The Subprime State of Race

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Subprime, On Your Knees

In late February, 2007, the upscale global banking empire HSBC issued an "unprecedented profit warning," and announced that it was boosting its loan-loss reserves by twenty percent (Tam 2007). HSBC sought to reassure anxious investors that the bank's global business remained healthy, and that the earnings shortfall was confined to U.S. operations -- in particular, faster-than-expected defaults on the 2006 vintage of high-cost "subprime" loans made to borrowers with low incomes and blemished credit histories. HSBC is Europe's largest bank, but several years earlier it had also become the second-largest subprime lender in the United States after a \$14.2 billion acquisition of Household International, a company notorious for deceptive, abusive, and irresponsible practices in a syndrome known as "predatory" mortgage lending (Sorkin 2002; McCoy and Wyly 2004; Zuckoff 1992). For many years, activists, attorneys, and housing researchers had been warning of the dangers of subprime and predatory lending, and its severe racial inequalities: African American and Hispanic/Latino borrowers are (depending on the company or the city) between two and five times more likely than non-Hispanic Whites to wind up with subprime credit. Many social scientists began to suggest that America's well-known history of racial discrimination and redlining (denying credit to qualified racially marginalized people and/or places) had given way to a new pattern of racial stratification of good and bad credit (HUD-Treasury Joint Task Force 2000; Squires 2003, 2004; Immergluck 2004; Engel and McCoy 2002; Williams et al. 2005). In light of the controversy over a subprime market that had already grown from \$65 billion in 1995 to \$213 billion in 2002 (Chomsisengphet and Pennington-Cross 2006, p. 37), financial analysts were surprised that a gold-plated brand name with a reputation for serving the wealthiest of borrowers would descend into the subprime

business. One stock analyst quipped, "I think of HSBC as a very Presbyterian company -squeaky clean." (quoted in Sorkin 2002, p. C10). But the transaction was an eminently logical
way to combine HSBC's global network of deposits -- especially across the Asian economies
where high household savings rates were creating a "global savings glut" (Greenspan 2007) -with Household's efficient machine for finding borrowers and getting them into loans with large
up-front fees, high interest rates, long prepayment penalties, and all the other features that had
become so attractive to investors. Another stock analyst summed it up crisply: "Basically, this
is all about capital." (quoted in Sorkin 2002, p. C10).

In February, 2007, however, the stock analysts who study capital so closely were shocked as they began to scrutinize the earnings advice from HSBC, and the detailed reports soon issued by other institutions. For years, U.S. subprime lending had been an extraordinarily profitable business, for neighborhood mortgage brokers and lenders working in cities and suburbs across the U.S., for investment banks who bought packages of these loans and assembled them into tradable financial instruments, and for investors who bought shares in the resulting mortgagebacked securities (MBSs) and collateralized debt obligations (CDOs) traded around the world. But the details of HSBC's report -- high rates of defaults in January and February, 2007 on loans that had been made during the calendar year that had ended only a few weeks earlier -- shocked everyone who considered the implications. In New York, the Dow Jones Industrial Average slid by 415 points in a single day, and the New York Times' breathless lead -- "Stock markets around the world plummeted yesterday in a wave of selling" (Norris and Peters 2007) -- wound up serving as a vivid preview for all of the dramatic events of 2007 and 2008 that are now described on the front page of the Wall Street Journal, the most conservative major newspaper in America, as the worst financial crisis since the Great Depression (Pérez-Peña 2008, p. C8). First a wave of bankruptcies swept through the lightly-regulated non-bank mortgage companies that dominated the subprime and predatory business. Then, rising defaults and foreclosures worsened MBS losses, and threatened the off-balance sheet structured investment vehicles (SIVs) that Wall Street investment banks had devised to avoid regulation and disclosure of what had been such a lucrative new line of business. MBS and SIV losses undermined unregulated hedge funds, and began to trigger mounting losses in the equally unregulated and opaque web of insurance promises that banks and SIVs had purchased in the \$60-trillion global credit default swaps (CDS) market. Banks, hedge funds, and other institutions reluctantly began writing down mortgage-related assets -- which for publicly traded companies involved a long, slow parade at each quarterly filing deadline that eventually reached some \$500 billion by September, 2008. Thanks to the regulatory vacuum and the absence of disclosure requirements on SIVs, CDOs, CDSs, and all the other specialized acronyms of Wall Street's financial innovations, banks and institutional investors around the world began to hoard capital amidst contagious suspicion: no one could predict who would take the next writeoff, or even who would survive. Every financial transaction requires the acceptance of risk, and the spreading realization that new elements of the global financial system had been built on the foundation of sophisticated subprime risk models that earned top grades from bond-ratings agencies before imploding horrified bankers and investors. Risk was re-defined and re-learned as everyone tried to protect themselves from "a hideous STD -- a securitization transmitted disease" (Fisher 2008). Not knowing whom to trust, financial institutions began to refuse to lend, even as the Fed and other central banks flooded the markets with cash trying to reduce the short-term cost of funds. Arteries of the global credit blood supply were suddenly blocked, first in the summer and fall of 2007, again in March, 2008 with the demise of the ruthless investment bank Bear Stearns, and then again in episodes through the summer and fall of 2008. U.S. Federal Reserve Chair Ben Bernanke and Treasury Secretary Henry Paulson, who had both spent the spring of 2007 providing calm testimony that the problems were "contained" to the subprime market, were soon forced to spend hours in latenight conference calls and marathon weekend negotiations for increasingly urgent interventions that could be announced on Sunday afternoons to reassure investors at the opening of stock markets across Asia.

By the summer of 2008, the glaring contradictions of the Bush Administration's freemarket ideology and its Chicago-School academic economic underpinnings were laid bare for all to see. Markets are always best left unregulated, and market prices always provide the most powerful and efficient signals and incentives that best allocate savings, credit, and investment -except when those prices do absolutely none of those things, and when market prices in fact become the enemy threat requiring a military response. The deteriorating U.S. housing market had taken losses not only from subprime MBS, but also from securities backed by the "Alternative A" mortgages serving many middle- and high-income borrowers, and even some of the best, A-rated "prime" customers. Danger signs began to appear in the securities issued by the quasi-governmental-but-private mortgage companies Fannie Mae and Freddie Mac, the awkwardly named "government sponsored enterprises" (GSEs) that together owned or insured some \$5.3 trillion in residential mortgage debt. Market rumors of troubles in the GSEs' capital base erased nearly half their stock prices on Friday, July 11, prompting long weekend sessions before Secretary Paulson appeared on the steps of the Treasury Building in Washington, DC to announce an unprecedented plan to inject billions into the companies through investments, loans, and preferred access to the Federal Reserve's discount lending window. Too many people and institutions around the world held instruments backed by the GSEs, threatening a global cascade

of losses if they were to fail. Struggling to convince angry Senators in testimony a few days later, Secretary Paulson emphasized that the authority had to be unlimited, and only a blank check would work to correct the market prices that no seller wanted to admit as the true "value" of the mysterious securities: "If you've got a squirt gun in your pocket you may have to take it out. If you've got a bazooka, and people know you have it, then you may not have to take it out. By making it unspecified, it will greatly expand the likelihood it will not have to be used." (quoted in Labaton and Herszenhorn 2008, p. A1).

Paulson got his blank-check bazooka, but within six weeks it became clear that the weapon was no match for the small-arms fire from a worldwide army of investors steeled by a market discipline that the Bush Administration had always regarded as infallible but unilateral doctrine in its crusade to spread the free-market gospel. On Sunday, September 7, the Administration seized both Fannie and Freddie, put them into a receivership status similar to bankruptcy, prepared to commit up to \$100 billion to each company to restore capital reserves, and announced an unprecedented plan to buy shares of their MBSs on the open market in a bid to create a floor beneath the descending, fire-sale prices of securities that investors and institutions had no idea how to value. Since an investor's bid price for a mortgage-backed security must begin with an estimate of the net present value of a stream of future payments from various groups of homeowners in various risk classes or "tranches" -- many of whom are facing job losses, and some of whom were tricked into risky, expensive loans with complex, adjustable terms and all sorts of hidden expenses -- the MBS market had been in chaos for nearly a year. It was clear that nobody knew how to develop realistic assumptions of the scale of borrowers' distress, the prevalence of predatory practices, the precise timing of defaults and foreclosures, and the severity of loan losses as U.S. home prices (and thus potential foreclosure sale proceeds)

continued to fall. Rising house prices forgive all sins, because even the most abusive loans that are destined for quick delinquency and foreclosure generate lucrative up-front fees while "distress" resales cure lenders' and investors' losses while avoiding formal foreclosure proceedings. But house price declines, which spread throughout the U.S. after a peak in mid-2005, require full confession and contrition. And so even the largest nationalization in U.S. history was not enough to restore investors' faith. On Monday, September 15, the latest failure was Lehman Brothers Holdings, a firm founded by cotton brokers in 1850 that had survived the U.S. Civil War and the Depression only to be destroyed by subprime securitization when Bernanke and Paulson tried to say no, withholding federal guarantees that might lure a potential buyer. The next day, Paulson reversed course to nationalize the American International Group, the world's largest insurance company, with an \$85 billion infusion for a 79.9 percent stake in the behemoth of the global credit default swaps business; an 80.0 percent stake would have triggered certain undesirable rules requiring the inclusion of AIG on the balance sheet of the U.S. government. The next day, Paulson, Bernanke, and other top officials reluctantly agreed that they needed to go to Congress for the last line of defense: authorization to buy up toxic MBSs of all financial institutions in order to clean up the balance sheets of banks and SPVs, and to use governmental power to define market prices in a market where fears of trading had destroyed all price signals -- using the unparalleled purchasing and borrowing power of the U.S. Treasury.

The three-page preliminary legislative proposal invested breathtaking governmental authority in a single individual. Section 8 specified that the Secretary's decisions "are non-reviewable and committed to agency discretion, and may not be reviewed by any court of law or any administrative agency," while Section 10 shyly confessed that the fine print on the statutory document authorizing the U.S. national debt "is amended by striking out the dollar limitation ...

and inserting in lieu thereof \$11,315,000,000,000." (U.S. Treasury, reproduced in Wall Street Journal 2008). The Wall Street Journal declared that the week marked "a decisive turn in the evolution of American capitalism," (Wessel 2008), and after Bernanke and Paulson faced tough questions in testimony before Senate and House committees, President Bush delivered a primetime television lecture on the housing, lending, and mortgage-backed securities practices that brought us to the point where "the market is not functioning properly." (Bush 2008). Conservatives were outraged at what could be the largest outright economic intervention in history (between \$700 billion and \$1 trillion of spending authority) led by the Bush White House. Republican Senators, House Members, and influential think-tank voices in the choir that normally praised Bush attacked the proposal as socialism, pure and simple. Congress had to postpone its election campaign preparation adjournment to struggle through tense negotiations. Shortly after a deal appeared imminent in the early afternoon of Thursday, September 25, Congressional leaders and the Presidential candidates, Senators John McCain and Barack Obama, met with Bush in the Roosevelt Room of the White House to forge a final agreement. But free-market purist House Republicans had been enraged at what Texas Representative Jeb Hensarling described as "being asked to choose between financial meltdown on one hand and the road to socialism," and being "told to do it in 24 hours" (quoted in Hulse 2008, p. A1). In the Roosevelt Room, House Republican leader John Boehner surprised everyone with a stark declaration that his caucus would deny support for the Administration's plan. When McCain dodged the question on whether he would support the legislation, "all hell broke loose," and McCain "just sat there and let them scream" (quoted in McKinnon et al. 2008). At one point, Secretary Paulson literally bent down on one knee before the Democratic Speaker of the House, Nancy Pelosi, and begged her not to reverse her party's support for the plan. Pelosi felt betrayed

by what seemed to be a Republican strategy to force Democrats to pass the bailout on their own with no Republican votes, thereby chaining them to a despised Wall Street welfare program crafted by a despised lame-duck President. "I didn't know you were Catholic," Pelosi said when Paulson kneeled before her; "It's not me blowing this up, it's the Republicans." Paulson sighed, replying, "I know. I know." (as recounted in Herszenhorn et al. 2008, p. A1). After a grueling weekend of bare-knuckle negotiations that yielded a revised, 110 page proposal, Hensarling repeated the "road to socialism" sound byte and 132 other House Republicans agreed, sending the measure down to a 228-205 defeat on Monday, September 29. This time the markets bent down on one knee, with the Dow posting its largest percentage loss in twenty years. By the end of the week a revised, 450-page measure stuffed with more than \$100 billion extra in legislative sweeteners and tax cuts passed both houses and went to Bush for his signature.

