publicly available. Together, this information comprises a consumer's credit report.

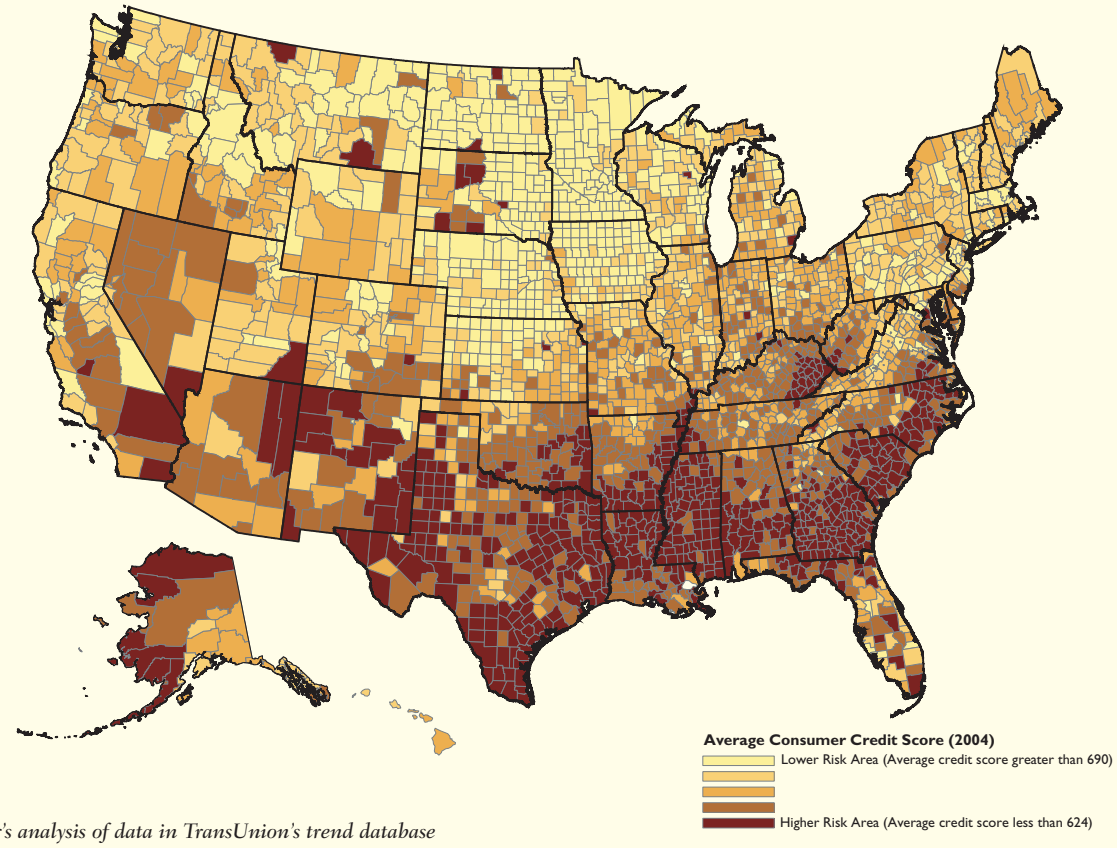
Among the numerous uses of this information, bureaus create credit scores, or sell this information to other institutions that calculate their own credit scores. Credit scores are calculated differently for different market applications and for different companies. In general, though, scores are a function of numerous factors related to the financial life of a consumer, including an individual's payment history, debt-to-equity ratio, length of credit history, extant types of extended credit, and numerous additional variables related to recent transactions.[19] Although the weights assigned to each of these general classes of variables are available for some credit scores, the specific variables and the specific weight assigned to these variables remains the private property of the institutions that develop them.[20]

Typically, consumer credit scores are scaled for ease of use to range between 350 and 850, where higher numbers represent lower levels of risks—or a lower probability of a delinquency or default—and lower numbers indicate a higher level of risk. Nonetheless, each bureau, along with the company that pools together the bureau's reports into a single score (myFICO), has a modestly unique range. The TransUnion Auto Model ranges between values of 300-900, for instance. For this analysis, we rely on TransUnion's credit score in the trend database, which ranges between 350 and over 850.

About the Analysis

To account for why consumer credit scores vary so widely across the country, we first consider how this information varies across the major Census regions and 10 divisions. *New England* consists of counties in Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; the *Middle Atlantic* includes counties in New York, Pennsylvania, New Jersey; the South Atlantic includes the District of Columbia and counties in Delaware, Maryland, West Virginia,

Figure 3. Credit Scores Widely Vary Across U.S. Counties



Source: Author's analysis of data in TransUnion's trend database

Note: All available data in the trend database were aggregated from depersonalized consumer credit reports. Data are displayed by country and in quintiles.

Virginia, North Carolina, South Carolina, Georgia, and Florida; the East South Central division includes counties in Kentucky, Tennessee, Alabama, and Mississippi; the *West South Central* division includes counties in Texas, Oklahoma, Arkansas, and Louisiana; the *East North Central* includes counties in Ohio, Michigan, Indiana, Illinois, and Wisconsin; the *West North Central* includes counties in Minnesota, Iowa, Missouri, North Dakota, South Dakota; the *Mountain* division includes Montana, Wyoming, Colorado, Utah, Idaho, Nevada, Arizona, and New Mexico; and the *Pacific* division includes Washington, Oregon, California, Alaska, and Hawaii.

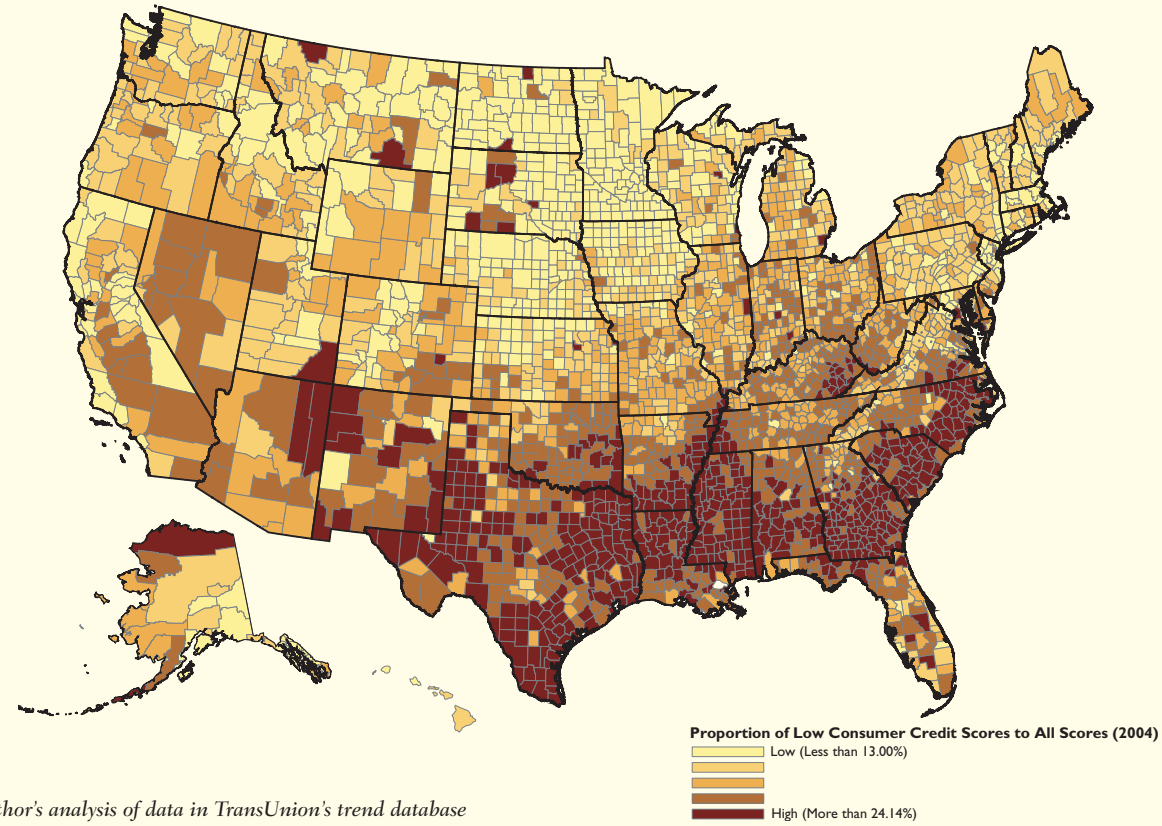
Because we have county-level data, we make inferences about consumers in these regions and divisions by taking population-weighted averages of counties within these areas. It would have been more ideal to weight these averages by the number of borrowers in each county, but that information was not available. We assume that the distribution of people across counties closely resembles the overall distribution of borrowers across counties.

