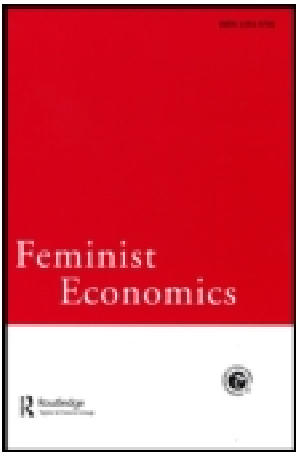

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Race, Gender, Power, and the US Subprime Mortgage and Foreclosure Crisis: A Meso Analysis

Gary Dymski [a] [b], Jesus Hernandez [c] & Lisa Mohanty [d]
[a] Leeds University Business School, University of Leeds, Leeds, LS2 9EJ, United Kingdom
[b] Department of Economics, University of California, Riverside, Riverside, CA, 92521-0427, United States
[c] Department of Sociology, University of California, Davis, Davis, CA, United States
[d] Department of Economics, Trident University International, Irvine, CA, United States
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ABSTRACT

This study addresses two largely unanswered questions about the United States subprime crisis: why were minority applicants, who had been excluded from equal access to mortgage credit prior to the spread of subprime loans, superincluded in subprime mortgage lending? And why didn't the flood of mortgage credit in the 2000s housing boom – an oversupply of credit suggesting supercompetition – reduce the proportion of minority and women borrowers burdened with unpayable subprime mortgages? This contribution develops a meso analysis showing how banking strategies were shaped by and reinforced patterns of racial and gender inequality, permitting lenders in evolving financial markets to offer new loan instruments to previously excluded loan applicants, and to exercise social power over – and thus extract rent from – these borrowers.

KEYWORDS

Race, subprime mortgages, discrimination, foreclosure, power, meso analysis

JEL Codes: G21, D02, B41

INTRODUCTION

The United States subprime mortgage and foreclosure crisis would seem to provide an ideal case study of how racial and gender stratification (William Darity Jr. 2005), amplified by the exercise of power (Elissa Braunstein 2008), can impact economic outcomes. Subprime lending exploited spatial racial disparities built up during decades of racial redlining and discrimination in credit markets, as well as by banks' withdrawal from minority neighborhoods. And given the concentration of female-headed households among racial and ethnic minorities, this crisis has a clear gender dimension as well.

Many sociologists, geographers, and urbanologists have emphasized the connection between race and space in the subprime crisis since it emerged six years ago. But most economic explanations of the subprime crisis have ignored stratification, race, and gender, since economists see subprime lending as an innovation that brings more suppliers and more instruments into the mortgage market; as such, it should expand choice and enhance allocative efficiency. In this view, properly regulated financial markets are socially neutral vehicles for allocating credit and distributing risk. So any crisis in subprime lending must be due to distortions and misaligned incentives in these markets, borrowers' over-optimistic assessments of housing price trajectories, or financial authorities' failure to prevent unwise lending. The defining aspect of the crisis was not that subprime loans and other forms of predatory lending disproportionately victimized minorities and women, but that borrowers were myopic, overly greedy, or both.

This rift between the explanatory frameworks of economists and other social scientists can be traced to two sources: first, economists' restricted view of when unjust – because it is unjustified – racial and gender discrimination can arise in credit markets; second, their inattention to the exercise of power in markets. In the wake of the subprime crisis, some economists are starting to rethink the premise of market neutrality. Michael R. Roberts and Amir Sufi (2009) have argued that financial structures may be systematically inefficient due to misaligned incentives. Following this logic, Adam J. Levitin and Susan M. Wachter (2012) have suggested that credit was systematically oversupplied to the housing market during the recent bubble insofar as asymmetric information and market complexity led investors to under-assess lending risks in mortgage-backed securities. But links between misaligned incentives and risks, and unjust – and thus socially non-neutral – outcomes have yet to be made.

We address two key questions about subprime lending that begin to make these links. First, why were minority and women applicants, who had historically been disproportionately excluded from equal access to mortgage credit, superincluded in subprime mortgage lending? Second, why didn't the flood of mortgage credit in the 2000s housing boom – an oversupply of credit suggesting supercompetition – reduce the proportion of minority and women borrowers burdened with unpayable subprime or high-cost mortgages?