The Curious Disappearance of Race

These scenes represent a tiny random sample of the global press coverage of a financial crisis that brings to mind John Kenneth Galbraith's (1954) "A Year to Remember," the first chapter of *The Great Crash 1929*, or perhaps the title of his son's latest book, *The Predator State: How Conservatives Abandoned the Free Market and Why Liberals Should Too* (Galbraith 2008). As these words are written (September, 2008), events are unfolding quickly, and it is too early to provide a full and complete accounting of America's subprime mortgage boom and bust. But it is not too early to note how the topic of racial exploitation was so quickly erased from public view as the crisis spread. It is worth remembering that HSBC, the giant conglomerate whose early earnings advice first alerted financial analysts to the dangers buried in the 2006

vintage of subprime securities, had only a few years earlier fought back a disclosure request that dealt specifically with issues of race, discrimination, and subprime practices. HSBC rejected the perfect opportunity to prove that their newly-acquired American subprime subsidiary was in fact innocent of the charges of racial discrimination that had long plagued this particular lender, and indeed the entire subprime sector. After severe Black-White and Hispanic-White disparities were found in tabulations of new data fields recently required under the Home Mortgage Disclosure Act (HMDA), the Civil Rights Bureau Chief of the New York Attorney General's office sent letters to HSBC and three other large lenders in April, 2005. Each letter cited the racial disparities in loan pricing observed in the banks' publicly disclosed HMDA records, and requested internal information on the banks' underwriting operations "in connection with the inquiry into whether violations of federal and state anti-discrimination laws had occurred" (cited in OCC vs. Spitzer 2005, p. 8). State regulators, in other words, were asking for precisely those kinds of details on, inter alia, borrower credit and assets that lenders always cite when they claim that there is no possibility of racial discrimination in their business practices. HSBC joined with the other targets of the investigation (Citibank, JP Morgan Chase, and Wells Fargo) along with an industry trade group and the Bush Administration's Office of the Comptroller of the Currency (OCC) to sue the New York Attorney General. The banks eventually won in U.S. District Court on the grounds that a state regulator's demand for data from a nationally-chartered bank constituted impermissible "visitorial" powers granted to the Federal government in the National Bank Act of 1864.

These kinds of tactical maneuvers have been common for decades, as conservatives and industry lobbyists worked to marginalize, suppress, and discredit any discussion of racism in housing finance. As the American subprime catastrophe spread into a global crisis in credit and

financial markets, issues of race and class were first distorted and then ignored. By the time the American Dialect Society (2008) met in January to vote "subprime" the word of the year, the subject had been neatly whitewashed. Erasing race from the still-unfolding history of America's global financial crisis is dangerous, misleading, and disempowering, and in this chapter I challenge this disappearance. Three particular issues demand attention.

First, the subprime crisis quickly slipped into a deceptively simple narrative: easy credit for everyone, even the most unqualified or irresponsible borrowers. By implication, mistakes were made by all, and if lenders and Wall Street were guilty of lax standards, so too were irresponsible consumers who borrowed beyond their means. The Wall Street Journal editorial page (2007) suggested that the wave of subprime mortgage company failures proved that lenders had not been charging enough from their customers. The *Journal*'s editors are wrong: bankruptcy reorganization is the typical end of a profit cycle for a risky enterprise, it has no connection to the suitability of prices charged, and it allows corporations and managers to shield themselves from certain kinds of legal and financial liabilities (Eggert 2002; Engel and McCoy 2002, 2007; McCoy and Engel 2008). Notably, one of the provisions of the September, 2008 bailout negotiations that Republicans refused to consider would have cost the Treasury nothing: changing the personal bankruptcy code to allow judges to modify the terms of first mortgages in foreclosure. Nobel laureate Joseph Stiglitz (2007), in a wide-ranging critique of Bush Administration fiscal policy, argued that "...Bush's own fiscal irresponsibility fostered irresponsibility in everyone else. Credit was shoveled out the door, and subprime mortgages were made available to anyone this side of life support." There are countless anecdotes of mortgage brokers chasing any borrower "with a pulse," but Stiglitz is wrong: in 2006, the most

permissive year of irresponsibility, more than five million people who applied for mortgage credit were denied (FFIEC 2007).

Second, public attention to the subprime crisis added an explicit racial dimension to the easy credit/personal responsibility discourse. The distinctly "American Dilemma" (Myrdal 1944) of racial inequality and exclusion has been known worldwide for decades, and thus for many it was shocking to be told that banks had been too eager to lend to racial and ethnic minorities. But racialized scandals have a long history: after a series of amendments in 1968, the insurance programs of the Federal Housing Administration (FHA) evolved from a subsidy program encouraging white middle-class suburbanization to a program designed to encourage lenders to serve first-time and low-income homebuyers, especially racial minorities in urban neighborhoods. Very quickly, however, fraudulent operators learned that the FHA guarantees could be easily exploited by making loans designed to default so a lender could collect the FHA insurance (Boyer 1973). In today's crisis, conservatives have deftly exploited the apparent contradiction of lenders willing to serve minorities. Thomas Sowell (2007) claimed that the mess resulted from the Community Reinvestment Act (CRA) of 1977, which "pressured lenders to invest in people and places where they would not invest otherwise." Angelo R. Mozilo, chief executive of Countrywide Financial (the nation's largest subprime lender) told a conference at the right-wing Milken Institute that "the industry faced special pressure from minority advocates to help people buy homes," forcing lenders to "lower their mortgage standards" (quoted in Morgenson and Fabricant 2007). Sowell and Mozilo are wrong. CRA applies only to deposittaking institutions, and it simply prohibits "extractive" banking practices: if a bank actively solicits deposits in a community, it is also expected to make loans to qualified applicants there. And in any event, if there is any racial preference in CRA it is now a blatant case of white

privilege: Whites are 50 percent more likely than Blacks to obtain loans from CRA-covered institutions. Blacks are more likely to obtain loans from less-regulated, non-depository, thinly-capitalized independent mortgage companies that are not subject to the CRA (Apgar et al. 2007).

Third, the discourse of global crisis has obscured the regional and neighborhood geographies of the subprime boom. Hundreds of press accounts of the aftermath have drawn detailed portraits of individual homeowners, neighborhoods, and cities struggling with a wave of foreclosures and empty houses; but such vivid accounts are rarely combined with systematic measurements of the racial and class dimensions of the boom. Instead, the entire boom and bust is now routinely described as stretching "from Main Street to Wall Street" (e.g., Bajaj 2008). But this is too amorphous. What about the links between Wall Street and, say, Martin Luther King, Jr., Boulevard – every one of them, across all 483 cities in the U.S. with such commemorations? (Alderman 2000). Other streets matter too, like Garland Road in East Dallas, where Mario Ramirez faces foreclosure on his small two-bedroom home "on a quiet street near a thrift shop, a Mexican seafood restaurant, and a Vietnamese Catholic Church," thanks to a subprime teaser-rate adjustable mortgage; Mr. Ramirez speaks little English, and so he trusted the friendly agent from Ameriquest when refinancing in 2005 to get enough money to take his two sons to meet their dying, 84-year old grandmother in Colombia (Case 2007). The predatory exploitation of Latinas and Latinos along Garland Avenue and hundreds of other sunbelt city streets, and the discriminatory targeting of African Americans throughout so many cities and suburbs, can and must be traced through the underwriting back-offices of subprime lenders, through the regional centers and gleaming-skyscraper headquarters of national banks who bought and created subprime subsidiaries, into the conference rooms of the Federal Reserve and the U.S. Treasury, through the investment-bank networks through which loans are purchased, packaged,

rated, and sold to investors on Wall Street and around the world. Many researchers are now undertaking the kinds of research needed to understand the essence of these intricate networks (Apgar et al. 2007; Engel and McCoy 2002, 2007; McCoy and Engel 2008; Immergluck 2004, 2008; Mansfield 2000; Pennington-Cross 2002; Peterson 2006; Williams et al. 2005). This chapter is a small contribution to this growing body of work, focusing on the severity of racial inequality in loan origination and its relations to institutional structure and securitization networks across several hundred U.S. cities in the peak years of the boom from 2004 to 2006.

In the rest of this chapter, I analyze subprime mortgage finance as a reflection and reinforcement of class and racial inequalities in American housing markets. The analysis is organized into four sections. First, I review the prevailing neoclassical doctrine of risk-based pricing, and then I draw on Omi and Winant's (1994) notion of the "racial state" to develop a theory of how the anti-redlining movements of the 1960s and 1970s were partially absorbed into Federal policy during the Clinton years of the 1990s and then co-opted and excluded when Bush came into office in 2001. Public policy allowed and encouraged private market actors to selectively replace old inequalities of racial exclusion with newer, more profitable inequalities of racially stratified inclusion. Second, I propose three modest hypotheses regarding recent changes in racialized lending patterns. The most provocative hypothesis is that the structure of bank and mortgage company subsidiaries – always important as adaptations to geographies of market demand and general legal and regulatory concerns – became a critically important way for lenders to exploit the profits of class and racial inequality without violating fair housing and fair lending statutes. Third, I undertake an empirical analysis of race-class inequalities and institutional structure using a series of matched borrower- and lender-level databases compiled

from the 2004, 2005, and 2006 HMDA records. Finally, I offer a few conclusions and implications for theory and action.

From Risk-Based Pricing to the Racial State

There is universal agreement across the political spectrum that racial and ethnic minorities faced blatant bigotry in the distant past, and that the last decade or so has brought a dramatic expansion of lending to minority individuals and neighborhoods. But there is sharp disagreement on why things changed. The dominant perspective in mainstream economics (which provides the foundation for national policy and regulation) offers an optimistic story of technology and innovation finally resolving old problems of credit rationing and creating a more efficient and fair system of <u>risk-based pricing</u>.

The central dilemma of credit rationing is asymmetric information. When a lender has insufficient or unreliable information on a borrower's true willingness or ability to repay a loan, the supplier's rational response (raising the price to cover the elevated risk of loss) creates perverse behavioral incentives. Borrowers with no intention or ability to repay -- the ones Adam Smith called the "charlatans" of the credit market -- will be happy to accept the offer, since they do not care about costs they do not plan to honor. But prudent, thrifty consumers with good intentions will be driven away as prices rise (Greenwald and Stiglitz 1991). Unable to separate the misers from the charlatans, lenders will set qualification standards too high, will ration the supply of credit, and may even resort to economically irrational assumptions (such as the race or ethnicity of a borrower or neighborhood) in attempts to make a profit while avoiding adverse selection (Stiglitz and Weiss 1981). As long as asymmetric information persists, many qualified

borrowers will be left unserved, in a systematic case of market failure. During the 1980s and 1990s, however, a dramatic revolution in consumer credit reporting systems, delinquency and default models, and automated underwriting systems finally resolved lenders' asymmetric information -- or so it seemed at the time (Brown and Burhouse 2005; Engel and McCoy 2002; Markus et al. 2005; Miller 2003). As lenders were better able to distinguish good risks from bad, they were able to go deeper into the applicant pool, successfully using risk-based pricing to serve people in need (Durkin and Staten 2002; Golding et al., 2008). Enormously influential in theoretical economics, risk-based pricing has also been the accepted wisdom among those in a position to shape policy. Months before the U.S. housing boom reached its limits, then-Federal Reserve Chairman Alan Greenspan (2005) gave a conference speech praising the document:

"Where once marginal applicants would simply have been denied credit, lenders are now able to quite efficiently judge the risk posed by individuals and price that risk appropriately ...