Data for county populations is based on the U.S. Census Bureau county population projections. These estimates are based on a method referred to as the "administrative records component of population change" method. This technique essentially uses a wide range of annually available administrative records to make inferences about population change over time.[21]

Next, we consider how consumer credit scores vary across counties to determine the different levels of financial insecurity across the country. We concentrate on delinquencies as a measure of financial insecurity, including the proportion of consumers in a county with any loan that is more than 60 days past due, along with the proportion of consumers that are delinquent on their mortgages and bankcards. All three measures are compiled by the same credit bureau that collected the consumer credit scores analyzed in this paper.

We also assess the relationship between numerous socioeconomic characteristics and both consumer credit scores and financial insecurity. The major characteristics we consider are: median county income, the proportion of black county residents, the proportion of Hispanic residents, and the proportion of homeowners in a county. The most recent data on these

Figure 4. Southern Counties Have High Proportions of Consumers with Very Weak Credit Scores



Source: Author's analysis of data in TransUnion's trend database

Note: All available data in the trend database were aggregated from depersonalized consumer credit reports. Data are displayed by country and in quintiles; low consumer credit scores are less than 492, bottom 10 percent range of scores in the validation sample.

characteristics for the entire population of U.S. counties is the long form survey included in the 2000 U.S. Census.[22] This form was completed by approximately one out of every six American households in 2000, or about 19 million different housing units. Using this information, Census weighted the response to approximate the population in each county of the country, creating the richest resource currently available to analyze socioeconomic characteristics across counties.

Finally, this study includes an analysis of specific types of loans in a credit report, which includes revolving loans, non-revolving loans, and mortgages. Revolving loans, such as those available through credit cards or home equity loans, are lines of credit that provide a continuous source of credit within some predetermined limit; non-revolving loans are one-time lines of credit, such as automobile or education loans, that usually close once the principal and any interest is paid off; and mortgage loans are all loans secured by a home.

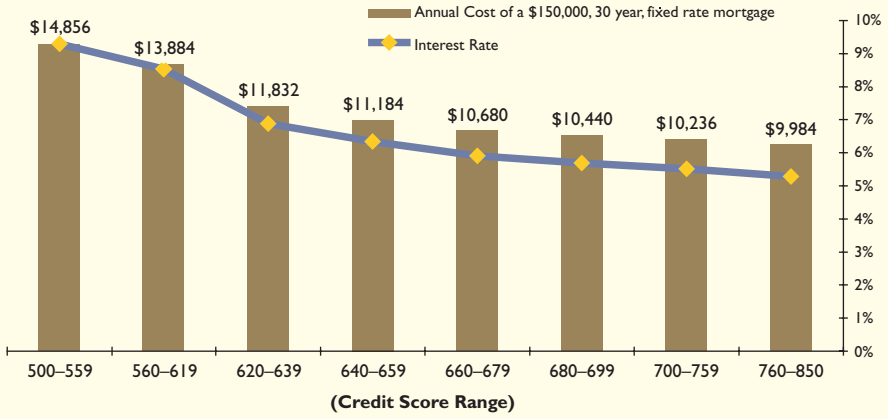
Findings

A. Consumer credit scores widely vary across counties, with the South having the highest concentration of consumers with weak credit scores.

Out of a possible range between 350 and over 850 (where higher numbers indicate lower risks for underwriting) the average consumer credit score was 656 in 2004. Around this mean, there is a fairly flat distribution: about 55 percent of the population has scores between 600 and 800 on this scale.[23] On either side of this central tendency, about 20 percent of the population has scores less than 600, and about another 25 percent have scores above 800. While most consumers in the United States are clustered around the average score, the "high" and "low" risk consumers are concentrated together in fairly systematic ways across the country.

In general, consumers in the typical Southern county have much lower credit scores than elsewhere in the country. While the typical consumer in the Western, Midwest, and Northeast counties had credit scores that ranged between 660 and 675, the average among Southern counties was 635 in 2004. Because this scale is constant across the country, this indicates that the average consumer in a Southern

Figure 5. Credit Scores are Strongly Related to Mortgage Terms



Source: Author's analysis of data from Fair Isaac.

county appears more of a credit risk than the average consumer in other areas of the country. This carries important implications for the cost of credit across different areas of the country.

To see this, Figure 5 illustrates the relationship between consumer credit scores, interest rates, and the annual cost of a $150,000 mortgage.[24] These consumer credit scores are average FICO scores, based on the three FICO-branded scores estimated by each of the three major bureaus. According to the company, FICO scores are the "credit scores most lenders use to estimate risk."[25] The company illustrates on its web page the relationship between interest rates and credit score categories—a practice also used by creditors. Here, interest rates range from a low of 5.3 percent charged to consumers with scores between 760–850 to a high of 9.3 percent charged to consumers with scores between 500 and 559. That difference adds up to nearly $5,000 every year in extra payments that are charged to consumers with scores in the lower range.

Certainly a high-risk borrower may be more than happy to pay an extra $5,000 to qualify for a mortgage that they may have been turned down for in the past. Their credit report indicates that they are a higher risk than other consumers, and financial institutions now can rationally pass on that higher risk through higher prices, whereas in the past there may not have been an offer of credit extended. Still, those higher costs are not without costs that both consumers and communities should take seriously. Most importantly, higher prices take money off the table for other types of investments that can help families get ahead. Similarly, when high-risk borrowers are clustered together, the effects of these higher costs may spill over into the community by draining consumer spending away from retail, homeownership, home improvements, and educations. For both families and leaders, it is therefore important to understand consumer credit scores, and the strategies needed to improve scores.

Credit report data do point to clusters of extremely high risk and extremely low risk areas of the country (Figure 4). To illustrate this we consider the eight credit score intervals reported in TransUnion's trend database: scores less than 421, between 422–492, 493–594, 595–700, 701–795, 796–839, 840–850, and greater then 850. Together, the proportions of consumers in these categories represent the universe of all borrowers in each county in the country. To assess counties with unusually high and low proportions of borrowers on either end of this credit score distribution, we look at the bottom and top two intervals. In particular, the proportion of a county's residents with very weak credit scores is measured as the proportion of borrowers that have scores below 492, which includes the lowest two categories tracked by our data source. The proportion of a county's residents with very strong credit scores is measured as the proportion of borrowers that have scores above 840, which includes the two highest categories tracked by our data source.[26]

Among the Southern counties in our analysis, an average of over 22 percent of borrowers in a county has very weak credit scores, or scores below 492. That suggests more than one out of every five borrowers in a typical Southern county may not have access to additional credit or, at the very least, pays a substantial premium for it. In contrast, about 16 percent of current borrowers in a typical county located in other major regions had scores under 492 in 2004.

Why do Southern counties have such large proportions of borrowers with low credit scores?

Most clearly, the information in these borrowers' credit reports tends to show more risky behavior, because of higher delinquency rates, higher debt to equity loads, fewer lines of open credit, and so on. But these data do not explain what is driving this more risky behavior. Why are Southern borrowers, for instance, more likely to fall behind on payments than borrowers in other regions? Is it something to do with systematic differences in their living expenses or wages? Or, does it have something to do with the types of businesses selling products in this region? That such large proportions of borrowers in this region stand out for having such weak credit scores begs

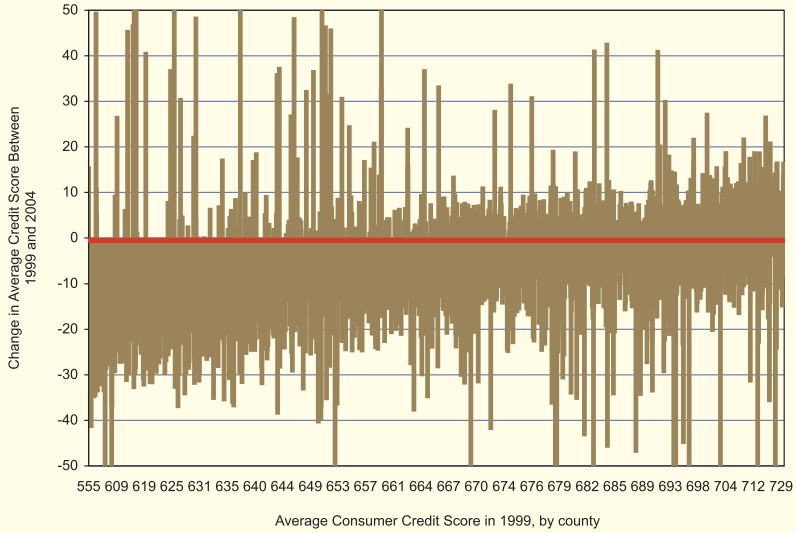
further research in the future. Without that attention, large proportions of consumers in Southern counties will likely continue to have credit scores that limit access to credit products or only qualify them for very high-priced mortgages, auto loans, and all of the other credit-based products families rely on today.