Our response to these questions is to argue that racial and gender inequality, along with lenders' exploitation of the differential social power that inequality generates, are central to the political economy of subprime lending and hence of the subprime crisis. What is missing in economists' accounts of market inefficiency is what Diane Elson (1994) and others have called the "meso" level of analysis: attention to the social construction of the institutional mechanisms whereby subprime loans were created and distributed. This level enables us to see how market power was attained and used in the long, gendered history of the exclusion of minorities from equal access to housing and mortgage credit.

Developing a meso analysis of the subprime crisis stretches the boundaries of economic processes, so that market participants' calculations of individual gain are seen as social practices conditioned by the broader forces that determine what resources and alternatives those participants have. In this way, the now missing links between gendered racial inequality and market mechanisms can be rendered visible. As Joan Acker puts it, "class, along with gender and race, are best seen as active practices rather than as classificatory categories ... 'the economic' must be expanded to understand the life situations of women and people of color" (2000: 192). A meso-analytic approach opens space for a richer incorporation of discrimination categories into economic analyses of credit markets.

Our meso analysis shows how the pervasive effects of racial inequality in multiple markets, combined with ineffective regulation, created incentives for banks to maximize short-term profits by pushing subprime lending, especially in minority communities, where banks controlled the choke points of a lending complex. Banks' use of market power cannot be captured using the lens of individual-level discrimination; instead, it built on the legacy of the racial cartel that had created segregated urban space in the mid-twentieth century, and on the more recent decades of financial exclusion.

ECONOMISTS ON THE SUBPRIME CRISIS: MORAL HAZARD AND EXPECTATIONAL ERRORS

Most economists' accounts of the causes of the subprime crisis ignore its origins in predatory lending in minority communities in the 1990s. Their explanations center on a more abstract question: how a set of mortgage instruments tailored for high-risk borrowers could have occurred in financial markets that specialize in efficient, information-rich exchanges. Such markets can accommodate lending to risky borrowers as long as market discipline prevails and lenders therein are adequately regulated.

Given this framing, attention centers on what factors undercut market efficiency. One possibility is human fallibility. Scenarios in which market participants have been fooled or delusional are a timeless theme in financial history, as Carmen M. Reinhart and Kenneth S. Rogoff (2009) point out. This fallibility has two interacting dimensions: the breakdown of optimistic assessments of future returns for the assets on which loans are based, and the inability of financial authorities either to prevent unwise lending or to compel borrowers to repay (Reinhart and Rogoff 2009). Some economists emphasize the former element. Breakdowns in beliefs and confidence can burst an asset bubble and destabilize markets regardless of regulatory precautions. For example, Kristopher Gerardi, Andreas Lehnert, Shane M. Sherland, and Paul Willen (2008) attribute the subprime crisis to widespread underestimation of the possibility that housing prices might fall.

Other analysts argue instead that perverse market incentives or regulatory flaws led to excessive risk taking. For example, John M. Quigley (2008) attributes the mortgage crisis to bad compensation structures and asymmetric information. Ross Levine (2010) argues that subprime securities markets were underregulated and participants undercapitalized, and bond market bonus mechanisms encouraged excessive risk taking. In a contrasting view, Charles W. Calomiris (2008) argues that governmental subsidies for risky loans injected moral hazard into subprime lending.

Racial or gender discrimination play no essential role in these explanatory alternatives. Robert Shiller (2008), for example, makes no mention of discrimination in a book-length treatment of the subprime crisis. A set of full-text word searches on working papers of the National Bureau of Economic Research (NBER) illustrates this implicit bias. The word "subprime" appears 305 times, and the word combination "subprime" and "mortgage" 238 times; but "discrimination" appears as a third term in only nine (3.8 percent) of these papers; the total declines to five and four when the terms "race"/"racial" or "gender," respectively, are included in the search string.[1] A similar pattern obtains for "foreclosure"; only three papers of the twenty-nine that include "subprime" with this term also mention "discrimination."[2] Ironically, the most notable exception among neoclassical economists engaged in this debate is the contrarian assertion by Peter J. Wallison (2009) that the Community Reinvestment Act (CRA) has forced banks to make home loans to borrowers with low incomes.[3]

In sum, analyses of incentive and governance problems are sufficient to generate a robust debate among economists about "what went wrong" without bringing in race or gender. Indeed, we might speculate that economists' belief that race or gender inequality will be discounted by the majority of their peers inclines them either to ignore race and gender factors, or to mention them only skeptically.