... improved access to credit for consumers, and especially these more-recent developments, has had significant benefits. Unquestionably, innovation and deregulation have vastly expanded credit availability to virtually all income classes. ... Home ownership is at a record high, and the number of home mortgage loans to low- and moderate-income and minority families has risen rapidly over the past five years."

Risk-based pricing offers an encouraging narrative of market innovation stamping out the irrationalities of discrimination. Unfortunately, racial and ethnic disparities remain deep and pervasive in American housing and credit markets, more than half a century after Becker (1957)

famously declared that discrimination could not persist in a competitive free market, since it required that agents forfeit profitable transactions if they wanted to satisfy a "taste" for bigotry. Today, even the most conservative policy officials steeped in neoclassical theory recognize that the landscape changed not simply through market incentives, but because of social movements and political struggle. The civil rights movement achieved a series of victories between the early 1960s and the late 1970s that put the federal government on record against racial discrimination: Title VI of the Civil Rights Act of 1964, Title VIII of the Civil Rights Act of 1968 (usually called the Fair Housing Act), the Equal Credit Opportunity Act of 1974, the Home Mortgage Disclosure Act (HMDA) of 1975, and the Community Reinvestment Act (CRA) of 1977. These statutes embodied a turning point in American race relations, and they promised a fundamental change in the relationship between state power and private market decisions. Indeed, conservatives acknowledge the significance of this promise when they try to link today's global financial meltdown to the unintended consequences of the CRA. But to understand why the record on this promise remains mixed, and why racial inequalities remain so severe even when they would appear to be illegal, we need to consider the evolution of America's racial state.

The Racial State

In the wide-ranging and interdisciplinary scholarship of critical race theory, the work of Michael Omi and Howard Winant (1994) offers an especially valuable contribution that has quickly earned 'classic' status (Levine 2006). Omi and Winant (1994) set out to develop a broad theory of *racial formation* – an explanation of how racial categories, identities, and subjects are created, how they change, and how they become sites of political conflict. Dynamic change, context, and contingency are at the heart of Omi and Winant's (1994) analysis of structured

inequality: they avoid the crude reductionism, determinism, and essentialism of traditional theories of race, ethnicity, and class – while also resisting the pure indeterminacy of poststructuralist ideas of fluid, post-racial identities. Race is neither a concrete, fixed essence, nor a purely ideological illusion (p. 54), but rather a durable creation of ongoing social and political struggle. For our purposes, the most important part of this panoramic work of theory is the account of the racial state (see also Goldberg 2002). Social movements and advocacy groups "which seek to represent racially defined minority interests, mobilize minority group members politically, and articulate minority viewpoints," (p. 78) typically encounter fierce resistance from dominant, majority interests controlling state institutions. Faced with challenges, Whites entrenched in the state seek to absorb, marginalize, and co-opt minority claims for representation, power, or reform. Yet these efforts are never completely successful, and thus contemporary racial politics traces out a trajectory of "conflict and accommodation ... between racially based social movements and the policies and programs of the state." (p. 78). Omin and Winant (1994) present a concise yet empirically rich analysis of this trajectory for the postwar period, tracing the rise of the civil rights movement and the responses by different elements of the White-dominated American racial state – its institutions, its explicitly or implicitly racial policies, the conditions and rules justifying state action, and the social relations of coalitions that maintain state legitimacy.

Omi and Winant (1994) narrate the achievements of the civil rights struggles of the 1960s as a challenge to the "unstable equilibrium" of racial ideology, involving "a dual process of *disorganization* of the dominant ideology and of *construction* of an alternative, oppositional framework" (p. 89). Yet the new terrain opened up by insurgent movements and the push for

state reform created a new landscape for all racial movements. "Progress" is neither linear nor assured:

"once such challenges have been posed and become part of the established political discourse, they in turn become subject to rearticulation. The state reforms won by minority movements in the 1960s, and the racial definitions and meanings embodied in these reforms, provided a formidable range of targets for 'counter-reformers' in the 1970s and 1980s. 'New Right' and neoconservative currents ... were able to carry on their own political 'project.'" (Omi and Winant 1994, p. 91).

The Subprime Racial State

As with most critical race theory, Omi and Winant's framework is typically applied to those controversies where the racial dimensions of political projects are explicit and unmistakable -- ongoing civil rights struggles, racial (de)segregation in education, affirmative action, media representations of racial and ethnic minorities, the racialization of criminality and incarceration, and so on (Dickinson 2008; Gilmore 2007; Oguss 2005; Parker 2005). But to understand the racialization of the American subprime crisis, we need to think carefully and creatively about the implicit dimensions of majority-controlled state institutions, and the "racial definitions and meanings" woven into the fabric of practices that appear at first glance to have nothing to do with race. Since the late 1970s, three broad changes in state and society set the stage for a deeply racialized catastrophe.

First, the shifting terrain of Washington politics gradually whitewashed the legislative and regulatory victories of the civil rights movement. Federal statutes from the 1960s and 1970s

received minimal enforcement priority during the 1980s. The early years of the Clinton Administration brought coordinated fair housing and fair lending initiatives (Vartanian et al. 1995), and some of these efforts took on even greater strategic significance after the mid-term elections of 1994 forced Clinton to move farther to the right and to repudiate old-style governmental social welfare policy (Dreier, 1997). Homeownership promotion, always a fixture of American public policy, became even more important thanks to a bipartisan consensus on the superiority of market-based solution over other kinds of state action. Policies viewed through the lens of race or class -- affirmative action, school integration, social assistance -- came under assault, and in case of welfare a major part of the Depression-era safety net was removed. Yet policies designed to expand homeownership enjoyed strong and consistent support across the political spectrum (Retsinas and Belsky 2002). The Clinton Administration was forced to rely on expanded lending and homeownership efforts as substitutes for (rather than complements to) a traditional center-left political agenda on racial and class inequality. This made it possible for a dramatic shift to take place with little notice. When the Bush Administration took office in 2001, the racialized fair housing and anti-discrimination enforcement efforts of the Clinton years were quickly reversed (see Immergluck 2004, p. 196). But there was no need to take any additional, deliberate actions (of the sort portrayed in Omi and Winant's model) because of the timing of the political calendar and the established conventional wisdom of de-regulation in the apparently neutral domain of banking supervision. With the exception of a weak law in 1994 (the Home Owner's Equity Protection Act or HOEPA) with major loopholes, serious federal action on racially discriminatory predatory lending only began near the end of the decade. Phil Gramm, Chair of the Senate Banking Committee at the time, fought back regulations by declaring that "there is no definition of predatory lending. I don't know how we can hope to

address the problem before we have decided what it is." (quoted in Heller and Grover 2000, p. 1). The results of a 2000 HUD-Treasury Task Force on predatory lending -- emphasizing the racial-ethnic, class, and geographical concentration of abusive practices -- was easily ignored by the new Administration. And even as the abuses grew worse through this decade, federal enforcement efforts were scaled back with little notice. HUD began only three fair lending investigations between 2006 and mid-2008, and the Department of Justice filed a single mortgage lending case in 2007 (NFHA 2008, p. 50).

By contrast, pro-homeownership programs encouraging lending to low-income and minority households fared well under Bush, because they fit so smoothly into the "coherent neoliberal discourse" of Bush's "ownership society" (Beland 2007, p. 91). Bush also ensured that key parts of his Administration showcased racial-ethnic and gender diversity in leadership positions, while consolidating an agenda favoring the rights of capital (Lipsitz 2006). Anti-discrimination and fair-housing legislation from the 1960s and 1970s was not repealed. But with no enforcement, the results were the same.

Second, the interaction of state and federal policy created new opportunities for lending institutions to escape regulation. The history of American financial regulation is very complicated, but Chomsisengphet and Pennington-Cross (2006, p. 38) conveniently summarize it: "Many factors have contributed to the growth of subprime lending. Most fundamentally, it became legal." Until the late 1970s, state-chartered banks were subject to general usury limits on the cost of credit, while nationally-chartered banks had the option of choosing between a federal cost limit and the maximum permitted in the state where the loan was made. After a 1978 Supreme Court decision (Marquette), however, banks were allowed to "export" the cost limit applied in their state of incorporation, thereby pre-empting other states' usury limits.

National banks "could establish their headquarters in states with high usury limits -- or none at all -- and charge the high interest rates permitted by the banks' home state to borrowers located in any other state." (McCoy and Engel 2008, p. 5). Then, in response to inflation pressures which began to push prevailing mortgage rates above some state usury thresholds, Congress passed the Depository Institutions Deregulation and Monetary Control Act (DIDMCA), which eliminated interest limits for first-lien residential mortgages. DIDMCA also allowed regulatory "exportation" for other kinds of depository lenders (McCoy and Engel 2008). In 1982, Congress passed the Alternative Mortgage Transactions Parity Act (AMTPA), which pre-empted state laws, for nearly all types of lenders, for loans that departed from the standard formula of fixed-rate long-term loans; the result was to legalize adjustable-rate mortgages, balloon payments, negative-amortization loans, and many other transactions that previously violated state usury laws. The result was a complex regulatory landscape that applied unevenly to institutions and financial practices, and for a growing number of lenders and borrowers, the pre-emption provisions encouraged a competitive race to the bottom.

The legal patchwork became even more complicated in the 1990s. The Office of Thrift Supervision (OTS) issued a regulation in 1996 that pre-empted federally-chartered savings associations from many state restrictions, and of course AMTPA had already pre-empted a wide variety of state limitations on certain kinds of loans, even those made by non-depository independent mortgage companies. In the face of federal inaction on predatory lending, beginning with North Carolina in 1999 dozens of states began to pass laws banning various kinds of abusive practices. But these limits could not be applied to transactions or institutions where federal laws pre-empted state restrictions, creating an intricate and evolving legal topography (Bostic et al. 2008). Moreover, the OTS pre-emption encouraged banks reporting to the Office

of the Comptroller of the Currency (OCC) to press their regulator for the same kinds of freedoms. In 2004, the OCC issued a pre-emption regulation similar to the OTS rule, and taken together all of the pre-emption decisions allowed "national banks and savings associations to ignore a whole host of state credit protection laws." (McCoy and Engel 2008, p. 12). Federal pre-emption even precluded state enforcement of state lending discrimination laws (McCoy and Engel 2008, pp. 12-13). Even more important, in July of 2001 the OCC issued an order that "state laws apply to national bank operating subsidiaries to the same extent that these laws apply to the parent national bank." (CFR 2008, p. 198; the OTS has the same rule at CFR § 559.3). In other words, the state laws do not apply, extending the pre-emption provisions to subsidiaries. After a conflict between one of Wachovia Bank's operating subsidiaries and a regulator in the state of Michigan, the U.S. Supreme Court affirmed that the National Bank Act -- the statute HSBC and other lenders used to avoid turning over data to the New York Attorney General -means that "real estate lending, when conducted by a national bank, is immune from state visitorial control"; federal OCC supervision was held to pre-empt state regulation over mortgage lending activities, "whether conducted by the bank itself or through the bank's operating subsidiary." (U.S. Supreme Court 2007, p. 12).

Taken together, all of these executive branch and judicial actions eviscerated state consumer protection laws for certain kinds of institutions, neutralized the already-weak restrictions on lending transactions, and encouraged lenders to organize their operations to avoid oversight or regulation.