On the other hand, none of the U.S. regions stand out as having an unusually high number of consumers with extremely strong credit scores, or scores in the highest two categories tracked by TransUnion's trend database. Among all U.S. counties in 2004, an average of 12 percent of consumers in a county had scores above 840. Across the four major regions, the average county in each region with consumers in this extremely low risk category varied between 11 and 14 percent of all consumers, suggesting that the typical county across each of the regions had about the same proportion of extremely low-risk consumers.

B. Over time, most counties with weak consumer credit scores saw sharp declines in the average consumer credit score, while counties with strong scores generally experienced modest gains.[27] This trend is illustrated in Figure 6. The average consumer credit score in 1999 for every U.S. county is listed on the horizontal axis; the vertical axis displays the absolute change in the average consumer credit score between 1999 and 2004, by county. Organizing the data in this way illustrates how consumer credit scores change over time in counties with low, average, and higher consumer credit scores, relative to the rest of the country. The trend is unmistakable.

Counties that had low consumer credit scores in 1999 relative to the national average generally saw that average drop in value by 2004. In particular, counties with average credit scores lower than 90 percent of the other counties in the country in 1999 saw that average drop by an average of 17 points by 2004, or from 611 in 1999 to 594 by 2004.

Figure 6. Counties with Strong Credit Scores Tend to Improve Over Time; Counties with Weak Scores Decline



Source: Author's analysis of data in TransUnion's trend database

Note: All available data in the TransUnion trend database was aggregated from depersonalized consumer credit reports

But counties with average consumer credit scores in 1999 showed nearly no discernable trend during this same period. Moreover, counties that had very high average consumer credit scores in 1999 had modestly higher values by 2004. In particular, counties that had higher average credit scores than 90 percent of the other counties in the country in 1999 saw that average modestly increase by two points by 2004, or from 708 in 1999 to 710 in 2004.

Some of the sharpest declines in average, county credit scores occurred in the South. Between 1999 and 2004, the average credit score in Southern counties fell by an average of 10 points, compared to a nationwide decrease of just two points. Even more dramatically, in both 1999 and 2004, 93 percent of the counties with average credit scores lower than 90 percent of the other counties in the country were located in the South.

At least when looked at from this aggregated level, these trends suggest consumer credit scores are somewhat path dependent, with particularly serious consequences for Southern consumers. Areas of the country with higher average lending risks among consumers saw that average lending risk increase over time, whereas areas with lower average lending risks saw that risk drop even lower over time.

This trend points to a potentially ruinous fiscal cycle for consumers with low credit scores, recently examined in more detail by Dean S. Karlen and Jonathan Zinman.[29] While credit scores create an opportunity to underwrite high-risk consumers that opportunity comes with a price, such as higher-priced mortgage loans. In turn, higher prices may make high-risk consumers more likely to miss bill payments than consumers with strong credit scores. Gaining access to higher priced credit, in other words, may not always be a wise financial decision, particularly for families who have trouble paying bills on time. This risk is likely pronounced when lower income households are the high-risk borrowers.

This trend may be reinforced by some questionable business practices used for high-risk borrowers. In the mortgage industry, for instance, some lenders sell negatively amortizing lines of credit to high-risk clients, most of which really should not buy this product. Negative amortization on a line of credit means that the monthly payment for that credit does not account for the full amount of monthly interest charged for the credit. This may make sense for high net-worth individuals, or for individuals who only temporarily need to make small payments. But, for high-risk clients who can only afford a loan by accumulating more debt on their principal balance, this may lock their credit score into a downward path.

Along those same lines, universal default policies on credit cards also may contribute to this trend. A universal default policy means that a credit card company automatically boosts the APR (annual percentage rate) on an individual's credit card if their credit report shows that the borrower has recently missed a payment on another line of credit. This policy means that one late payment can add up to higher payments on numerous lines of credit, increasing the chances for further missed or late payments. In this way, high-risk borrowers may spiral into lower and lower credit score categories.

Meanwhile, it is important to point out again that credit scores have made underwriting many high-risk consumers possible, where in the past it may not have been even considered.

Table 1. Race and County Credit Score Profiles

	The average racial profile of counties in each risk category	
Credit Score Risk Categories	Proportion Black	Proportion Hispanic
850–720 (Very Low Risk)	1%	4%
700–719	5%	5%
675–699	5%	8%
620–674	12%	14%
560–619	28%	19%
500–559 (Very High Risk)	26%	23%

Source: Author's analysis of data from TransUnion's trend database and the U.S. Census Bureau.
Note: All available data in the TransUnion trend database was aggregated from depersonalized consumer credit reports. Credit score categories correspond with the credit score risk categories reported by Fair Issac in October 2005.

Table 2. Wealth, Homeownership Rates, and County Credit Score Profiles

	County Wealth			Mean Terms for a 30 year fixed-rate, $150,000 mortgage	
Credit Score Risk Categories	Per-Capita Income	Homeowner Rate	Unemployment Rate	Interest Rate	Annual Payments Due
850–720 (Very Low Risk)	$41,384	75%	4%	5.7%	$10,404
700–719	$40,946	73%	4%	5.8%	$10,536
675–699	$36,280	69%	5%	6.3%	$11,160
620–674	$29,391	65%	6%	7.5%	$12,552
560–619	$26,636	63%	7%	8.5%	$13,884
500–559 (Very High Risk)	$17,136	72%	10%	9.3%	$14,856

Source: Author's analysis data in TransUnion's trend database and the U.S. Census Bureau.
Note: All available data in the TransUnion trend database was aggregated from depersonalized consumer credit reports. Credit score categories correspond with the credit score risk categories reported by Fair Issac in October 2005.

C. Counties with relatively high proportions of racial and ethnic minorities are more likely to have lower average credit scores.

Credit scores are an assessment about the level of numerous types of risk posed by consumers, such as to a creditor or an employer. The models that calculate credit scores do not include a person's race, so it is unclear how these scores could discriminate against a borrower, a problem that the lending and insurance industry has grappled with in the past.[30] The scores also do not include any information about the neighborhood that the borrower lives in, which makes it difficult to see how scores can redline communities, another problem that has plagued these industries.

For these reasons, credit scores are a substantial improvement over the often subjective measures used to evaluate risk in the past. Still, we do find that that county racial profiles are associated with the average credit score of a consumer. In other words, the higher the concentration of racial or ethnic minorities in a county, the more likely the county's average credit score will be low. *This does not suggest*

that a bias exists, or that there is a causal relationship between race and credit scores. Instead, this association reflects the numerous, historical disparities between races in the access to and availability of high quality education, well-paying jobs, and access to loans, among other factors. But the presence of this relationship does raise important questions that should be explored through further research, particularly in instances where information in reports are being used in nontraditional, under-researched market applications, like screening job applicants and pricing insurance.

To illustrate this relationship, first consider the simple associations between a county's racial and consumer credit score profile in Table 1. Here, we use the credit score categories automatically generated by the bureau to assess this relationship.

Take the counties on either side of the central tendency: the approximately 552 U.S. counties that have very low average consumer credit scores between 560–619, and the 270 counties that have very high average scores between 700–719. In the counties with a very low typical score, about 19 percent of the population is Latino and another 28 percent is black. On the other hand, the counties that have higher typical credit scores tend to be essentially all white counties. In particular, in the 270 counties with average credit scores between 700–719 only about 5.1 percent of the population is Latino and just 1.1 percent is black.

This evidence does not suggest that racial differences between counties cause these differences in scores. Instead, these data point to an association, which frankly is not very well understood, and requires more rigorous analysis. For instance, the strong association in Table 1 could be overstated because we have not accounted for the variables factored into credit scores, like an individual's payment history, debt-to-equity ratio, length of credit history, extant types of extended credit, and numerous additional variables related to recent transactions. Once these variables are accounted for, there may not be an independent effect associated with a county racial profile.[31]

Along those lines, there is evidence that the depth of an individual's knowledge about credit scores, and the significance of these scores in a family's financial life, is strongly related to many socioeconomic characteristics.[32] Less information about this product may lead to lower scores.[33] Similarly, more risky credit behavior may be driven by systematic differences between borrowers with thin and full credit files, the effects of unscrupulous lenders of credit, and systematic differences in the labor market.

There also may be an additional, albeit far more technical, force at work here obscuring the true relationship between race and credit scores. A recent analysis by economists at the Federal Reserve looked at problems associated with selective reporting of account information to the bureaus. Their analysis suggests that the use of a borrower's highest balance on a revolving line of credit as a substitute for the credit limit (which affects the credit utilization component used to calculate credit scores) may systematically drive down credit scores for those who "are at the margins of credit worthiness."[34] Traditionally, that margin has been occupied by more vulnerable sectors of the economy.

D. High homeownership rates and county per capita income are strongly associated with high consumer credit scores.

Homeownership rates and county per capita income increase as the typical consumer credit score in a county increases in value. These findings point to an important opportunity leaders have to have families get ahead by boosting their creditworthiness.