EMPIRICAL FINDINGS ON SUBPRIME LENDING AND ON THE SUBPRIME AND FORECLOSURE CRISES

Studies outside of economics have emphasized that the subprime and foreclosure crises are rooted in historical and contemporary practices that generate and reinforce racial and gender inequality. The variability of unequal racial and gender outcomes across time and space (Manuel B. Aalbers 2009a) is an object of study, not a reason to dismiss these factors. What have these studies – which have largely focused on race, and only infrequently on gender – found?

In 2004, Patricia A. McCoy and Elvin K. Wyly edited a special issue of *Housing Policy Debate* on predatory lending that emphasized its links with racial inequality and segregation.[4] Elvin K. Wyly, Marcus Moos, Holly Foxcroft, and Emmanuel Kabahizi (2008) showed that predatory lending was concentrated in cities with large concentrations of minorities. Gregory D. Squires, Derek S. Hyra, and Robert N. Renner (2009) and Jacob S. Rugh and Douglas S. Massey (2010), too, have pointed out the strong correlation between residential segregation and subprime lending, suggesting that racial and ethnic segregation is the root cause of the crisis. These authors use a two-stage least-squares model to confirm "the causal effect of black segregation on the number and rate of foreclosures across metropolitan areas," along with "overbuilding, risky lending practices, lax regulation, and the bursting of the housing price bubble" (Rugh and Massey 2010: 629). Dan Immergluck (2009), Manuel B. Aalbers (2009b), and Peter Marcuse (2009) argue that minority communities were subjected to subprime loan pushing by a vertically integrated housing finance system. Jeff Crump, Kathe Newman, Eric S. Belsky, Phil Ashton, David H. Kaplan, Daniel J. Hammel, and Elvin Wyly summarize many of the findings of these and related articles when they write (2008: 745):

> Low-income and racially marginalized neighborhoods, once redlined and excluded from mainstream credit markets, were at the center of the profitable wave of subprime abuse and equity extraction during the long housing boom, and are now at the center of the long, slowly unfolding catastrophe of the U.S. foreclosure crisis.

Four points from this social science literature provide a basis for the analysis developed below. First, subprime loans were already growing rapidly in the 1990s in minority neighborhoods (US Department of Housing and Urban Development [HUD] 2000). From the start, African Americans and Latinos were about twice as likely to receive subprime home loans as whites (Calvin Bradford 2002). For example, in a study of subprime lending in Baltimore for the period 1998–2002, Elvin K. Wyly, Mona Atia, Holly Foxcroft, Daniel J. Hammel, and Kelly Phillips-Watts (2006) found substantial evidence of racial targeting, even after controlling for a variety of supply and demand factors in the subprime securitization market; further, subprime loans were concentrated in segregated neighborhoods. Second, subprime lending continued to grow in "subprime zip codes" even as income levels there declined in the 2002–05 period (Atif Mian and Amir Sufi 2008).

Third, subprime lending accounted for 43 percent of the increase in black homeownership during the 1990s, and for 33 percent of the growth in ownership within minority neighborhoods (Richard Williams, Reynold Nesiba, and Eileen Diaz McConnell 2005) – a pattern that continued through the 2007 subprime crisis. Vicki Been, Ingrid Ellen, and Josiah Madar (2009) find, for 2006 national data, that African American loan applicants are 2.8 times more likely to get a high-cost loan than is a white applicant in a low-segregation city, but (respectively) 3.5 or 3.4 times more likely in a highly segregated city. Robert B. Avery, Kenneth P. Brevoort, and Glenn

B. Canner (2007) find that most of the disparity in the racial distribution of prime and subprime mortgages can be traced to the higher rate at which African Americans and Latinos obtain mortgages from (unregulated) mortgage brokers, not from (regulated) depository institutions. This is related to the paucity of depository branches in African American and Latino neighborhoods (Gary A. Dymski and Lisa Mohanty 1999). Concentrated subprime lending, in turn, crowds out non-subprime lending and reduces loan product choice for all residents.[5]