The third component of the subprime racial state involved macroeconomic conditions and broad trends in the financial services industry. A wave of mergers and acquisitions has been underway for more than a decade (Dymski 1999), and a 1999 law (the Gramm-Leach-Bliley

Financial Services Modernization Act) eliminated Depression-era restrictions that had separated securities-dealing investment banks from traditional, deposit-taking banks. The nation's largest bank holding companies achieved a steadily growing share of total assets (Dymski 2005), while large investment banks responded to the flow of investment into U.S. markets driven by high personal savings rates and central bank policies across Asia. Amidst historically-low yields on fixed-income bonds, residential mortgage-backed securities became increasingly popular -- and subprime securities promised even higher yields, with individually risky loans packaged into pools designed to spread, manage, and minimize losses for investors with different risk-yield preferences. At the peak, subprime securities were issued at the rate of more than half a trillion dollars a year (Standard and Poor's 2006).

These three developments -- the subtle shift away from civil rights enforcement in favor of new markets and the ownership society, the evolution of a complex but weak patchwork of easily-avoided regulations, and the growth of a global market for mortage-backed securities -- transformed the racial state. None of these changes required any explicit struggles over the racial categories, meanings, or inequalities at the heart of Omi and Winant's (1994) model. But each change quite literally took place on the foundation of racial-ethnic and class segregation in America's housing markets. The result is a new kind of racial state in which corporate organization, financial intermediation, and competitive de-regulatory innovation have transformed the scale of racism. With the growth of specialized and lightly-regulated subsidiaries, the proliferation of small, independent mortgage brokers, and the expansion of securities-related loan-selling networks, all actors are able to deny any discriminatory intent. Local brokers who specialized in high-risk subprime loans can treat all customers the same -- but segregation, lower minority incomes, and the continued exclusion by prime, mainstream banks

will ensure that most subprime brokers will spend most of their time in minority neighborhoods. Mortgage companies and bank subsidiaries can claim that they treat all customers who come to them equally, without regard to race or ethnicity -- but when they create specialized subsidiaries that aggressively market to minorities, and when they work closely with local broker networks, these processes will ensure that minorities are more likely to wind up at institutions that give every customer a bad deal. And Wall Street investment banks can truthfully say that they have no knowledge whatsoever of the race or ethnicity of individual borrowers whose loans are being packaged into MBS and sold to investors around the world. And yet the combination of racial segregation, deregulatory subsidiary structure, and target marketing will ensure that a disproportionate share of investors' yields, and investment banks' fees, will be extracted from African American and Latino people and communities. This new racial state has replaced the explicit racial politics of a previous generation with seemingly race-neutral debates over consumption, credit, and obscure banking regulations. This neutral discourse has woven the localized racisms of American neighborhoods -- segregation patterns produced and reproduced since the 1930s -- into a complex web of national and transnational economic relationships.

All who benefit from these relations are truthful when they deny any discriminatory intent. Indeed, if there is one person who best personifies the new racial state, it is E. Stanley O'Neal, the former CEO of the nation's largest securities brokerage firm, Merrill Lynch. O'Neal led Merrill Lynch's lucrative expansion in subprime securities until the market collapsed and the firm took what was then the largest writeoff in Wall Street history (almost \$8 billion) and he was forced to retire in October, 2007. O'Neal is a Black man who grew up in the town of Wedowee, Alabama, on several hundred acres of land that had been in his family for two generations:

O'Neil's grandfather was born into slavery in 1861, but had managed to get around Jim Crow laws by having a white friend buy small parcels of land and transfer them (Cassidy 2008).

Hypotheses and Data

These economic and regulatory changes invite simple questions. Has old-fashioned racial exclusion disappeared, or has it just become more complicated by stratified inclusion? Did the subprime industry serve those who would otherwise be excluded by mainstream lenders? Did the changes in regulation, industry structure, and securitization have any effect on racial inequalities? If so, do the effects vary across the nation's urban and regional housing markets?

I explore these questions with the applicant-level public data disclosed according to the Home Mortgage Disclosure Act. Beginning in 2004, HMDA required the identification of high-cost loans that generally correspond to the subprime sector: loans where the total borrowing costs (including points, fees, and other charges) exceeds an annual percentage rate more than three percentage points above the yield on Treasury securities of comparable maturity for first lien loans, and five percentage points for subordinate liens (FFIEC, 2005-2008). HMDA has many limitations, but 1) banking industry lobbyists have fought back attempts to improve the data by adding new reporting requirements, 2) the annual disclosures offer the broadest possible coverage of the 'front end,' application and origination end of the loan market, and 3) it offers a glimpse into the secondary market via loans that are sold in the same calendar year by originating institutions. Moreover, although the vast majority of HMDA research measures the income and other qualifications of those who apply for credit, the data can also be used to identify and analyze those who make loans: the thousands of separate entities filing HMDA

reports can be regarded as a rough approximation of the many different subsidiaries competing for market share. HMDA is not a sample: it requires the disclosure of certain characteristics on all applications received by all but the smallest and/or rural mortgage lending institutions -- and it includes borrowers' self-reported race, ethnicity, and gender.

I test three hypotheses. First, a <u>racial stratification</u> hypothesis suggests that, all else constant, subprime credit added a new dimension of inequality instead of erasing old denial-based racial exclusion. Second, a <u>racial restructuring</u> hypothesis holds that the competitive reorganization of lenders pursuing market niches and regulatory freedoms had significant effects on racial inequalities -- effects that cannot be blamed solely on the presumed deficiencies of borrowers. Third, a <u>racial rescaling</u> hypothesis proposes that the unequal treatment of racially marginalized individuals and places was worsened by connections to secondary securitization networks.

Subprime Snapshot, 2004-2006

Consider first the simple, unconditional tabulation of loan rejections. Despite the widespread turbulence of the industry in a competitive housing and lending boom, loan rejection rates were remarkably stable (Table 1). There is no evidence of falling denial rates to suggest any secular abandonment of underwriting constraints: indeed, with only a few exceptions, rejection rates edged upward. Overall denials slipped marginally for non-Hispanic Blacks between 2004 and 2005 (from 30.7 percent to 30.1 percent), and this period also brought a slight decline for applicants who identified themselves as non-Hispanic but who refused to answer the race question. In all other cases, however, denial rates increased between 2004 and 2006. Some

of these increases were substantial -- from 22.2 percent for non-Hispanic Black homebuyers in 2005 to 26.3 percent the next year, for instance. Moreover, *relative* denial rates proved durable. In 2004, non-Hispanic Black homebuyers were denied at a rate 1.91 times higher than non-Hispanic Whites. This ratio was almost identical the next year, and jumped to 2.15 in 2006. During the year when everyone was supposedly able to obtain credit, more than 3.8 million homeowners and would-be homebuyers were rejected by lending institutions.

Table 1. Application Rejections by Race and Ethnicity, 2004-2006.

Applicant race		2004		2005		2006	Number of denials, 2006		
	Hispanic	ispanic Non-Hispanic		Non-Hispanic	Hispanic	Non-Hispanic	Hispanic	Non-Hispanic	
American Indian or Alaska Native	18.04	18.51	18.90	19.03	23.33	20.49	7,808	5,388	
Asian	15.59	12.71	17.17	14.45	21.65	15.59	1,464	58,641	
Black or African American	17.79	21.08	21.21	22.20	25.32	26.31	5,265	231,715	
Native Hawaiian or Other Pacific Islander	16.75	15.09	22.57	16.46	23.03	19.48	2,674	7,307	
White	17.05	11.03	18.74	11.63	22.94	12.23	284,201	491,049	
Information not provided	20.07	20.22	22.32	16.71	25.11	19.21	25,338	25,434	
Not applicable									

All single-family applications 2004 2006 Number of denials, 2006 Hispanic Non-Hispanic Hispanic Non-Hispanic Non-Hispanic Non-Hispanic Hispanic Hispanic 28.17 25.85 30.95 25,292 American Indian or Alaska Native 25.39 27.18 35.35 36,194 20.38 22.11 17.69 20.18 4,041 145,563 Asian 15.64 26.75 Black or African American 24.88 30.67 26.14 30.15 30.67 32.90 14,255 721,211 Native Hawaiian or Other Pacific Islander 23.13 21.48 25.95 22.33 30.12 26.14 9,510 25,987 White 22.04 17.34 22.34 18.13 26.07 19.79 653,162 2,051,464 Information not provided 26.35 25.87 29.18 24.41 31.67 24.70 87.458 105.823

Note: includes applications filed for owner occupancy in one to four-family dwellings.

Data Source: FFIEC (2005-20007).

Other dimensions of the market shifted considerably during this short period of time.

FHA-insured credit, historically prevalent among low- to moderate-income neighborhoods and African American borrowers, was quickly crowded out by the unregulated subprime boom (Table 2). FHA loans accounted for only 8.1 percent of all loan volume to African Americans in 2004, and this share slipped below 6 percent over the next two years. In a single year, conventional subprime market penetration of African American communities shot up from 25.7 percent to 45 percent; a lucrative \$30.4 billion market mushroomed into a \$72.1 billion business. Total subprime volume for all racial groups was just shy of \$200 billion in 2004; the market

more than doubled the next year, and then edged up to \$486 billion in 2006. (All of these figures are conservative estimates, since they exclude applications with incomplete or missing information on ethnicity and other key variables; considering all records, the total subprime market exceeded \$540 billion in 2006).

Table 2. FHA and Subprime Market Shares by Race and Ethnicity.

				Conven	tional s	ubprime	Conventional subprime			
	FHA	prime	share		share		volume (\$billion)			
	2004 2005 2006			2004	2005	2006	2004	2005	2006	
Race:										
American Indian or Alaska Native	4.40	2.95	3.46	16.02	27.58	29.57	2.81	5.25	4.48	
Asian	0.82	0.61	0.76	5.67	15.93	17.87	6.84	22.13	21.12	
Black or African American	8.10	5.25	5.76	25.74	44.95	46.85	30.43	72.15	77.18	
Native Hawaiian or Other Pacific Islander	3.23	2.10	2.66	13.99	28.44	30.66	1.94	5.04	4.65	
White	3.63	2.75	3.37	9.26	19.17	21.92	121.71	303.31	306.89	
Information not provided	2.17	1.23	1.77	12.76	25.98	28.56	33.75	74.78	72.21	
Not applicable	0.89	2.12	2.69	3.34	7.69	5.46	0.02	0.05	0.02	
Ethnicity:										
Hispanic or Latino	4.71	2.41	2.41	16.79	37.87	40.47	34.30	109.63	116.64	
Non Hispanic	3.62	2.86	3.61	9.52	18.59	21.29	130.22	303.05	307.77	
Information not provided	2.18	1.29	1.67	11.94	24.39	26.70	32.87	69.83	61.85	
Not applicable	4.51	4.60	3.77	5.00	16.12	26.68	0.09	0.20	0.30	

Note: includes only loans approved and originated to owner-occupiers in one to four-family dwellings.

Data Source: FFIEC (2005-20007).

These figures attest to a broad and lucrative array of opportunities for brokers, lenders, investment banks, and many other individuals and institutions competing in an evolving market and regulatory environment. The most readily detectable result of the competition involves shifts among types of institutions reporting to different regulatory and supervisory agencies (Table 3). The most notable departure from the established history of housing finance from the 1960s to the 1980s -- and even from the recent boom of the late 1990s -- was the aggressive growth of specialized subsidiaries of traditional, deposit-tanking savings institutions and banks. Until a few years ago, the subprime market was dominated by thinly-capitalized, lightly-

Table 3. Subprime Specialization by Subsidiary Type.