Take the counties on either side of the central tendency that we examined in the previous section (Table 2). In the 552 counties with a very low typical score, the per capita income is $26,636, about 6.7 percent of the labor force is unemployed, and about 63 percent of the households own the homes they live in. On the other hand, the counties that have higher typical credit scores tend to have much more wealth and higher employment rates. In particular, in the 270 counties with average credit scores between 700–719, the per capita income is $40,946, or 54 percent higher than the counties with very low average credit scores. About 4.2 percent of the labor force is unemployed, which is quite a bit lower than the national average. And, about 73 percent of the households own the homes they live in, again higher than the national average.

This evidence points to the strong, underlining association between the typical consumer credit profile of a community and the per capita income and homeownership rates in a community. Counties with good consumer credit scores have more homeowners and more personal income.

Why is this so? A big reason here is that credit scores act as a gatekeeper for creditors, insurers, even potential employers, in deciding if they should extend an offer to an individual. In counties with lower average credit scores, a higher proportion of people may be turned down for an application for a loan or insurance than in a county with a higher proportion of people with higher average credit scores.[35] When added up across all of the consumers in a county, we see major differences in the comparative homeownership rates of communities. In the example above, for instance, the communities with a very low average credit score have a homeownership rate 16 percent lower than the communities with a very high average credit score.

Differences in credit scores also have important implications for the prices consumers are charged for these necessities. In the counties with

very high average scores, for instance, the annual payments for a $150,000 mortgage would be about $10,536, while the payments for the same loan in the counties with lower average scores would be $14,856 every year, a 41 percent price premium. These higher prices make homeownership possible for many high risk consumers. But, that considerable benefit must be weighed against the effects of taking money off the table for other types of investments in getting ahead. A consumer may very well be better off, for instance, investing that money and repairing their credit scores before going ahead and buying a higher-priced mortgage.

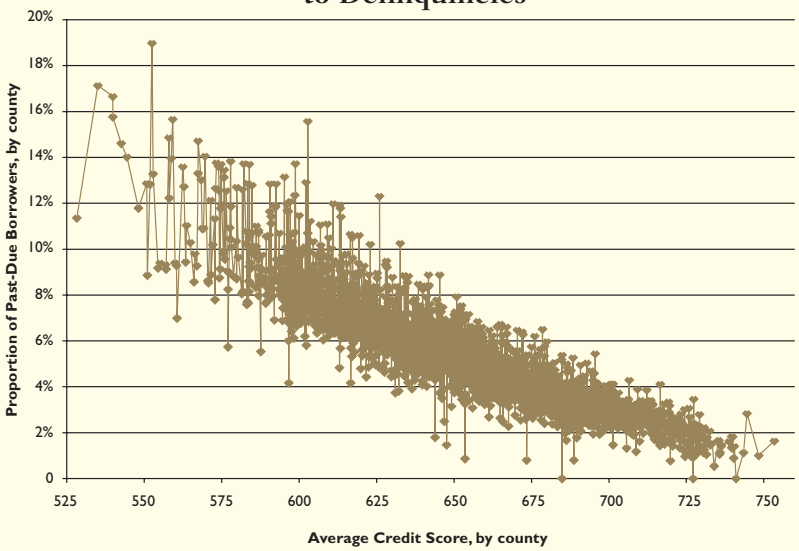
Together, these findings point to an important opportunity leaders have to help families get ahead. Helping families boost their creditworthiness in communities with low credit scores would give more families that opportunity to invest in assets, like houses. It also would likely lower the prices they pay for a number of basic necessities, including financial and insurance products. In turn, this frees up money for savings, retail purchases, or other investments, like education or retirement.

To do this, leaders will need to address the rising rate of delinquencies, which we discuss in the next section. By design, this has a systematic effect on credit scores. But to boost credit scores, leaders also will need to look more closely at the reasons why consumers are deemed to be a high risk by creditors, insurers, employers, utility companies, and any of the various other institutions that utilize these data.

E. Financial insecurity, primarily measured by the frequency of loan delinquencies, rose between 1999 and 2004

The status of payments made on outstanding loans is a critical variable factored directly into a credit score. In a nearly linear manner, consumer credit scores decrease in value when delinquencies increase in frequency. This then has an influence on the price for loans and insurance, and consumer efforts to get jobs and rent apartments. Since information about loan delinquencies is collected by credit bureaus, it provides a very rich glimpse at the financial security of American across the country, along with very detailed information about the performance of different types of loans, including mortgages and revolving lines of credit. The unmistakable impression from these data is that financial insecurity has increased in recent years, though the South and particular lines of credit are largely driving this trend.

Figure 7. By Design, Credit Scores are Strongly related to Delinquincies



Source: Author's analysis of data in TrendUnion's trend database
Note: All available data in the TrendUnion database was aggregated from depersonalized consumer credit reports

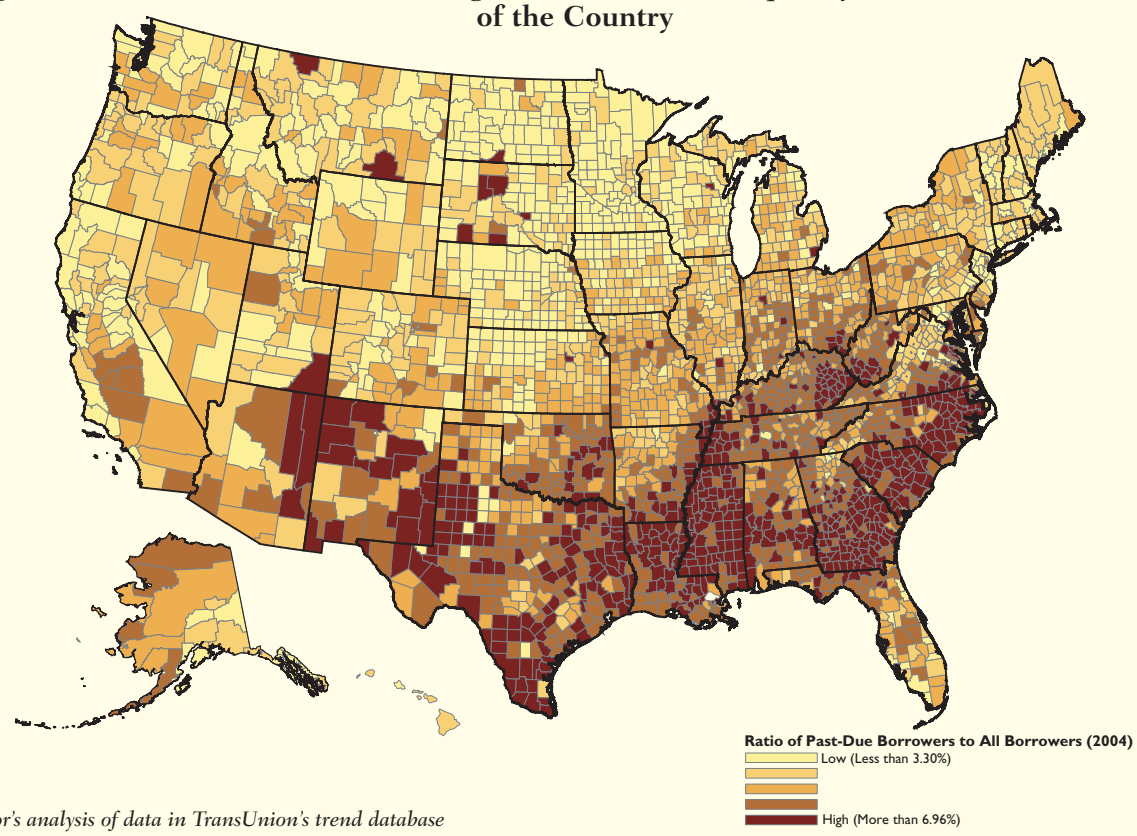
Overall Financial Insecurity

The ratio of borrowers who are late paying their credit-bearing accounts has increased in recent years. In 1999 about one out of every 23 borrowers was over 60 or more days behind in their payments. In 2004, that number had grown to about one out of every 21 borrowers, about a 9 percent increase.

By design, falling behind on payments has a substantial impact on consumer credit scores. To illustrate these effects, Figure 7 charts the relationship between the proportion of borrowers with delinquencies in a county and the average credit score in a county. In a nearly linear manner, credit scores decrease in value as the incidence of delinquencies increases in a county.[36] This carries important implications for the price of many necessities along with access to an even larger number of necessities.

We consider these effects by analyzing either end of the delinquency distribution, or counties with the highest and lowest proportion of borrowers with a delinquent loan. At the low end, this includes the counties that have a higher proportion of delinquent borrowers than 90 percent of the other counties in the country, a group we refer to as counties with very high delinquency rates.[37] At the high end, this includes the counties that have a lower proportion of delinquent borrowers than 90 percent of the other counties in the countries, a

Figure 8. Southern Counties Have Higher Consumer Delinquency Rates Than Other Areas of the Country



Source: Author's analysis of data in TransUnion's trend database

Note: All available data in the trend database were aggregated from depersonalized consumer credit reports. Data are displayed by country and in quintiles; past-due borrowers are 60+ days past due.

group we refer to as having very low delinquency rates.