Fourth, mortgage payment pressures led to foreclosure problems in minority neighborhoods well before the housing bubble peaked in late 2006. Ellen Schloemer, Wei Li, Keith Ernst, and Kathleen Keest examined six million subprime mortgages made between 1998 and 2004 and find that "despite ... a favorable economic environment during the past several years, the subprime market has experienced high foreclosure rates comparable to the worst foreclosure experience ever in the modern prime market" (2006: 2). The reason is that subprime borrowers disproportionately face repayment problems. These authors also find that in markets with strong housing appreciation, borrowers with repayment problems could refinance under duress; in stagnant markets, they were forced into foreclosure.[6] Of course, refinancing via a new subprime mortgage forestalls, but does not eliminate, household financial pressure. Once these markets flipped from price appreciation to stagnation or decline, foreclosures were certain to grow explosively. In a Massachusetts study, Kristopher Gerardi and Paul Willen find that minority homeownership obtained via subprime mortgages proved "exceptionally unstable in the face of rapid price declines ... subprime lending did not lead to a substantial increase in homeownership by minorities, but instead generated turnover in properties owned by minority residents" (2009: 1). And as Dan Immergluck and Geoff Smith (2006) pointed out, foreclosures have large spillover impacts on housing prices and the social life of surrounding neighborhoods. The spatial concentration and contractual instability of subprime loans was one reason, in turn, that the fallout from the post-2006 housing-price collapse spread unevenly over the urban landscape (Dan Immergluck 2008).

These four findings, taken together, demonstrate the cumulative community consequences of subprime lending processes. At the same time, these findings do not constitute proof of racial targeting, though they are consistent with the existence of such targeting. Emblematic is this summary paragraph from Been, Ellen, and Madar (2009: 20):

> While our results suggest that racial segregation may exacerbate racial disparities in high cost lending, our data cannot reveal why these associations exist. Our findings for New York City, however, are consistent with mechanisms that depend on differences in access to credit markets by neighborhood, such as access to bank branches,

> differences in social networks across neighborhoods, and racially discriminatory geographic targeting by high cost lenders, which would impact residents of all races in these neighborhoods. It appears that residents of neighborhoods with higher shares of black residents are particularly disadvantaged.

This caution about causal links between race and mortgage outcomes pervades the literature. Even the powerful indictment of subprime lending as race and class exploitation by Wyly et al. urges "extreme caution on the crucial question of racial and ethnic discrimination" (2006: 114).

This caution is fed by problems of data availability. Even before subprime lending peaked, Elvin K. Wyly and Steven R. Holloway warned of the "disappearance of race in mortgage lending" (2002: 129) due to nondepository lenders' noncompliance with federal reporting laws. Further, only fragmentary data about subprime mortgages are publicly available; and no publicly collected data on foreclosures exist. Elvin K. Wyly, Mona Atia, Elizabeth Lee, and Pablo Mendez have argued that "nondisclosure is driven primarily by lending-industry practices, with the strongest disparate impacts in African-American suburbs" so that "[p]redatory lending is producing ambivalent spaces of racial-ethnic and gender invisibility" (2007: 2139).

This leads to a fifth finding: efforts to overcome these data limitations by combining public and private data have yielded ambiguous results. Consider two studies on race and subprime pricing. Debbie Gruenstein Bocian, Keith S. Ernst, and Wei Li (2008) found, using 2004 matched Home Mortgage Disclosure Act (HMDA) and proprietary data, that African American and Latino borrowers are more likely to receive higher-priced subprime loans than non-Latino whites. However, Andrew Haughwout, Christopher Mayer, and Joseph Tracy (2009), matching 2005 data for HMDA and a different proprietary dataset, found that African Americans and Latinos received slightly better rates than did other borrowers, controlling for risk. Maya Sen (2011), in turn, using a sampling technique also designed to overcome gaps in HMDA data, found evidence that African American borrowers were offered high-cost loans at a rate exceeding that of identically situated whites.