	Avg. lender share			2006 Only									
	of high-cost				Origination volume			Statistically significant differences between					
	loans			Number of	(\$ billio	ns)	means, by lender type (Tukey test, P<0.01)						
Lender type	2004	2005	2006	Institutions	High-cost	Other	1	2 3	3 4 :	5 6	7 8 9	9 10 11	
	10.47. 0	0.20	20.60	510	2.5	24.5		,		,	11	,	
Bank regulated by Federal Reserve Board (FRB)			20.68	519	3.5	24.5	1	<u>~</u>		. •	. • •		
Mortgage subsidiary of FRB-regulated bank	50.13 5	0.19	54.00	147	76.2	196.1	2 ✓	✓	✓ ✓	✓ ✓	✓ ✓	/ /	
Bank regulated by Federal Deposit Insurance Corporation	21.65 2	21.53	21.88	2,725	35.6	75.1	3	✓		✓	✓ ✓	•	
Mortgage subsidiary of FDIC bank	8.39 1	1.63	18.73	91	7.5	31.3	4	✓		_ <	✓		
Mortgage subsidiary of credit union	8.04	6.38	8.70	24	0.2	1.8	5	✓					
Credit union	8.19	7.78	5.88	2,019	0.8	46.2	6 ✓	✓	✓	✓	_	\checkmark \checkmark	
Bank regulated by Office of the Comptroller of the Currency (OCC)	19.35 2	21.55	21.60	955	67.7	399.5	7	✓		✓	✓ ✓	,	
Mortgage subsidiary of OCC-regulated bank	9.68	4.71	6.74	276	5.7	120.3	8 ✓	✓ ✓	✓	✓		_ ✓ ✓	
Thrift regulated by Office of Thrift Supervision	5.94	7.21	10.30	584	36.3	259.2	9 ✓	✓ ✓		✓ ✓		✓	
Mortgage subsidiary of OTS-regulated thrift	8.81 1	9.26	24.23	34	34.6	18.0 1	0	✓		✓	✓	\checkmark	
Independent mortgage company	10.38 1	7.47	19.90	1,392	272.7	433.2 1	1	✓		✓	✓ ✓	✓ □	

Data Source: FFIEC (2005-20007).

regulated independent mortgage companies that were not subject to CRA oversight (Apgar et al. 2007). These firms still account for an outright majority of all high-cost lending volume. But this dominance appears to be only a byproduct of the overall shift from traditional banks to nonbank financial services. The average independent mortgage company used subprime products for only a fifth of its business in 2006. This figure ballooned during the boom -- almost doubling from a 10.4 percent share in 2004 -- indicating that independent mortgage firms certainly shared in the frenzy of these years. But the vast majority of credit flowing through independent mortgage firms fell short of the high-cost HMDA triggers. The situation is somewhat different for some of the subsidiaries of the financial institutions that have usually been regarded as more prudent -- state commercial banks, local savings and loans, and national banks. These institutions have become much more active in the high-cost lending market. Subprime products account for a fifth of all business for the average subsidiary of banks regulated by the FDIC or the OCC, and for the national banks regulated by the Federal Reserve; subprime business is a full quarter of the loan volume for subsidiaries of OTS-supervised thrifts. Even more striking, the average subsidiary of a Federal-Reserve regulated bank did a majority of its mortgage business in high-cost loans in 2006. The contrasts among different institutional-regulatory configurations cannot be dismissed as the product of a few outliers: Fed-regulated subsidiaries are statistically

significant and distinct in their market orientation, compared with all other types of lenders in 2006 (see the right-hand side of Table 3).

Banks moved into the subprime market through their flagship operations, by creating specialized subsidiaries, and through targeted acquisitions of existing subprime firms. This "strategic transformation of banking" (Dymski, 2007) was driven in large part by the voracious Wall Street appetite for mortgage-backed securities. Through the mid-1990s, the American mortgage market was understood mainly in terms of fairly simple divisions: a "primary" channel of deposit-taking banks and savings and loans, a secondary market dominated by Fannie and Freddie, and a small, government-subsidized segment for loans insured by FHA and several smaller agencies (Van Order, 2000). In the last decade, however, subprime lending carved out an ever-larger segment both on the front end (marketing, working with brokers, underwriting and originating loans) and on the back end (selling the notes into the secondary market to obtain capital to make new loans) (Pennington-Cross, 2002). The displacement of FHA-insured loan originations by subprime products reflected and reinforced new partitions in the secondary market, with B-and-C loans and prime notes sold to different kinds of investors (Table 4). Between 2004 and 2006, between a quarter and a fifth of all conventional loans were not sold in the same calendar year as origination; many of these loans are sold in later years, but these cannot be tracked directly through these data. For those loans that go into the secondary market, however, the circuits of investment diverge sharply. One third of all prime loans were sold to the GSEs in 2004; this share dipped below 30 percent by 2006, as lenders held more loans in portfolio and sold greater shares to affiliated institutions, life insurance companies, private partnerships and individual investors. Subprime sales, by contrast, flourished in networks that bypassed regulation and disclosure. Fewer than one out of forty rate-spread loans met the

Table 4. Secondary Sales Circuits.

	Subprime				All others		Ratio			
Purchaser type	2004	2005	2006	2004	2005	2006	2004	2005	2006	
Not sold in same calendar year	29.57	21.78	21.25	25.13	24.05	26.86	1.18	0.91	0.79	
Fannie Mae	1.48	1.93	2.18	21.18	18.18	17.81	0.07	0.11	0.12	
Ginnie Mae	0.00	0.00	0.00	0.00	0.00	0.00				
Freddie Mac	0.20	0.12	0.40	12.81	12.61	11.79	0.02	0.01	0.03	
Farmer Mac	0.00	0.00	0.00	0.00	0.00	0.00				
Private securitization	2.55	15.85	15.80	1.74	4.12	3.60	1.47	3.85	4.39	
Commercial bank, savings bank or savings association	7.69	5.98	4.87	5.31	4.55	4.81	1.45	1.31	1.01	
Life insurance co., credit union, mortgage bank, or finance company	10.15	17.39	18.18	7.06	8.97	9.61	1.44	1.94	1.89	
Affiliate institution	6.13	8.01	9.15	7.02	11.40	11.55	0.87	0.70	0.79	
Other type of purchaser	42.23	28.92	28.18	19.74	16.12	13.96	2.14	1.79	2.02	
Total	100.0	100.0	100.0	100.0	100.0	100.0				
Total originations (\$billions)	182.7	405.5	425.9	1,174.8	1,193.8	1,115.6				

Note: includes only conventional, conforming loans approved and originated for one to four-family dwellings.

Data Source: FFIEC (2005-20007).

criteria and were sold in the same year to Fannie or Freddie. In 2004, the dominant channel for high-cost loans -- more than two-fifths of all originations -- was "other" purchasers. Most of these transactions involve the special-purpose vehicles (SPVs) specifically designed as passthrough entities that break the chain of legal liability between the loan transaction and subsequent investors (Eggert 2002; McCoy and Engel 2008). As more institutions and investors pursued the profits of high-cost lending, however, many loans were sold to affiliates, finance companies, or life insurance companies. In turn, many of these sales were probably re-sold to SPVs and then on to investment banks. Individuals and institutions scrambled to obtain shares of the various kinds of transaction fees associated with packaging loans into investment vehicles that could be sold on an expanding and transnational market for mortgage-backed securities. Between 2004 and 2006, subprime sales to private investors shot up from 2.5 percent to 15.8 percent. By 2006, subprime loans were more than 4 times more likely to be sold into private securitization compared to private loans, more than twice as likely to be sold to SPVs, and almost twice as likely to be sold to life insurance companies, other mortgage banks, and finance companies. These findings are in line with Malpezzi's (2008) assessment that, beginning in 2003, private subprime securitization routes began to edge out the GSEs in the secondary market.

Mapping the New Racial State

All of these mortgage market changes are intertwined with urban and regional geographies of economic growth and decline, housing construction and neighborhood change, and historical legacies of immigration and racial-ethnic diversity. Several studies document the multivariate interdependencies between segmented credit flows and metropolitan housing markets (Apgar et al. 2007; Immergluck 2008; Pennington-Cross 2002; Mayer and Pence 2008). But two of the simplest ways of mapping the subprime landscape offer the clearest views. First, subprime market share correlates quite closely with denial rates across the nation's 387 metropolitan areas (Figure 1). For advocates of risk-based pricing, this pattern offers clear confirmation: subprime credit goes to precisely those places where borrowers would otherwise be excluded. Yet this argument is weakened when we consider how long the subprime boom lasted: if risk-based pricing really works, why doesn't subprime market share eventually reduce regional denial rates? Moreover, if risk-based pricing is racially neutral, why are the places with the highest shares of African American borrowers still saddled with both high denial rates and higher subprime shares? On these measures, risk-based pricing is most prevalent in places like Detroit and many of the regional centers of the "Black Belt" of the Confederacy; the few exceptions (places in the upper right corner of the chart with low Black shares) are low-income cities with large Latino and migrant-worker populations on the Texas-Mexico border. The overall pattern suggests that the old inequalities of denial-based exclusion persist alongside newer inequalities of stratified exclusion.

A second mapping approach offers clues on who was involved in creating these new inequalities (Figure 2). As a general rule, lenders only pursue the African American and Latino markets if they can reap the profits of high-cost lending. Only a few lenders specialize in the

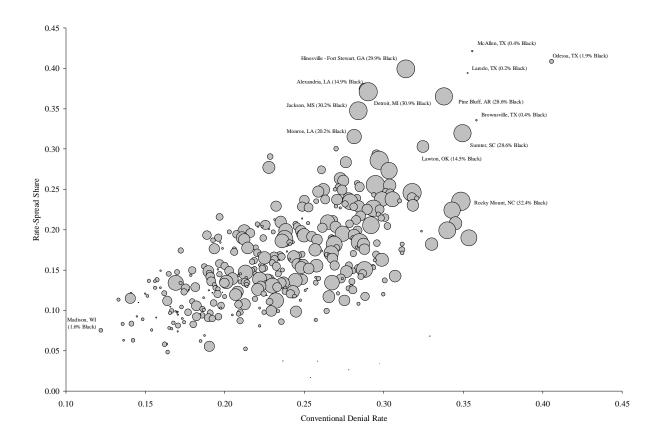


Figure 1. Conventional Denial Rate (horizontal axis), Rate-Spread Market Share (vertical axis), by Metropolitan Area, 2004. Circle sizes proportional to Non-Hispanic Black Share of Loan Applications.

minority market while avoiding rate-spread loans -- the institutions in the bottom-right corner of the chart. These are institutions in Puerto Rico, where a strong government subsidy program renders private subprime credit non-competitive. Most lenders nationwide specialize in prime credit mostly for non-Hispanic Whites (the bottom left of the graph) or pursue Black and Hispanic borrowers with high-cost lending (the top right). The pattern would be even more striking if subprime lenders did not exploit regulatory loopholes that result in many loan applications being coded with no information on race, ethnicity, and sometimes gender: 99

percent of the applications reported by Resmae Mortgage (see the upper left corner) were racially or ethnically invisible. Without these disclosure problems, the institutional correlation between subprime specialization and racial-ethnic marketing would likely be much stronger. Resmae filed for bankruptcy protection in early 2007, and its assets were subsequently purchased in March, 2007 by the Citadel Investment Group, a private hedge fund.

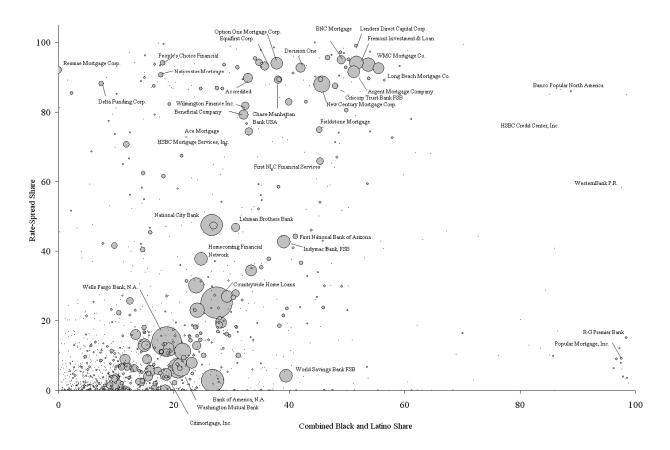


Figure 2. Black and Hispanic Share of Applications (horizontal axis), by Share of Originations Exceeding Rate-Spread Trigger, 2006. Circle sizes proportional to total originations.