In the counties with very high delinquency rates, the average credit score in 2004 was 597. In contrast, among the counties with very low delinquency rates, the average credit score in 2004 was 702. One of the important consequences of these differences is the higher prices charged for many necessities when credit scores are low. When average county credit scores are low the average price of many of these necessities is likely high. Capturing a portion of those extra costs in communities with severe delinquencies could create extra spending power among consumers in these areas. To the extent that these delinquencies are behavioral, lowering delinquency rates among consumers might very well represent a significant economic development opportunity.[38]

Just as average credit scores widely vary between U.S. counties, delinquency rates, and the effects they hold for consumers and local economies, also systematically vary across the country (Figure 8). Standing out again from the other regions of the country, Southern counties have a higher proportion of delinquent borrowers than borrowers in other regions of the country. In 2004, nearly six out of every 100 borrowers in the typical Southern county had a delinquent loan, compared to about five borrowers out of every 100 in every other region of the country.

Even more telling, delinquency rates have been rising in the South faster than in other regions of the country. Counties in the Southeast states experienced the fastest recent growth in consumer delinquency rates out of any other census division, growing by nearly 23 percent between 1999 and 2004. The next fastest growth rates during this time period were in Midwestern counties, which saw the average delinquency rate grow by about 15 percent during this period. But the average delinquency rate is much lower in the Midwest than the national average, suggesting that there is a lower overall level of financial insecurity, even if it is increasing at a faster pace than the rest of the country.

Meanwhile, counties in the West actually saw nearly no change in delinquency rates between 1999 and 2004, increasing by just about two percent during this period—a trend largely driven by counties in the Pacific. Counties in the Northeast

area of the country also saw more modest increases in delinquency rates during this period compared to the national average, increasing by about six percent.

These clear regional differences in delinquency rates illustrate an important, and widely overlooked, spatial dimension of financial insecurity in the United States. While rates of delinquencies have increased nearly everywhere in recent years, counties in the South stand out as having the swiftest increases in delinquency rates in the country.

What explains these higher delinquency rates in the South? It's certainly true that the South tends to have a much lower median income than other areas of the country, which may mean that consumers have less money available to make payments than consumers elsewhere. But housing prices and other major costs of living tend to be much lower in the South than in other areas of the country, which should depress the significance of the earnings gap. At the same time, the unemployment rate in the South is lower than in both the Midwest and the West. For these reasons, it's not at all clear that basic economic differences between the regions explain the particularly high delinquency rates in the South. Future research will need to explore this vexing issue.

Home Loan Insecurity

Overall measures of financial insecurity in a county paint a broad picture of growing financial insecurity through out the country. Still, this overall impression masks the underlining financial commitments made by consumers to create this impression. One of the most important of these underlining components is the growing propensity of homeowners to fall behind in their mortgage payments.

Throughout the 1990s, homeownership surged across the country, adding a substantial asset to the lives of millions of Americans. By 2004, about seven out of every 10 households owned at least one home, up by about eight percent from 1992. Not only is this the highest homeownership rate recorded since the Census Bureau began tracking this statistic in 1965, the recent jump in homeownership is also the largest sustained increase on record.[39]

But, the promise of homeownership has turned into too large of a financial burden for a rapidly growing number of homeowners (Figure 9). This is reflected by the large number of homeowners that are delinquent on their mortgage payments. On this count, it is important to point out that there are many different sources of data on mortgage delinquencies, from each of the three credit bureaus, to surveys of financial establishments like that administered by the Mortgage Bankers Association, to surveys of borrowers like the Survey of Consumer Finances. *The estimates across all these different sources are often different, and it is still not clear why this is the case.* Although our estimates are based on an enormous sample of consumers, it should be treated as an estimate, just like all of these other estimates.[40]

Our data indicate that about one out every 50 homeowners with an active mortgage was delinquent on their mortgage payments in 2004. That certainly does not mean that each of these borrowers will lose their homes. But, because of the effects credit scores have on several major necessities, the costs of living for these homeowners will likely increase, which may make them more likely to lose their homes in the future.

Meanwhile, the rate that mortgage delinquencies increased in recent years has substantially outpaced increases in overall delinquency rates. Between 1999 and 2004, the proportion of homeowners behind on their mortgage payments jumped 115 percent, increasing from one out of every 100 mortgage borrowers to about one out of 50. This remarkable leap in mortgage delinquencies means that a growing number of American homeowners are finding the costs of homeownership too financially burdensome, throwing in jeopardy what for most families is their primary asset. But, as with the overall delinquency rate, this trend is reflected unevenly across the country.

Once again, consumers in Southern counties face a risk that is substantially larger than consumers who live elsewhere in the country, even though the housing stock in the South is the least expensive in the country. Not only are there higher proportions of homeowners with delinquent mortgages in this region, their ranks have also swelled at a clip unmatched by nearly any other area of the country. Leading the pack, counties in the Alabama, Kentucky, Mississippi, and Tennessee Southeast division saw the average mortgage delinquency rate in a county nearly triple between 1999 and 2004, including about one of every 32 mortgage borrowers by 2004.

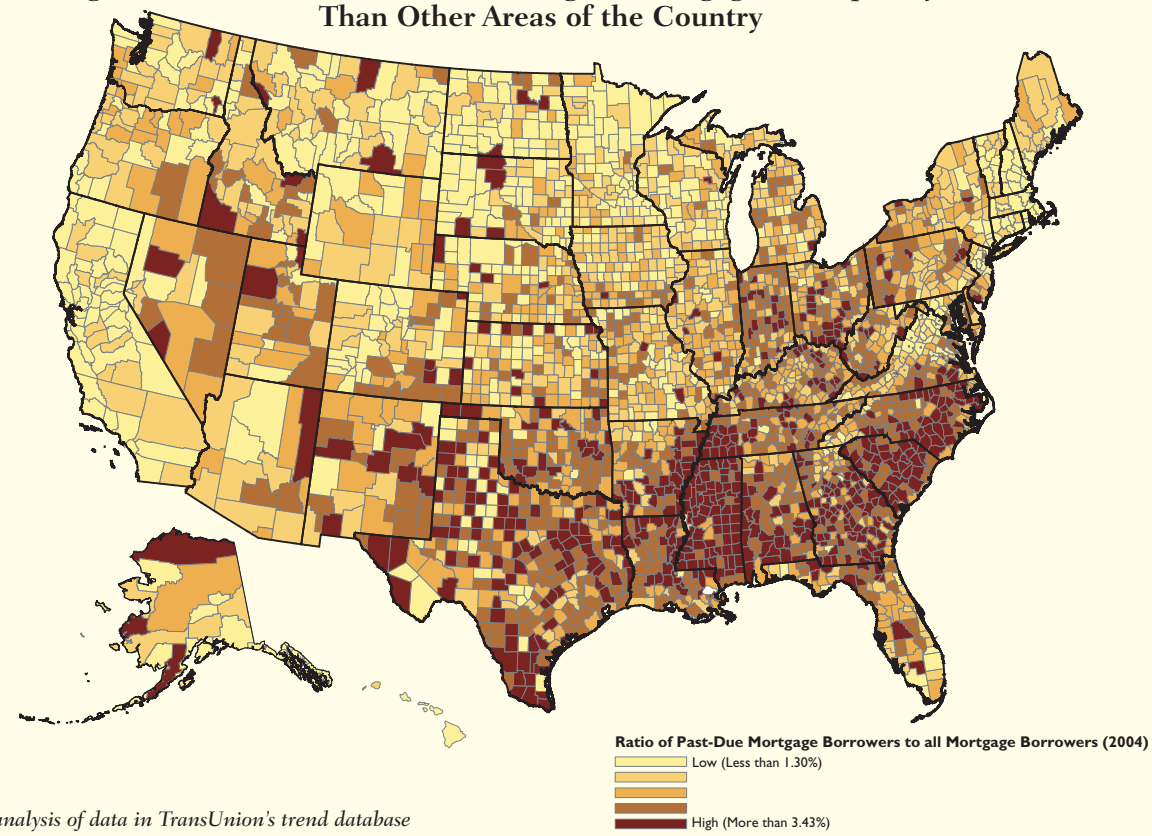
In stark contrast, the average Western Pacific county actually saw only a 14 percent increase in the number of delinquent mortgages during that time period. So, while most counties saw a surge in the number of borrowers unable to pay their mortgages on time, there are clearly regions of the country that have emerged as leaders and laggards in this phenomenon. Although home prices have generally surged well ahead of income increases in recent years, it is actually where homes are least expensive that we find the highest incidences of homeowners falling behind in payments.