The sixth and final finding is an observation: remarkably little academic research has focused on the impact of subprime lending on women (John Sarto 2010). The outstanding exception is the study by Allen J. Fishbein and Patrick Woodall (2006), at the height of the housing boom, which concluded that women were being targeted for subprime loans. These authors found for 2005 data that women were more likely than men to receive a subprime or high-cost loan, regardless of income and across ethnicities, and that disparities between men and women worsen as incomes rise. Sen (2011) finds some evidence as well that women were disadvantaged in subprime lending. The reason for this inattention may lie in a result from the dissertation research of Lisa Mohanty (2001) on discrimination in 1990s

HMDA loan data: the gender variable often was statistically insignificant, and changed signs when included separately in estimates of the probability of loan approval; but when gender variable was interacted with applicant race, it became more reliably statistically significant, and took on consistent signs. Results for race and gender tandems in 2005 subprime lending are shown below, with dramatic results.

HOW ECONOMISTS HAVE EXPLAINED RACIAL DIFFERENTIALS IN MORTGAGE MARKETS

The Fair Housing Act of 1968 prohibits discrimination against protected classes (including women and racial and ethnic minorities) by "any person or other entity whose business includes engaging in residential real estate-related transactions," including the "terms or conditions of such a transaction" (42 U.S.C. §3601 et seq.). Three types of discrimination are encompassed: overt discrimination – that is, personal animus against, or avoidance of, members of a protected class; disparate treatment – harsher or more rigorous screening processes in applications for members of a protected class; and disparate impact – procedurally neutral practices that result in statistically significant disadvantage for members of a protected class without being justified by any legitimate business need.[7]

While the law on discrimination is clear, the social science literature, as noted above, is hesitant to interpret empirical evidence of inequality as demonstrating the presence of credit market discrimination. This caution is rooted, at least in part, in the findings of economists' empirical and theoretical work on this topic. Economists' skepticism, in turn, follows from two factors: first, they have largely ignored overt discrimination and disparate impact, and focused on disparate treatment; second, economists' models have a restricted conception of what might constitute rational economic behavior in credit markets.

Gary Becker's (1971) foundational work on discrimination suggests that in competitive markets, market forces will cause racial discrimination to disappear. A discriminatory lender who misclassified loan applicants into, say, "high" and "low" risk categories would create profit-making opportunities for nondiscriminatory lenders. So market forces will eliminate discriminatory firms; thus, laws such as the CRA impose unnecessary costs.

Becker's strong result requires perfect competition and the absence of spillover effects. When these assumptions are violated, the possibility of persistent discrimination emerges even in the absence of racial animus. Economists exploring credit market discrimination have emphasized the implications of asymmetric information or of transaction costs. These deviations from ideal competitive conditions eliminate the self-correcting capacity of market competition. And if some of the factors used in determining applicant creditworthiness are correlated with applicant race or gender, then discrimination becomes rational: lenders can use race or gender (or characteristics correlated with race or gender) to make valid predictions about borrowers' creditworthiness.[8] Charles W. Calomiris, Charles M. Kahn, and Stanley D. Longhofer (1994) have suggested that applicant or neighborhood race may represent an efficient screening tool, when extracting signals of creditworthiness is costly and these signals are linked to applicant race. William C. Hunter and Mary Beth Walker (1996) suggest that lenders may more accurately assess same-race individual applicants due to "cultural affinity."

So, disparate treatment may be present without racial animus: profit-maximizing banks can use race as a form of informational shorthand. Tying discrimination to lenders' need to overcome informational barriers to efficient lending outcomes has the effect of legitimating disparate treatment, and of making it virtually impossible to argue that observed disparate impact is not due to business necessity. What remains as a possible category of unjust discrimination is only racial animus per se.

Since the passage of the Home Mortgage Disclosure Act in 1975, lenders have been required to make an annual public disclosure of data about their residential mortgage loans. Most studies of race and gender impacts in mortgage markets have used HMDA data. Through 1989, loan volumes were reported by census tract, permitting analysts to undertake "redlining" models – that is, disparate-impact investigations of whether loan levels are lower in minority than in nonminority neighborhoods, all else equal.