Many of the other institutions on this graph met a similar fate. The first wave of failures swept through the institutions on the top of the graph -- most of them lightly regulated, non-bank institutions that made and sold loans quickly, earning up-front profits from initial transactions rather than long-run streams of interest income from repayments. The largest and most

prominent failure was New Century Financial, a firm that made 204 thousand mortgages in 2006, 88 percent of them high-cost; Black and Hispanic borrowers accounted for about 46 percent of the firm's originations. Donna Marie Pearce was one of these borrowers; she asked about the high interest rates and confusing terms of the loan document when she went to closing on her condominium in Hartford, Connecticut in mid-2006. The broker told her not to worry, that she would be able to refinance in six months; but months later it became clear that she did not have enough equity to refinance, and even if she did, a prepayment penalty clause would require her to pay several thousand dollars up-front for the privilege. She fell behind and closer to foreclosure (Prevost 2007). New Century, which promoted itself to investors as "a New Shade of Blue Chip," made \$51.6 billion in loans in 2006, making it the second-largest subprime lender after HSBC Finance (\$52.8 billion). New Century reported a profit of \$63 million in the third quarter of 2006, but several months later the firm was forced to restate earnings, and soon sought bankruptcy protection. A subsequent external audit uncovered systematic accounting failures -related to repurchase provisions that sometimes require originating lenders to buy back loans from investors if the borrowers slip into delinquency within the first 90 days -- and concluded that the \$63 million profit was an illusion, along with more than \$200 million more claimed as profits during 2006 (Missal 2008). But for many years, these kinds of profits were very real, sustained by rising house prices that allowed distress resales that avoided formal default or foreclosure, thus insulating lenders and investors from any losses. As the boom ended and defaults spread, New Century was the first in a wave of failures -- first the subprime specialists, then the investment vehicles that had supplied their capital, then larger lenders with mixed prime and subprime businesses. HSBC had organized itself into several separate HMDA reporting entities, some of them focused on the prime market, others engaged in the subprime activities

that led to the February 2007 announcement of the bank's first profit warning in its 142-year history. National City, based in Cleveland, struggled in 2008 to sell a \$20 billion portfolio of its troubled loans; the bank's stock fell by half on the day the first Treasury bailout proposal was defeated in the U.S. House. Washington Mutual, cutely known as WaMu, became the largest bank failure in U.S. history at the end of September, 2008, in a government seizure and asset sale to J.P. Morgan Chase.

Countrywide Mortgage reported 728 thousand loans in 2006, 25 percent of them exceeding the rate-spread threshold, 27 percent of Blacks and Hispanics. Recall that Angelo Mozilo told the Milken Institute that his industry was forced to lower underwriting standards because of "pressure from minority advocates." But in 2004, Mozilo met with Daniel H. Mudd, CEO of Fannie Mae, and pressured him. Countrywide sold more mortgage loans to Fannie Mae than any other institution, and Mozilo was angry about the standardized underwriting systems that led Fannie Mae to avoid buying the riskier, no-document loans that were becoming so popular and profitable among lenders and investors. Sources report that Mozilo threatened to end Countrywide's dealings with Fannie Mae, and he reminded Mudd that Countrywide had other options -- to sell their risky loans directly to Wall Street investment banks that were eagerly packaging and selling MBS shares. "You're becoming irrelevant," sources describe Mozilo as saying; "You need us more than we need you, and if you don't take those loans you'll find you can lose much more." (quoted in Duhigg 2008). Countrywide posted its first yearly loss in its 30-year history in 2007 (\$704 million), while in the same year Mozilo was awarded \$22 million in compensation (including \$44,454 for company aircraft use and \$8,581 for country club fees) and exercised \$121 million in stock options from previous years. Countrywide was acquired in January, 2008 in a distress sale to Bank of America (Reuters 2008). One of Countrywide's loans

was made in 2004 to Addie Polk, 90, of Akron, Ohio, collateralized by a 101-year old house that she had purchased with her late husband in 1970; after she fell behind on the payments and Fannie Mae assumed the mortgage and began foreclosure proceedings, Polk shot herself twice with a shotgun as sheriff's deputies arrived to evict her. While Polk lay in critical condition at Akron General Medical Center, Fannie Mae, now coping with its own foreclosure experience in federal conservatorship status, announced that it would forgive the entire outstanding balance and sign the home over to her (CNN 2008).

Modeling the Transformation

These kinds of stories -- Donna Marie Pearce's experience with New Century, Mozilo's complaints about "pressure from minority advocates" -- are being written about thousands of the individuals and institutions responsible for the subprime landscape portrayed in Figure 2. But the evidence thus far is only circumstantial, because it does not distinguish between lenders' actions and the qualifications of prospective borrowers. We need a multivariate approach to control for demand-side factors and to highlight the independent effects of racial stratification, financial-services transformation, and racialized institutional practices. I use the standard approach of most HMDA-based studies, which involves estimated individual-level models to control for applicant income, requested loan amount, and similar borrower characteristics. This standard approach is augmented with a) subsidiary-level aggregates designed to measure market specialization, and b) a proxy for applicant credit history. In the early 1990s, Abariotes et al. (1993) developed a technique to use the reasons lenders provide when they deny applications in order to infer underwriters' judgments of credit quality (see also Myers and Chan 1995;

Holloway 1998). When lenders reject applications, they can cites specific reasons for their decision, and by far the most common is credit history; these denial codes can be used to estimate, for a random sample of applications, a logistic regression model predicting the likelihood of a bad-credit denial as a function of borrower income, loan-to-income ratio, and so on. The parameters of this model can then be used to calculate a probability value for all applicants in the entire database, measuring each prospective borrower's statistical similarity to those consumers rejected by lenders who specifically identified credit history as a problem. Citing credit history has always been the best way for lenders to insulate themselves against charges of discrimination, and lenders' responses to the denial-code questions in HMDA are almost never scrutinized by regulators; as a result, this instrumental variable gives the benefit of the doubt to underwriters and lenders, and subsumes a certain amount of racial bias into a measure of applicant financial qualifications. Including the credit instrument in subsequent models of denial or subprime selection has the effect of using lenders' own judgments to build in a conservative bias that minimizes the likelihood of a finding of racial inequality.

Denial and Stratification

The first hypothesis is that subprime specialization complicates denial-based exclusion rather than reducing it. The raw rejection rates (recall Table 1) seem to support this hypothesis: at the peak of risk-based pricing in 2006, non-Hispanic Blacks are rejected at a rate 1.66 times higher than non-Latino Whites for all single-family applications, and at a rate 2.15 times higher for home purchase loans. For Hispanics, the disparities are substantially less, although the ratios vary with the interaction of race and ethnicity. For all applications, the rates range from 1.35 for Hispanics who identify themselves as Asian, to 1.78 for American Indian and Alaska Native

Hispanics; for home purchase applications, the disparities range from 1.77 for Asian Hispanics to 2.07 for Latino African Americans.

Nevertheless, these inequalities do seem to be reduced among subprime specialists. Logit models of applicant rejection yield different results depending on market segment (Table 5). For

Table 5. Tests of Risk-Based Pricing, 2006.

	Loan Rejection Models												
	Subprime Specialists						Rate-Spread Approvals at Subprime						
	Base model		Add credit proxy			Base model		Add credit proxy		_	vs. Rejections by Prime Lenders		
		Odds		Odds			Odds		Odds			Odds	
Variable	Coefficient	ratio	Coefficient	ratio	Tolerance	Coefficient	ratio	Coefficient	ratio	Tolerance	Coefficient	ratio	Tolerance
Intercept	-0.514	0.60	-0.5768	0.56		-2.1502	0.12	-2.3487	0.10		1.0534	2.87	
Applicant income	-0.00000103	0.89	-0.000000413	0.96	0.27	-0.00000276	0.65	-0.00000128	0.82	0.28	-0.000000703	0.92	0.31
Income squared	0.0000000000000151	1.08	0.00000000000000448	1.02	0.40	0.0000000000000311	1.28	0.000000000000015	1.13	0.37	9.36E-14	1.06	0.40
Income to loan ratio	0.0618	1.14	0.0466	1.10	0.68	0.0097	1.04	-0.0251	0.91	0.87	-0.058	0.79	0.89
Owner-occupant	0.0476	1.05	-0.0235	0.98	0.84	-0.3359	0.72	-0.4807	0.62	0.86	0.4913	1.63	0.87
Subordinate lien	-0.2692	0.76	-0.2893	0.75	0.81	0.2242	1.25	0.1757	1.19	0.78	0.1257	1.13	0.81
Jumbo loan	0.3171	1.37	0.3186	1.38	0.83	0.455	1.58	0.4352	1.55	0.78	-0.4539	0.64	0.81
Pre-approval requested	-0.4443	0.64	-0.3613	0.70	0.98	-0.5733	0.56	-0.391	0.68	0.90	-2.0565	0.13	0.97
Data edit failure	0.2088	1.23	0.2515	1.29	0.39	0.0897	1.09	0.2082	1.23	0.84	0.7122	2.04	0.72
Home improvement	0.2532	1.29	-0.2461	0.78	0.27	1.1044	3.02	0.1359	1.15	0.22	-0.3559	0.70	0.18
Refinance	0.3373	1.40	0.1779	1.20	0.30	0.7767	2.17	0.4841	1.62	0.51	-0.2466	0.78	0.42
Demographic information unknown	0.4413	1.56	0.3316	1.39	0.53	0.7323	2.08	0.4826	1.62	0.76	0.1053	1.11	0.64
Female primary applicant	-0.0106	0.99	-0.0415	0.96	0.91	0.101	1.11	0.0326	1.03	0.93	0.231	1.26	0.92
Hispanic	-0.0586	0.94	-0.1957	0.82	0.44	0.6095	1.84	0.2653	1.30	0.71	0.9636	2.62	0.56
Native American	0.2293	1.26	0.0113 *	1.01	0.94	0.7741	2.17	0.2415	1.27	0.96	0.3547	1.43	0.94
Asian or Pacific Islander	0.0661	1.07	0.0488	1.05	0.93	0.285	1.33	0.2701	1.31	0.96	-0.0663	0.94	0.94
African American	0.1808	1.20	-0.087	0.92	0.20	0.8732	2.40	0.2193	1.25	0.49	1.3613	3.90	0.31
OCC-regulated bank	0.0113	* 1.01	0.0292	1.03	0.54	0.5348	1.71	0.5372	1.71	0.24	-3.6783	0.03	0.35
FDIC-regulated bank	-0.4331	0.65	-0.4137	0.66	0.40	-0.1227	0.88	-0.1226	0.89	0.51	-0.9028	0.41	0.53
OTS-regulated thrift	0.4081	1.50	0.353	1.42	0.43	0.543	1.72	0.4134	1.51	0.32	-1.4526	0.23	0.38
Credit union	-1.5659	0.21	-1.3061	0.27	0.99	-0.5012	0.61	0.1031	1.11	0.40	-5.0202	0.01	0.67
HUD-regulated mortgage bank	0.2294	1.26	0.2388	1.27	0.39	0.4103	1.51	0.4306	1.54	0.30	-0.1655	0.85	0.29
Credit instrument			3.8864	1.18	0.11			8.7599	1.52	0.14	-9.1694	0.62	0.12
Number of observations	3,552,926		3,552,926			7,654,073		7,654,073			3,317,583		
Pseudo R-squared	0.0426		0.0434			0.1141		0.1190			0.4309		
Unadjusted denial rate	0.493		0.493			0.198		0.198					

Note: estimated with all conventional single-family applications either 1) approved and originated, or 2) rejected by the lender, for properties in a metropolitan area in the continental U.S., filed either a subprime institutions (those where rate-spread loans account for at least 80 percent of originations) or prime lenders (where rate-spread loans are no more than 20 percent of all loans). Reference category for loan purpose is home purchase; for race/ethnicity/gender, non-Hispanic white male, for institution, Federal Reserve-regulated bank.

applications filed at lenders where fewer than 20 percent of all originations are subprime, the odds ratio comparing non-Hispanic Blacks to non-Hispanic Whites is 2.40 when considering directly observed applicant characteristics; adding estimated credit risk reduces this disparity to 1.25. At lenders where more than 80 percent of all originations are subprime, the corresponding ratios are 1.20 and 0.92 -- the latter implying that Blacks are treated slightly more favorably than Whites at subprime specialists. This finding directly contradicts the first hypothesis. Yet three considerations merit caution. First, fit diagnostics fall far below previous HMDA-based studies -- especially for subprime specialists. Individual applicant characteristics offer little predictive value. The credit proxy has the expected sign, but adds little improvement to model fit, in contrast to its robust performance in previous studies (Myers and Chan 1995; Holloway 1998;

^{*}Coefficient not significant at P=0.05; all other coefficients are significant at P<0.001

Holloway and Wyly 2001). Second, the reduction or disappearance of racial effects in the denial model can be interpreted in ways that undermine risk-based pricing: regardless of race and ethnicity, anyone who applies at a subprime specialist faces a higher chance of denial (49.3 percent vs. 19.8 percent). Risk-based pricing is justified by arguments that if firms are allowed to charge higher costs to cover riskier borrowers, they will be less likely to engage in denial-based exclusion. Third, the provisions of HMDA do not allow us to identify people who sought good, prime credit and who were turned down -- and to distinguish them from others who apply for prime credit, only to show up and closing to find that the paperwork has been changed to a more costly, risky subprime loan. Such tactics are pervasive in the subprime market, and the impossibility of systematically measuring them makes it difficult to provide a definitive test of risk-based pricing.