Revolving Debt Insecurity

Much has recently been written about the surge in revolving debt, including debt held in credit cards and home equity loans.[41] This is certainly true. According to our data, the total real value of revolving debt held per borrower was valued at about $8,900 in 2004, a 46 increase from 1992.[42]

But, the rate of delinquencies on revolving loan accounts has actually

Figure 9. Southern Counties Have Higher Mortgage Delinquency Rates Than Other Areas of the Country



Source: Author's analysis of data in TransUnion's trend database

Notes: All available data in the trend database were aggregated from depersonalized consumer credit reports. Data are displayed by country and in quintiles; delinquent mortgages are 60+ days past due.

decreased during this period. According to TransUnion's trend database, an average of one out of every 40 borrowers with a revolving line of credit was delinquent on their payments in 2004, a 10 percent decrease from 1999. Once again, though, these trends played out unevenly across the country (Figure 8).

Proportions of borrowers with revolving lines of credit in the Pacific division of the country saw the sharpest drops in the rates of delinquencies between 1999 and 2004, falling by about 19 percent. On the other hand, delinquency rates in four Census divisions—New England, South Atlantic, West North Central, and the Southeast—saw delinquency rates on revolving lines of credit fall by two percent or less during this period. Meanwhile, the counties in the Mountain division of the country have the highest rates of delinquency rates on revolving loans in the country, including more than one out of every 33 borrowers with this line of credit. Right behind these counties, delinquency rates on revolving lines of credit include about one out of every 31 borrowers in the South Atlantic counties that carry this form of debt.

This evidence again speaks to the spatial implications of these national trends. The South, home to some of the least expensive places to live in the country, also is home to some of the highest proportions of borrowers with revolving debt who can not meet their payments on time. Because the effect these late payments have on credit scores, consumers in these areas will end up paying higher prices for a number of major necessities.

So, even while the proportion of delinquent borrowers with revolving lines of credit remain generally less than found in the mortgage market, many more people own revolving lines of credit than mortgages, meaning that the insecurity associated with these late payments, including the effects on credit scores, affects many more people. At the same time, the smaller value of payments typically made to maintain revolving lines of credit may mean that borrowers have an easier time meeting these payments than much higher mortgage payments.

Research and Policy Implications

Credit reports and scores affect both the access and terms of access to a large and growing array of basic necessities, including jobs, housing, energy, and communications. Besides formally separating issues of class, race, and gender from underwriting decisions, information in credit reports is also used to substantially expand the range of market products available to consumers. Among other benefits, this has increased access to assets like houses, given consumers more choices about market products, and spurred economic development in neighborhoods once ignored by creditors and insurance companies. At the same time, consumer credit reports and scores have spurred a dramatic surge in the availability of consumer debt, which has improved the lifestyle of countless Americans.[43]

With these benefits, however, there have come some costs. Consumers are confronted with an array of choices that they do not fully understand. Applications of these products to market decisions are not well researched. And, consumers have amassed a substantial amount of debt. As one possible outcome, we found the delinquencies across a range of different lines of credit substantially increased in recent years. In turn, growing financial insecurity drives down credit scores, which affects the access and terms of access to a broad array of basic necessities and undermines household goals for savings and wealth accumulation.

Many of these trends vary in systematic ways across the country, even dividing the country into clear geographical areas that lead or lag the nation. Most strikingly, counties in the South are sharply distinguished from the rest of the country by the high rates of delinquency in the typical county, which drives the high proportion of consumers who have extremely low credit scores.

We also found that some of the factors that credit scores have replaced from underwriting decisions—like race—are strongly associated with credit scores. Some of this may have to do with the fact that the depth of an individual's knowledge about credit scores, and the significance of these scores in a family's financial life, is strongly related to many socioeconomic characteristics.[44]

What implications do these findings raise for policymakers? Most importantly, leaders must take more seriously the complexity of participating in the modern American marketplace. The need for a sustained financial education has never been greater. Policy and business leaders also need to continue asking if these assessments of consumers are always accurate, while also assessing if the many market responses to these risk assessments are reasonable. We expand on all of these implications below:

Provide a Financial Education for Consumers

Although credit reports and scores play a fundamental role in the financial life of individuals, few people understand that role. How many people know, for instance, that credit reports affect the access and terms of access to financial services, insurance, telecommunications, apartments, and even jobs?

In fact, a recent survey by Providian Financial and the Consumer Federation of America indicates that few people understand credit scores, one of the primary uses of credit reports.[45] Although 93 percent of consumers indicated that they knew credit scores are affected by missing payments, only 27 percent knew what credit scores actually measure. Moreover, the scarce knowledge about the importance of credit scores that does exist systematically varies with an individual's income and educational attainment.[46] Only 56 percent of the respondents with a low educational attainment, and 64 percent of respondents with a low income, indicated that they knew that their credit rating weakened when they missed a credit card payment.

Even while there is limited public understanding of credit reports and scores, there has never been more information about both. Hundreds of credit counseling agencies now provide information about credit reports and scores, consumer finance TV personalities constantly advertise information, and there are thousands of documents posted on the Internet about both.[47] Lack of information, then, is not driving this low public understanding.

Instead, there is likely a low understanding of credit reports, and the significance they play in people's lives, because people are not accessing this information. Unless an individual is in financial trouble, there are no routine ways that people are exposed to credit reports, and their many applications. This absolutely vital ingredient to a person's ability to get ahead is really only recognized after someone is in financial trouble. This makes credit reports both an asset that goes unutilized, while at the same serving as an unnecessary roadblock for others.

The solution to building awareness and knowledge of credit reports lies, then, in promoting routine ways that give consumers access to this information. For this reason, leaders should implement financial education for consumers. This can be incorporated into existing curriculum at the K-12 level. Banks can integrate basic information about credit reports when they sign their clients up for service. They could also make access to a variety of budgeting tools part of their customer service operations. Consumer organizations could provide feedback information about credit counseling agencies in local markets, and invest in web-based financial education courses. Insurance companies can share with customers the impact their

scores are having on their rates; insurance regulators could provide information about the different ways that companies they regulate use this information.[48] And, utility and telecommunications companies can inform their customers about the role scores play in their access to services. Through all of these ways, consumers can receive the information they need to become proficient in negotiating through this tool, or barrier, to getting ahead.

Pass a Credit Bureau Disclosure Act

Policymakers should pass a Credit Bureau Disclosure Act (CBDA) that *requires the credit bureaus,* rather than policymakers, *to report their assessments of the accuracy of their information.* The bureaus already regularly assess the accuracy of their model predictions because their business depends on it. But, theses assessments are not shared with policymakers, or the public.

Is this necessary? Various independent researchers have tried to assess the accuracy of the information in the reports, along with the accuracy of the risk estimates. But sample sizes are often small, time bound, and based on information from a single bureau. The result: there is a lot of conflicting evidence and uncertainty about the accuracy of these market products. This fuels ad hominem opinions about the accuracy of these products, which is unfair to the bureaus, the businesses that rely on their data, and consumers.

To address just this type of uncertainty, the Fair and Accurate Credit Transactions Act of 2003 (FACT Act) required the bureaus to make one free credit report available to consumers every year, which gives consumers the ability to more easily assess the accuracy of the information contained in the report.[49] But, the law did not require the bureaus to report a) the number of queries they receive or b) information about the outcome of those queries. The law also did not give consumers the option to receive a free credit score estimate from the bureaus or MyFICO, which makes it more difficult to link reports with score predictions. All of this means that the FACT act made some important steps forward, but more needs to be done. For those households who have not received news of this law, not acted on it, or cannot afford to buy their credit score, it is uncertain how their interest is being served by this new policy.

To address this limitation, a CBDA should require that bureaus annually submit reports to federal policymakers that speak to the accuracy of their information. Most importantly, bureaus should report the results of consumer inquires they receive into the accuracy of their information. Such an act would preserve the rights of these businesses to maintain their intellectual property, while also safeguarding the privacy of consumers. Just as important, it would create an incentive for a long overdue assessment of how the accuracy of both credit scores, and the reports they are based on, can be improved.

Research market responses to credit report information

This report has illustrated how prices respond to changes in credit scores through an analysis of pricing decisions made in the mortgage market. When credit scores are low, mortgage borrowers pay more—in our example, thousands of dollars more every year—for their loan than borrowers who have high credit scores. But, this example really just scratches the surface of how markets now respond to credit reports and scores. We also know that prices for and access to other loans, like home equity or auto loans, are affected by credit scores. So are prices and access to auto and home insurance, along with access to jobs and apartments.

Oftentimes, credit scores have substantially expanded the opportunity of high-risk households to access credit, as we have discussed. There also may have been beneficial effects associated with non-traditional applications, like insurance pricing and landlord decision-making.

Still, the rising delinquency rates make it important to now ask if credit reports and scores are always being used in a way that is beneficial to all consumers. What costs, in other words, are created along with the substantial and widely-recognized benefits associated with these products, and how are those costs distributed across both place and people?