As of 1990, lenders had to report application level, including applicant income, loan size, gender, and race. These data permitted empirical studies of disparate treatment – whether the probability of home loan approval is affected by applicant race and neighborhood racial composition. These tests were challenged on the basis of missing-variable bias.

Economists at the Federal Reserve Bank of Boston conducted a study that responded to the missing-variable bias critique by estimating a model that made full use of all the information contained in Boston lenders' 1990 mortgage case files (Alicia H. Munnell, Lynn E. Browne, James McEneaney, and Geoffrey M. B. Tootell 1992). They found that *ceteris paribus*, African American applicants had a 40 percent greater probability of loan denial than other applicants. But instead of resolving doubts, this study's conclusions attracted a number of critical responses. Stephen L. Ross and John Yinger (1999) reviewed of this critical literature and re-estimated the data used in the Boston study. They came to two conclusions: first, the large racial gap in loan denial cannot be attributed to misspecification or data problems; second, this study could not conclusively demonstrate the presence or absence of disparate treatment discrimination on the basis of race.

From the perspective of economic theory, any factors that reduce information costs and permit more competition should permit a more efficient sorting of loan applicants into appropriate risk classes. Subprime loans were viewed as innovative loan contracts customized for riskier applicants, which should improve credit allocation and expand access to capital. Ingo Fender and Janet Mitchell argue that structured finance overcomes "adverse selection and segmentation" (2005: 2), while Frank Partnoy and David A. Skeel, Jr., discuss how "financial engineering [can be used] to complete markets" (2007: 11). Borrowers should benefit from more contractual choices and improved risk pricing, as James Barth (2009) discusses.[9]

In sum, this line of argument suggests that when lenders must sort borrowers in imperfect information settings, the use of race and gender may be justified, and may have little to do with racial animus. The sources of some applicants' systematic disadvantage in credit markets are outside the boundaries of the "economic" analysis of credit market outcomes. Once variables correlated with race, gender, and creditworthiness are ruled out of bounds, little – if any – empirical evidence can meet the double discrimination threshold of intent to harm and unfair treatment.

A MESO ANALYSIS OF THE EMERGENCE OF SUBPRIME LENDING AND ITS CONSEQUENCES

Meso analysis "concerns itself with the structures that mediate between individuals and the economy considered as a whole" (Elson 1994: 33). The term did not originate within feminist economics, but has been used widely in this field. As Elson points out, institutions operating in markets are understood as "the outcome of voluntary contracts" (34); the state is "absent from the micro level" (35). In most models developed to date, gender is conceptualized at the micro level, and excluded from the meso and macro levels, since "mediating structures ... cannot be identified as 'male' or 'female"' (36). But then, "If these institutions and instruments operate in ways that are detrimental to women, then this is fundamentally due to the characteristics of individuals at the micro-level, and in particular to prejudice against women" (36). This thinking, according to Elson, leads to policy that solely focuses on addressing inequalities at the micro level.

Elson highlights the importance of undertaking gender analysis at the meso level, so as "to analyze how male bias is constituted at the meso- and macro-levels, at the level of mediating institutions and instruments" (1994: 39). Diane Elson went on to demonstrate this approach, showing how labor markets are gendered institutions, in which "discrimination against women may persist because … it is profitable" (1999: 611).

These insights highlight the level of analysis that is missing in most writing on racial inequality in credit markets. The parallels with Elson's 1999 article are fairly exact. But her conclusion about profitability and discrimination brings us to a paradox that lies at the heart of understanding the links between racial and gender inequality and the subprime lending crisis:

if minority and women applicants, and minority neighborhoods, were as systematically unworthy of housing credit as other areas and applicants, how did they become so systematically included with the advent of the subprime loan?

One possible response is that the housing price bubble made subprime loans a necessity for many prospective borrowers; another is that lenders became more tolerant of risk. But as we show below, subprime lending emerged well before the housing price bubble, and one key to its takeoff was precisely a method for shifting risks off lenders.

A meso analysis can provide a more adequate response by exposing the "mediating institutions and instruments" that created the conditions for subprime lending: how banks accommodated these loans' excessive riskiness and increased their profits by making subprime loans, and why loan applicants agreed to these loans' disadvantageous terms and conditions. We develop our meso analysis in the next section.