An alternative approach, however, offers important clues. If financial innovation serves borrowers who would otherwise be excluded from mainstream credit, then there should be no significant differences between people who are served in the subprime market and people excluded by the old, credit-rationing prime lenders. In other words, the profile of borrowers approved for high-cost credit at subprime lenders should be roughly similar to the profile of those who applied and were rejected by prime lenders. Model results contradict these expectations (right panel, Table 5). There are striking, systematic differences between these populations. In models calibrated with 2004 data, the credit proxy yielded a standardized odds ratio of 1.3, confirming that subprime lenders serve riskier consumers; but this effect reverses by 2006, while racial and ethnic contrasts widen. After accounting for income, loan type, estimated debt burden, and estimated credit risk, African Americans are 3.9 times more likely to wind up with high-cost credit at a subprime specialist rather than rejected by a prime lender. For Latinos,

times as many African Americans, and more than two and a half times as many Latinos, as would be expected if the industry were simply serving those turned away by traditional lenders. It strains credulity to accept that these results are solely the result of rational, fully-informed choice. The results suggest that segmentation of racial and ethnic minorities intensified with the expansion of risk-based pricing. Risk-based pricing may have eliminated racial disparities in rejection by increasing rejection rates for <u>all</u> borrowers. At the same time, subprime lenders can legitimately claim that all borrowers are treated without regard to race. And yet marketing and broker referral networks ensure that racial and ethnic minorities are steered into high-cost credit. Risk-based pricing complicated traditional inequalities but certainly did not eliminate them.

The New Institutional Landscape

The second hypothesis shifts the focus from the qualifications and deficiencies of consumers to the strategic, competitive position of lenders. One way to disentangle these two sets of influences involves estimating a series of models of subprime segmentation, based first on the directly observable characteristics of applicants, then adding the credit proxy, then adding a vector of lender and subsidiary measures of market activity (Table 6). These models offer detailed evidence on the relations between risk-based pricing and the institutional restructuring of recent years. Four main findings stand out. First, the subprime industry moved well beyond its established niche of low-income borrowers. Model results are consistent with Immergluck's (2008) diagnosis that practices in the low-income subprime market moved rapidly into the

Table 6. Logistic Models of Subprime Segmentation.

	Model 1				Model 2		Model 3		
	2004	2005	2006	2004	2005	2006	2004	2005	2006
Income	0.45	0.60	0.76	0.54	0.73	0.88	0.66	0.75	0.86
Income squared	1.46	1.31	1.15	1.35	1.18	1.07	1.21	1.16	1.08
Income to loan ratio	1.12	1.04	1.02	1.06	0.97	0.97	1.15	1.11	1.09
Owner-occupied	0.81	0.93	0.73	0.75	0.83	0.66	0.65	0.64	0.53
Subordinate lien	2.66	1.92	1.41	2.48	1.85	1.40	1.87	1.29	1.16
Jumbo loan	0.65	0.83	0.93	0.64	0.84	0.93	0.51	0.70	0.69
Pre-approval requested	0.61	0.48	0.31	0.69	0.58	0.37	0.80	0.88	0.52
Data quality flag	0.88	0.91	1.09	0.91	0.98	1.15	1.35	1.33	1.23
Home improvement	0.69	0.44	0.52	0.40	0.20	0.24	0.36	0.19	0.33
Refinance	1.06	0.83	0.96	0.88	0.63	0.76	0.68	0.48	0.64
Demographic information incomplete	1.46	1.68	1.63	1.33	1.43	1.37	1.01 *	1.02	1.12
Female applicant	1.26	1.29	1.23	1.23	1.22	1.17	1.05	1.05	1.04
Hispanic/Latino applicant	1.84	2.65	2.71	1.48	2.02	2.13	0.89	1.09	1.26
Native American applicant	1.96	1.78	1.66	1.48	1.18	1.13	1.32	1.19	1.27
Asian, Hawaiian, Pacific Islander applicant	0.75	0.99 *	0.99	0.75	0.96	0.97	0.71	0.67	0.79
Black/African American applicant	3.46	3.93	3.77	2.27	2.24	2.35	1.60	2.33	2.38
Credit history instrument				1.26	1.40	1.36	1.24	1.32	1.24
Loan sold to GSE							0.10	0.19	0.24
Loan sold to private investor							0.96	1.99	2.48
Loan sold to bank							1.34	1.57	1.87
Loan sold to finance company							1.00 *	1.78	2.01
Loan sold to affiliate institution							1.04	0.92	1.09
Loan sold to other purchaser							1.47	2.04	2.92
National market share							1.22	1.19	1.09
Data quality flag share							0.93	0.96	1.01
Denial rate							1.25	1.40	1.60
Withdrawal rate							1.09	1.20	1.25
Declined rate							1.07	1.23	1.25
Share of applications closed as incomplete							1.02	1.06	1.08
Share of loans made to owner-occupiers							1.01	0.94	0.86
Subordinate lien share							0.78	0.85	0.86
Jumbo share							0.64	0.68	0.90
FHA share							0.71	0.72	0.80
Share of applicants w/ incomplete demographic information							1.30	1.44	1.20
Female share							1.16	1.20	1.16
Hispanic/Latino share							1.32	1.77	1.37
Native American share							1.07	0.92	0.96
Asian share							0.72	0.62	0.62
Black/African American share							1.50	1.99	1.77
Lender Black share * Native American applicant							0.99	0.99	1.00 *
Lender Black share * Asian applicant							1.02	1.04	1.03
Lender Black share * Black applicant							0.99	0.96	0.98
Lender Black share * Hawaiian or Pacific Islander applicant							1.03	1.04	1.04
Lender Black share * White applicant							1.01	1.02	1.02
lender Black share * Racial information not provided							1.02	1.02	1.01
Pseudo-R-squared	0.11	0.13	0.10	0.12	0.13	0.11	0.42	0.56	0.50

N for 2004: 10,951,818; for 2005: 12,475,694; for 2006: 11,018,814.

Note: Odds ratios for continuous variables measure the change in odds with a one-standard deviation increase in the respective predictor.

Data Source: FFIEC (2005-20007).

^{*}Not significant at P<.01; all other coefficients are significant at P<0.01.

"exotic" Alternative-A market serving middle- and high-income buyers in overheated regional housing markets. The standardized odds ratios for applicant income and debt ratio moved steadily towards 1.00 between 2004 and 2006, while owner-occupied status became a more reliable predictor. Even more remarkable, among similar loan amounts to similar borrowers, refinance loans became less likely than home purchase loans to carry high-cost features (the refinance odds ratio dips well below 1.00 in Model 2). These results provide some support for the idea that risky practices became common among middle-class borrowers trying to cope with high housing costs, or seeking loans for investment properties.

But the second finding is a sharp racial stratification in these opportunities and constraints. Racial disparities persist after accounting for owner-occupancy and all other factors. At its worst, and only considering directly observed characteristics, African American borrowers were almost four times more likely than Whites to wind up with subprime credit in 2005. Adding the credit instrument reduces these disparities, but does not eliminate them (see Model 2, Table 6). The ratio for Blacks dips slightly from 2.27 in 2004 to 2.24 the next year, only to shoot up to 2.35 the year after that. Meanwhile, the subprime market appears to have reoriented towards Latino borrowers at the height of the boom, with racial odds ratios rising from 1.48 to 2.02 to 2.13. Adding the vector of lender measures, however, fleshes out a subtle distinction in the racial-ethnic dimensions of the industry. Adding lender variables substantially reduces the odds ratios for Hispanics (compare Models 2 and 3): the Latino odds ratio for 2004 is only 44 percent of its magnitude in the model excluding institutional measures, and this figure stays at 0.54 the next year, and 0.59 in 2006. For African Americans, by contrast, the figures are 0.71 in 2004, 1.04 in 2005, and 1.01 in 2006. In other words, much of the racial disparity between Hispanic and non-Hispanic White consumers is a product of the distinctive kinds of lenders

active in Latino markets. For African Americans, the entire spectrum of the industry is stratified and biased, and the disparities worsened: the odds ratios for Blacks, after accounting for estimated credit and lender characteristics, rises from 1.60 in 2004 to 2.33 the next year to 2.38 in 2006.

The third finding deals with the interactions between racial inequality and networks of structured finance. Private capital that once avoided racial and ethnic minorities moved aggressively into these markets during the boom -- creating disparities that cannot be attributed solely to demand-side factors or consumer qualifications. Marketing, advertising, and broker referral networks appear to be important on the front end -- attracting applicants -- but so also are the decisions about where to sell the loan once it is originated. On the front end, lenders and subsidiaries serving racial and ethnic minorities are doing so mainly through the vehicle of subprime credit. A lender specializing in the African American market (i.e., increasing the lender's Black share by one standard deviation, a bit over 5 percent) increases the likelihood that the loan will be subprime by a ratio of 1.50 in 2004; this effect strengthens to almost 2 the next year before moderating slightly. The trend is more ambiguous for lenders focused on the Latino market, but the ratio exceeds 1.7 in 2005. Since these ratios persist after accounting for all borrower characteristics that can be measured with public data, the results provide evidence that lending industry structure rivals individual characteristics in terms of understanding market outcomes: among identical consumers, the kinds of loan one receives depends significantly on the kind of institution one is dealing with. Nearly two-thirds of all mortgages are negotiated by mortgage brokers between consumers and lenders (El Anshasy et al. 2006), and we cannot distinguish the business practices of banks and mortgage companies from the activities of brokers. But that is precisely the point: if a lender establishes a dedicated subprime unit to cater

to African Americans, or establishes networks with local brokers active in African American neighborhoods, the result will be the same. Serving the minority market will reflect and reinforce localized racial inequalities, while allowing all industry actors to truthfully deny any knowledge of discrimination or biased intent. Yet discriminatory outcomes will persist as economically rational and highly profitable. Even as serving the minority market has become synonymous with specializing in high-cost lending, lenders are still able to claim that all their customers are treated equally: note the extremely weak odds ratio for the interactions between applicant race and lender African American share. And yet, thanks to the combined actions of subprime lenders working in minority neighborhoods and lenders marketing and advertising to minority borrowers through specialized subsidiaries, subprime credit became even more sharply racialized during the boom years between 2004 and 2006.