To start with, there may be an over reliance on credit scores if other information that speaks to the true risk a person represents is not considered. As Peter McCorkell of Fair Isaac and Company has noted, "ignoring other relevant information in the mortgage decision process is not in the best interests of either borrowers or lenders….[But] during the mortgage and refinancing boom there was certainly an economic motivation to move on to the easy cases rather than spend extra time on the difficult ones."[50] In this case, credit scores are being relied on too heavily because they are not the only factor that should be used to assess risk.

Similarly, there is no rule or even a general guide that specifies what a proper market response in any of these cases should be to credit scores. There is no fixed cap, for instance, that suggests a broker cannot systematically add 2, 5, or even 10 percent to the total value of a loan in fees and higher interest rates when lending to someone with a low credit score. Aside from concerns addressed in the Equal Credit Opportunity Act, no government policy specifies what is fair and what crosses the line.

This raises a key, albeit very complicated, question for policymakers: What is the optimal level of price fluctuation across different levels of risk? In other words, at what point do higher prices for borrowers with low credit scores stop covering the costs of

the predicted higher level of risk, and start becoming price-gouging market products?

In theory, an invisible cap exists in the market that curbs the extent to which prices vary across and within markets. Competition between businesses, in this ideal world, drives this cap to its most efficient point. But, we don't live in an ideal world. Unfortunately, *it is currently difficult to know what an appropriate cap would look like, or whether a cap is even a proper policy response, without more information.* We know that markets are responding to these market products, but we don't always have a very good sense of how they respond, particularly in non-traditional applications of these products. For this reason, policymakers need to begin systematically gathering and evaluating information related to market responses to credit reports and scores. Public policy is premature; research is not.

As a model, federal policymakers should consider the results from the Illinois pilot predatory lending database, created in July 2005 (Public Act No. 94-280). This law authorizes the Illinois Department of Financial and Professional Regulation to develop and maintain a database on mortgage products sold in Cook County over the next four years. Consumer credit scores, types of mortgage products, and the price of those products are among the many variables that will be included in this database. *This will be the first public database in the country to systematically collect the full of range of information analyzed by lenders when making access and pricing decisions.*[51] Among its many attributes, these data will provide policymakers with the capacity to assess the extent to which mortgage prices respond to changes in credit scores. Given the far reach of credit reports and scores, it seems quite reasonable to collect similar data to study other applications of credit reports and scores.

Endnotes

1. Robert Hunt, "A Century of Credit Reporting in America." (Federal Reserve Bank of Philadelphia, Working Paper No 05-13, 2005); and U.S. Census Bureau, County Business Patterns.

2. Credit reports preceded credit scores. Reports were originally gathered by local or regional bureaus to track the performance of loans made by individual creditors, from banks to retail establishments. Then in 1958, Bill Fair and Earl Isaac developed a model for generating credit scorecards, which, by the end of the 1970s, were used by most banks. The drawback of these early scores, however, was that they were often not comparable across either industries or businesses within industries, because scorecards were custom developed by bureaus for different clients. In fact, it was really not until a 1995 recommendation by Fannie Mae and Freddie Mac that mortgage lenders use FICO scores in their mortgage lending decisions that the use of credit scores began to explode in this country, now influencing billions of decisions every year. For more information about the evolution of this market product, see Lyn C. Thomas, "A Survey of Credit and Behavioral Scoring: Forecasting Financial Risk of Lending to Consumers." *International Journal of Forecasting*, 16 (2000):149–72; and Hollis Fishelson-Holstine, "Credit Scoring's Role in Increasing Homeownership for Underserved Populations" in Nicolas P. Retsinas and Eric S. Belsky, *Building Assets, Building Credit* (Cambridge: Joint Center for Housing Studies and Washington: Brookings Institution Press, 2005).

3. A) The permissible uses of credit reports were identified in the Fair Credit Reporting Act (1970) to protect the privacy of individuals. However, the range of legal uses is quite broad. Among the many legal applications, credit reports can be used for any purpose related to a credit transaction (including marketing related products), underwriting insurance, evaluating credit risks, and for employment purposes. New state laws/regulations somewhat curb these applicable uses, although these laws are uneven across the country. Also, the 1996 amendments to FCRA somewhat curb the use of reports, by allowing consumers to sue when their report is used for a purpose not permitted by FCRA. At the same time, the Fair and Accurate Credit Transactions Act (FACT), passed in December 2003, preempted the states from passing certain laws that curb the content and permissible uses of credit reports. B) There are numerous surveys that suggest employers are more frequently using credit reports to screen job applicants. A 2004 survey of companies by the Society for Human Resource Management, for instance, found that 35 percent of companies used credit reports for this purpose, up from 19 percent in 1996. This closely paralleled findings in the 2003, University of Florida, National Retail Security Survey. C) There are private companies which provide credit-checking services for landlords. For instance, see **http://www.amerusa-tenant-screening.com/**. There is no evidence that we have been able to find that attests to how many renter applications are accepted or rejected because of their credit scores, although the existence of nationwide companies to provide this information suggests there is a large market for this information. D) On the basis of background conversations with state regulators, we know that it is commonly believed that a growing number of utility companies are using credit report information. But, the market impact of these applications is essentially unknown.

4. An increasing number of insurance companies use "insurance scores", which are constructed from information in credit reports. Insurance scores are used to predict the likelihood of a future adverse event, like an insurance claim. State policymakers are increasingly acting to curb the use of credit reports by insurance companies. Hawaii bans the use of credit scores, and all states regulate its use. A growing number of statehouses are also considering legislation to limit the legal uses of credit scores in insurance pricing, such as justifying an increase in an insurance premium. In this case, state authority to regulate insurance is in tension with provisions in FACT that preempt state limits on credit report uses.

5. In particular, the "high risk" market was mostly ignored prior to the invention of credit scores, which are based on information contained in credit reports. The prediction power that these scores have given companies substantially expanded their ability to extend credit. For more information, please refer to Nicolas P. Retsinas and Eric S. Belsky,. *Building Assets, Building Credit: Creating Wealth in Low-Income Communities* (Cambridge and Washington: The Joint Center on Housing and The Brookings Institution, 2005); and Thomas A. Durkin and Michael E. Staten,. *The Impact of Public Policy on Consumer Credit* (Boston: Kluwer Academic Publishers, 2004).

6. Mark Furletti, "An Overview and History of Credit Reporting," Federal Reserve Bank of Philadelphia, TransUnion Workshop (held April 5, 2002).

7. The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (signed into law in April 2005), may very well continue to reduce the number of personal bankruptcies (at the time of publication, bankruptcy filings have substantially dropped). Among its several major provisions, the law requires credit counseling for filers and makes

it more difficult for consumers to file for Chapter 7 bankruptcies, which accounted for about 74 percent of all personal filings in 2004. Chapter 7 bankruptcy filings are more popular than Chapter 13 filings because outstanding debt is cancelled after non-exempt assets are sold-off. On the other hand, Chapter 13 filings require filers to establish a five-year pre-payment plan.

8. Teresa Sullivan, Elizabeth Warren, and Jay Lawrence Westbrook, *The Fragile Middle Class: Americans in Debt* (New Haven: Yale University Press, 2000).

9. See for instance Timothy Egan, "Newly Bankrupt Raking in Piles of Credit Offers," *New York Times,* December 11, 2005, p. 1.

10. "It is estimated that more than 70 million Americans make rent, mortgage, and other recurring bill payments that are not reported to traditional credit bureaus. As a result these consumers often have lower credit scores than they should, and pay more for housing, credit, and insurance than they deserve." Terry Clemans, Executive Director of National Credit Reporting Association, Inc., quoted in an October 3, 2005 Press Release by NCRA, Inc.

11. Information Policy Institute, "Giving Underserved Consumers Better Access to the Credit System: The Promise of Non-Traditional Data" (2005). (**http://www.infopolicy.org**).

12. For some examples see: Consumer Federation of America and National Credit Reporting Association, "Credit Score Accuracy and Implications for Consumers." (Washington: Consumer Federation of America, 2002); Michael E. Staton and Fred H. Cate, "Accuracy in Credit Reporting," in Nicolas P. Retsinas and Eric S. Belsky (2005); Robert B. Avery, Paul S. Calem, and Glenn B. Canner (2004); Alison Cassady and Edmund Mierzwinski, "Mistakes Do Happen: A Look at Errors in Consumer Credit Reports." (Washington: National Association of State PIRGs, 2004).

13. For evidence of consumers being under-informed, see the annual survey administered by Providian Financial and the Consumer Federation of America or GAO, "Credit Reporting Literacy: Consumers Understood the Basics but Could Benefit from Targeted Educational Efforts." (GAO-05-223, 2005). Systematic overcharging would likely lead to adverse selection among clients if it were applied across the board. More likely, evidence of information asymmetries among consumers may lead to systematic effects that substantively vary across consumer segments.