From financial exclusion to exploitative inclusion via subprime lending

From the Depression-era reforms until the deregulation acts of the 1980s, the US banking system consisted of segmented markets in which price and geographic market competition was disallowed. Commercial banks rarely made consumer loans. Thrifts collected households' savings deposits and made mortgage loans, which were often underwritten by the Federal Housing Administration (FHA). Banks ignored and underserved lower-income and minority areas. FHA underwriting criteria explicitly discriminated against minority areas until the 1960s (Jesus Hernandez 2009).

Once pressure from the civil rights movement opened the FHA program to minority areas, the character of FHA loan making was transformed. Conventional loans financed most home purchases; FHA loans, which were virtually riskless for the lender due to federal underwriting, were increasingly used to finance homes for first-time buyers and for buyers in minority areas.[10] Banks maintained fewer branches in minority neighborhoods than elsewhere (Gary A. Dymski and John M. Veitch 1996), forcing households to disproportionately use high-cost alternatives. Inner-city areas were so disadvantaged in access to banking services that a national community reinvestment movement succeeded in pressuring Congress to pass the HMDA and the CRA in 1975 and 1977, respectively.

High interest rates and recession in the late 1970s and early 1980s generated institutional changes in banking: large banks suffered large loan and customer losses; thrifts experienced insolvency problems, compromising the flow of mortgage credit. Deregulation beginning in the early 1980s and weaker regulatory oversight permitted surviving banks and thrifts to launch a merger wave and broaden their activities. Some banks reached regional – and eventually national – scale. Large banks competed to offer multiple financial products (credit cards, interest-plus deposit accounts, and so on) to prosperous, asset-rich customers. These customers, for whose assets banks (and nonbank funds) were competing, often paid zero fees to maintain accounts; other customers were subjected to minimum balance requirements and rising fees. These developments spurred investments in centralized databases and data-processing facilities, which in turn shifted the informational basis of loan making from personal knowledge to standardized assessments.

The home mortgage market was reshaped. Home finance was provided directly through securities markets, not by savings made at thrifts. The Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation underwrote "plain vanilla" mortgages satisfying conservative loan–income ratios and downpayment criteria (30 and 20 percent, respectively), bundled them into mortgage-backed securities (MBS), and sold them into the markets. Several private firms provided these services for "jumbo" loans exceeding FNMA's maximum sales price. Banks and nonbank mortgage companies rushed into the vacuum left by thrifts' decline. The MBS market became the biggest securities market in the world by the end of the 1980s. Other forms of loan securitization also grew explosively, as loans in more and more categories and risk classifications were offloaded by their bank or nonbank originators.

These shifts altered the shape of financial services in minority and lower-income areas. Bank branch closures occurred disproportionately in minority areas. Financial services in these neighborhoods, which were experiencing an influx of ethnic-minority immigrants, were provided through products offered by "fringe banks" (Michael S. Barr 2004). Check-cashing stores and finance companies franchised and expanded their credit services; payday and tax refund anticipation loans became widespread.

Large banks got into these explosively growing markets by buying check-cashing and finance companies, and by providing funding for "fringe bank" lenders. These hybrid credit-delivery chains linked Wall Street with loan instruments whose high interest rates and fees, onerous nonpayment penalties, and short maturities made them "predatory": both substantially more expensive and more likely to result in default than primary market loans. These were targeted to borrowers desperate for credit, often female-headed households, and/or households with members who were unemployed, imprisoned, or lacking medical insurance.

Subprime mortgage loans emerged as the most prominent form of predatory lending in the mid-1990s. Initially, they were marketed in minority neighborhoods. In some cases, these loans were sold as second mortgages to cash-poor, house-rich households. In other cases, they were provided to minority and female applicants for home purchase loans. In the US, subprime loans grew by 900 percent between 1993 and 1999 (HUD 2000), primarily in minority neighborhoods. A national study of 2000 HMDA data by Bradford (2002) found that African Americans were twice as likely as whites to receive subprime loans, and Latinos slightly less than twice as likely.