These boom years departed from previous American housing booms, by virtue of the new pipelines connecting borrowers and neighborhoods to national and transnational securitization networks. The fourth finding is that this new infrastructure worsened racial inequalities. To be sure, significant racial coefficients from models estimated with HMDA data have always been challenged by conservative analysts and industry partisans, who cite a long list of reasons why the results cannot "prove" discrimination. Yet it cannot be disputed that such results clearly merit further investigation (this is precisely the methodology used by the Federal Reserve Board to identify institutions for further regulatory examination). In this case, the results indicate that racial disparities worsened in tandem with the acceleration of subprime securitization. The Black odds ratios rose 49 percent in two years, and the Latino ratio jumped 42 percent, at the same time that subprime originations ballooned from less than \$200 billion to more than \$425 billion, and as lenders moved loans quicker off their books into the secondary market. Loans

originated and then quickly sold to another bank were by 2006 almost twice as likely (compared to a loan held in portfolio) to be subprime, all else constant. In 2004, there was little difference between lenders' portfolio business and the mortgages they quickly re-sold to finance companies and private investors. Two years later, loans sold to finance companies were twice as likely to be subprime; for private investors, the ratio shot up to 2.48. The pass-through investment vehicles ("other purchasers") have been important conduits for several years for both prime and subprime re-sales, but even here, subprime circuits moved much quicker, with the odds ratio jumping from 1.47 to 2.92. Notice that, by contrast, mortgage loans sold to affiliate institutions are split evenly between market segments: after accounting for all other factors in the model, loans sold to affiliates are not substantially more likely to be subprime (the odds ratio never gets above 1.1). These results suggest that subprime securitization networks became especially vulnerable to the classic lemons problem, where originators had incentives to pass off their worst products to others (not affiliates) who believed that structured finance would insulate them from losses (Engel and McCoy 2007). Until early 2007, of course, this assumption was safe.

Subprime Geographies of Race

The implications of this last finding -- the interaction of racial inequalities with securitization networks -- deserve careful consideration. Additional models confirm that the strengthening of racial segmentation admidst secondary-market acceleration is no coincidence. I estimated models with interaction terms for all 379 metropolitan areas in the United States, testing for relations between the local severity of racial segmentation, the effects of lender specialization, and the role of securitization channels. Consider first the interdependence of individual inequalities and lender specialization across metropolitan areas (Figure 3). The raw

logit coefficient for subprime selection in the full model for 2006 with all interaction terms is 0.46, corresponding to an odds ratio of 1.6. But this coefficient (ignoring interactions not significant at P=0.05) varies widely, turning negative in places like Idaho Falls, Idaho, Flagstaff, Arizona, Redding and San Luis Obispo, California -- while rising substantially in Sheboygan, Wisconsin, Sioux City on the Iowa-South Dakota border, Terre Haute, Indiana, and Johnstown, Pennsylvania. At both extremes, these are places that are easily overlooked both in national

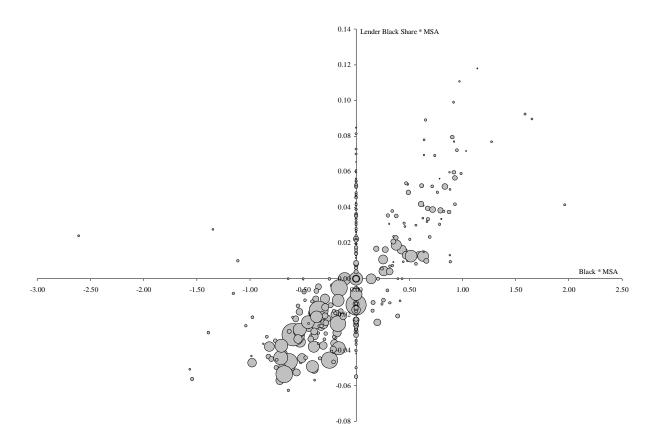


Figure 3. Interaction Terms from 2006 Racial Segmentation Model, Black*MSA (horizontal axis), Lender Black Share*MSA (vertical axis). Circle sizes proportional to total HMDA loan application records in 2004.

housing-market research and in most local case studies. Outside of Sheboygan or Idaho Falls, who would go there to study racial inequalities in subprime lending? But the pattern becomes

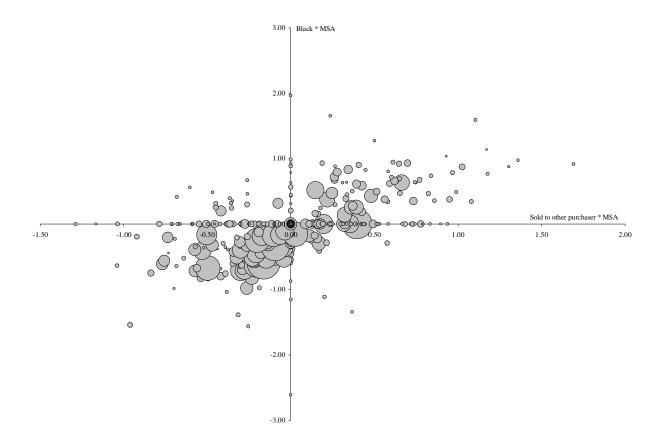


Figure 4. Interaction Terms from 2006 Racial Segmentation Model, Sold to Other Purchaser*MSA (horizontal axis), Black*MSA (vertical axis). Circle sizes proportional to total HMDA loan application records in 2004.

obvious when racial segmentation coefficients are plotted against interaction terms for the lenders' African American share -- an effect that varies much less, in raw terms, across metropolitan areas (Figure 3). In urban and regional housing markets with the most severe segmentation of Blacks into subprime credit, lenders' specialization in the African American market is more decisive in predicting whether an individual borrower will wind up with a high

cost loan. Disparate impacts by race are inextricably tied to institutional decisions on subsidiary structure, market specialization, broker networks, and other business practices. The bubbles on this chart are scaled for market size; the worst inequalities thus seem confined to small cities, where in extreme cases the majority of Blacks in town might get subprime loans from one or a few local lenders or subsidiaries that specifically market easy credit and court the African American market. But these intensified effects are by no means confined to small cities. The cluster of larger metropolitan areas with Black * MSA interaction term coefficients around +0.50 includes Detroit, St. Louis, Kansas City, Milwaukee, Indianapolis, and Dayton, Ohio. And while many of the nation's largest cities appear in the bottom left quadrant, this does not mean that there are no significant racial inequalities in these places (recall the 2.38 overall odds ratio in Table 6).

Securitization networks accentuate institutional divisions and established contexts of regional race relations. Places where local lenders quickly sell loans to special-purpose-vehicles tend to be places with a significantly higher probability of subprime segmentation, and these are also the same places where Black-White loan disparities are more severe (Figure 4). This relationship is not overwhelming (R²=0.25), but it persists after accounting for an extensive array of borrower and lender characteristics. Finally, lenders specializing in the African American market are more likely to push borrowers into subprime credit in those places where subprime loans are quickly sold to special-purpose vehicles and Wall Street investment networks (Figure 5).

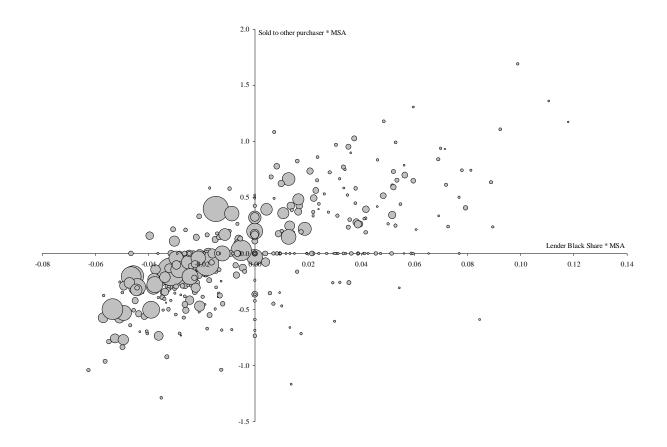


Figure 5. Interaction Terms from 2006 Racial Segmentation Model, Lender Black Share*MSA (horizontal axis), Sold to Other Purchaser*MSA (vertical axis). Circle sizes proportional to total HMDA loan application records in 2004.

Conclusions

There is now a rich, interdisciplinary, and rigorous literature documenting the shift from the simple divisions of racially discriminatory exclusion to the more complicated environment of racially discriminatory segmentation, inclusion, and exploitation. But if the means are sometimes complicated -- target marketing, yield spread premiums, prepayment penalties, risk tranches and CDOs and credit default swaps -- the ends are quite simple. Larry Wilmore, the self-described Senior Black Correspondent on the satirical news program The Daily Show had it

about right when he declared in August, 2007, that subprime lending is "the financial N-word." Between 2004 and 2006, subprime racial disparities after controlling for income and loan amount widened from 3.5 to more than 3.7 for African Americans, and from 1.8 to 2.7 for Latinos. Accounting for estimated credit risk reduces these inequalities to a bit more than 2 in 2006. Institutional specialization in the subprime market has allowed lenders to skirt regulations and to exploit the history and geography of racial discrimination. In turn, the strategies of lenders and secondary market investors strengthened the links between subprime specialization and racial segmentation; those places most tightly connected to securitization networks endured more severe racial segmentation.

Unfortunately, when the tactics similar to those devised long ago (Boyer 1973) seemed to have stripped all the available profits from minority communities and lenders turned increasingly to middle-income Whites struggling in high-cost markets or seeking investment properties, the stage was set for a financial discourse that could safely ignore issues of race. In an eloquent commentary on the unfolding crisis, James Sidaway (2007, p. 197) reminds us that

"Today the term 'subprime' risks obscuring how ... dispossessions are being mediated through race and class. At the most basic level, African American and poorer white folk are disproportionately amongst those who are losing homes. Whole neighbourhoods in some cities have been wrecked as homes are repossessed, values collapse, and buildings fall into ruin. It is not news that American cities are racialized and divided in class terms. But the current crisis seems set to deepen these sociospatial divisions. Mapping the social and economic geographies and countering conservative (and sometimes racist)

discourses of simply blaming the dispossessed for their lack of financial nous or recklessness is an urgent task."

This chapter is a response to Sidaway's call to map these geographies, and to counter racist conservative discourse. The maps and models I have presented can be regarded as analytical documents, designed to test causal hypotheses and evaluate alternative explanations. But they are also guides to action, designed to support the work of those who have led the community reinvestment movement for many years. The new racial state was produced by deregulation and industry restructuring that weakened the achievements of multiracial organizing during the civil rights era. Challenging today's inequalities requires a vigilant politics of measurement and mobilization. The new racial state operates by hiding in plain sight, obscuring racism by declaring the good intentions of lenders and the bad qualifications of consumers, by emphasizing technocratic financial details and the virtues of deregulated market discipline. Fighting back requires, as a first step, making things visible. The legacies of the civil rights era are at risk, hidden and ignored, but they are not lost: despite conservatives' best efforts, we still have HMDA, the CRA, and the Fair Housing Act. At an interdisciplinary conference on predatory lending in September, 2005, the prominent civil rights litigator John Relman (2005) described what is at stake:

"Race matters, and race is everything... If someone tells you that race is not the issue, they don't know what they are talking about. Race is the issue. It's always been, and it will always be, in America, and if you ... don't understand that fact, and understand that race and class always go together, then you're not going to understand the story of what this litigation is about. And in the end, litigation is

about telling a story, and it's about telling a story to a jury or a judge, but the story has to be true if you're going to win, and the true story in America is that race and class, and race and exploitation, always go together."

In January, 2008, Relman filed a suit under the Fair Housing Act on behalf of the Mayor and Council of the City of Baltimore against Wells Fargo, alleging a pattern or practice of targeting African American neighborhoods -- illegal reverse racial redlining -- for risky loans that maximize short-term profits at the expense of a predictable wave of foreclosures (Relman 2008). This is the first lawsuit filed by a municipality seeking to redress the costs of racially discriminatory lending, but there will be others, and there are many other efforts underway -- litigation, foreclosure mitigation, organizing to demand regulatory reform, and research to map the geographies that must be changed. We all have a lot of work to do.

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