14. For more information about these data, please refer to John M. Barron, Gregory Elliehausen, and Michael E. Staten, "Monitoring the Household Sector with Aggregate Credit Bureau Data." *Business Economics* (35) (2000): 63–76.

15. Consumer credit scores do vary across bureaus, although the extent to which they vary is hardly certain. There is no evidence that aggregate level data—the type of data we analyze here—significantly varies from place to place. For this reason, we don't have a reason to suspect that reliance on the evaluations of one bureau for county level statistics should systematically bias our analysis.

16. Barron, Elliehausen, and Staten. 2000. .

17. The Fair and Accurate Credit Transaction Act of 2003 mandated that the Federal Reserve and the Federal Trade Commission explore these relationships and report back to Congress. The first of those reports was due in December 2005, but, at the time of publication, that report had not yet been released.

18. The Brookings Institution's Urban Market Initiative hosted a roundtable on alternative data sources in credit scoring, and has made available most of the presentations on their webpage: **http://www.brookings.edu/metro/umi/20051215_paidroundtable.htm**.

19. The importance of these different categories in the calculation of a credit score varies, but myFICO reports a weight distribution for the general population: 35 percent payment history, 30 percent amount owed, 15 percent length of credit history, 10 percent types of credit used, and 10 percent new credit [**www.myfico.com**, accessed September 2005]. Debt-to-equity ratios, for instance, are not used in credit card lending, and are not often included in a score for mortgage lending (but as a separate consideration).

20. For instance, myFICO reports the general weights assigned to classes of variables on its webpage. The same information is not available for other credit scores, such as those calculated by the three major bureaus or by insurance companies.

21. For more information, please refer to the web page of the Population Division of the U.S. Census, **http://www.census.gov/popest/counties**.

22. When fully implemented, the American Community Survey (ACS) will become a superior source of information.

23. The same distribution is reported by myFICO. See: MyFICO. "Understanding your Credit Score," available at **www.myfico.com/Offers/myFICO_UYCS%20booklet.pdf**.

24. Current rates are August 2005. The range of consumer credit scores in the private bureau data used in this report is nearly identical to the Fair Isaac credit score, or the FICO score. Fair Isaac updates a daily, national estimate of the relationship between its credit scores and the average interest rate charged by mortgage lenders for several major mortgage products. All additional analyses in this paper related to this relationship rely on these data (**www.myfico.com**).

25. MyFICO homepage [**www.myfico.com**]

26. Although there is no hard set rule, it is frequently reported that scores above 650 will qualify a borrower for a prime mortgage rate. Consumers with scores above 840 may not be offered different terms than consumers with scores of 800. We select this cutoff point only because TransUnion's trend database has this value as a cutoff point.

27. To determine whether the selected time period affected this analysis, we also looked at the percentage change between 1999 and 2003, 1999 and 2002, and 1999 and 2001. All of these analyses confirm the trend illustrated in Figure 5.

28. Upcoming analyses by the Federal Reserve will examine panel data, which will yield insight into how this trend plays out among individual borrowers.

29. Dean S. Karlan and Jonathan Zinman, "Observing Unobservables: Identifying Information Asymmetries with a Consumer Credit Field Experiment." (Dartmouth University, 2005).

30. Concerns about unequal access to credit across racial and income groups led to the creation of the Home Mortgage Disclosure Act (HMDA) and, then, the Community Reinvestment Act (CRA). For a recent summary of HMDA see Robert B. Avery, Glenn B. Canner and Robert E. Cook,. "New Information Reported under HMDA and Its Application in Fair Lending Enforcement." *Federal Reserve Bulletin,* Summer (2005): 354–394. For a recent assessment of the CRA see Michael Barr, "Credit Where It Counts: Maintaining a Strong Community Reinvestment Act" (Washington: Brookings Institution, 2005).

31. We did run a regression analysis that predicted credit scores as a function of a variety of information found in credit reports along with county socioeconomic information. We found that there was a significant, direct relationship between credit scores and median income, proportion black, proportion Latino, and educational attainment. But, an analysis of the robustness of these results suggested that the variables included in a credit report have a much more powerful effect on credit scores than socioeconomic characteristics. Still, we do not report these results, and only note them here, because the information available from the reports was not sufficient for the model to fully control for information accounted for in a credit score. Future analyses, based on all of this information, are still needed to sort out the direct, indirect, and total relationship between credit scores and socioeconomic variables. It is for this reason that we only report associational relationships and are very explicit that our research does not point to causal claims in this case.

32. See annual survey administered by Providian Financial and the Consumer Federation of America; or GAO, "Credit Reporting Literacy: Consumers Understood the Basics but Could Benefit from Targeted Educational Efforts" GAO-05-223 (2005).

33. This premise that more information leads to better scores was one of the motivations for passing the Fair and Accurate Credit Transactions Act of 2003 (FACT Act). This required the bureaus to make one free credit report available to consumers every year, which gives consumers the ability to more easily assess the accuracy of the information contained in the report.

34. Robert B. Avery, Paul S. Calem, and Glenn B. Canner, "Credit Information Reporting and the Practical Implications of Inaccurate or Missing Information in Underwriting Decisions," BABC 04-11 (Harvard University: Joint Center for Housing Studies, 2004).

35. The average credit score of a county is not used to assess the costs of credit. Rather, the higher proportion of consumers with high or low credit adds up to systematic differences across counties.

36. Credit scores are generally used by businesses to assess risk within markets, and the range within a market likely differs from a national range. Still, consumer credit scores are generated from a common set of criteria, which means that the depth of risk posed in a particular market by a score should only marginally vary across markets. At the same, it is important to note that there are many different types of credit scores in use in the market today. The three major national bureaus, for instance, each generate its own credit score and a FICO score, which is directly comparable across the three major bureaus. Although these bureaus account for over half of the market, there are over 1,000 different credit bureaus, many of whom generated some type of predictive score.

37. The overall delinquency rate in a county is the proportion of borrowers in a county who have at least one loan that is 60 days or more past due. Mortgage delinquency rates are the proportion of borrowers with at least one mortgage 60 days or more past due; revolving loans are the proportion of borrowers with at least one revolving loan 60 days or more past due. Delinquency is measured by bureaus as any account that is past due, but the data are only available for accounts 60 days or more past due. For this reason, our estimates of delinquency should be interpreted as very conservative estimates.

38. Delinquencies can also be brought on by unexpected events, such as an unexpected health costs or loss of a job.

39. These statistics come from the Current Population Survey, available at **http://www.census.gov/hhes/www/housing/hvs/historic/index.html** (August, 2005).

40. The trend data is a sample of borrowers, which includes both solely owned and joint accounts. For this reason, it may be the case that some estimates are biased in types of lines where joint accounts are particularly prevalent. The extent of this bias remains to be seen.

41. For instance, see Stan Sienkiewicz,. "Credit Cards and Payment Efficiency" (Federal Reserve Bank of Philadelphia, Payment Cards Center Discussion Paper, 2001); and Tamara Draut and Javier Silva,. "Borrowing to Make Ends Meet: The Growth of Credit Card Debt in the '90s" (Washington:: Demos, 2003).

42. Do keep in mind that this is the average among all consumers with revolving debt. This means that the effect of home equity loans on this average is weighted down by the much larger number of consumers with credit cards and retail cards, which tend to have lower balances than home equity loans.

43. But, see: Gregg Easterbrook,. *The Progress Paradox: How Life Gets Better While People Feel Worse* (New York: Random House, 2003)..

44. See annual survey administered by Providian Financial and the Consumer Federation of America; or GAO,"Credit Reporting Literacy: Consumers Understood the Basics but Could Benefit from Targeted Educational Efforts." (GAO-05-223, 2005)..

45. For a summary of this survey please refer to: **www.consumerfed.org/pdfs/Providian_Press_Release_9_05.pdf** (October 2005). Also, see the GAO report mentioned in notes 44 and 46.

46. This finding was also reported in a recent analysis of credit report literacy by the Government Accountability Office, GAO-05-411SP, which was mandated in the 2003 FACT Act.

47. Robert M. Hunt,"Whither Consumer Credit Counseling?" *Business Review,* Quarter 4 (2005).

48. According to the Michigan Department of Insurance, some companies price insurance by using multiple "insurance score" categories, whereas other companies used just two categories and others do not use credit information. Drivers may be able to find a better price for insurance if they had this information.

49. To access your free credit report, go to **https://www.annualcreditreport.com/cra/index.jsp**

50. Peter L. McCorkell, "The Impact of Credit Scoring and Automated Underwriting on Credit Availability," in Thomas A. Durkin and Michael E. Staten, eds, *The Impact of Public Policy on Consumer Credit*(Boston: Kluwer Academic Publishers, 2004).

51. The 2004 version of the Home Mortgage Disclosure Act data took a big step forward with the inclusion of price information. But, it still does not have information about credit scores. To be sure, this is a difficult undertaking, since so many different credit scores exist. The Illinois effort here may very well provide a model for federal policymakers as they determine how to include these data.

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