Predatory lending was facilitated by the growth of outlets for high-risk credit, such as hedge and private equity funds. The structured investment vehicle (SIV), invented in 1988 for Citibank, permitted banks to fund higher-yield paper off of balance sheets, using commercial paper (Carrick Mollenkamp, Deborah Solomon, Robin Sidel, and Valerie Bauerlein 2007). Credit-rating agencies' willingness to provide reassuring ratings for securities incorporating predatory loans mitigated concerns about their riskiness. Further, AIG and other Wall Street firms issued credit default swaps on securities containing subprime loans, insuring these securities' holders (Andrew Ross Sorkin 2009).

The Gramm–Leach–Bliley Act of 1998, which removed prohibitions against combinations of banks, securities companies, and insurers, further expanded the demand for subprime securities, as did the Commodity Futures Modernization Act (CFMA) of 2000, which clarified that over-the-counter derivatives transactions would be regulated only under weak "safety and soundness" guidelines. The Federal Reserve took a hands-off approach to predatory lending, waiting more than seven years before publishing regulations implementing the 1994 Homeownership Equity Protection Act (Alan Greenspan 2010).

In effect, borrowers who had previously been denied access to credit became central to Wall Street's cash-flow bundling and risk redistribution apparatus via the routine extraction of excess interest and fees. This institutional plumbing was also used to offload many other kinds of debt, including credit card debt and loans for automobiles, education, and manufactured housing. By the end of the 1990s, nearly $1 trillion of asset-backed securities were outstanding (Financial Crisis Investigation Commission [FCIC] 2011).

When US housing prices in some markets began rising to unprecedented price-to-income ratios in the early 2000s, the machinery for originating and placing a large volume of high-risk loans was in place. The notion of "high risk" was reframed. Initially, subprime lenders used the collateral in borrowers' homes to offset their low or unstable income levels. As housing prices boomed in many areas, "high risk" came to mean loans for which unsustainable loan-to-income levels were made in anticipation of continued housing-price appreciation. At its peak in 2006, subprime lending accounted for 23.5 percent of the US housing market, becoming a "new normal" (FCIC 2011: 70).

Female-headed households, like minority households, were disproportionately targeted for subprime loans. A boom in homeownership by women coincided with the rise of subprime lending and with the early-2000s housing bubble. According to the National Association of Realtors, the percentage of homebuyers who are single women doubled between 1981 and 2005, from 11 to 21 percent – even while the percentage of single men buying homes remained stable at 9 percent (Noelle Knox 2006). It is not surprising, then, to find that one-quarter of female-headed households spend more than half their income on housing, versus one-tenth of households headed by single fathers (Joint Center for Housing Studies of Harvard University 2011).

Re-envisioning the subprime crisis

So the subprime crisis was not just a breakdown of market mechanisms or a shock that was experienced by all homeowners or market participants: it represented the final stage in a step-by-step coevolution of banking strategies and communities, one shaped by and reinforcing patterns of racial and gender inequality.

That there was no simple shift from exclusion to inclusion in housing credit is shown by Figure 1, which displays data for conventional home purchase loan applications for the years 1990–2002 and 2005–09.[11] In this figure, the ratio of the African American versus white denial rate was over 2.0 in the early 1990s, and actually rose above 2.5 in the mid-2000s. Denial-rate ratio data comparing Hispanic and white applicants show an identical pattern from a slightly lower base (1.7). One notable difference between the early-1990s and mid-2000s data is the growing share of minority applicants. Figure 1 also illustrates that in 2005–07, minorities accounted for less than one-third of all conventional home purchase applications, but about half of all denials.

The emergence of subprime lending did not involve lenders becoming more tolerant of risk. As noted above, lenders had since the 1960s been making FHA-underwritten home loans in disproportionate numbers in minority and lower-income areas. Further, subprime lending grew only when means were found to shift risk off banks' balance sheets without relying on government underwriting. In the first phase of subprime lending, subprime mortgage loans were often well collateralized – they were frequently second mortgages that turned home equity into cash. In the second (post-2001) phase of subprime lending, third-party underwriters willing to ride the housing bubble emerged. But even so, rejection rates for subprime loans were high. Hernandez (2009) shows this in a case study of Sacramento; and in a nationwide analysis of the densities of subprime lending, Wyly et al. also find high subprime rejection rates; as these authors put it, "unequal subprime segmentation goes hand in hand with rejection and exclusion" (2008: 18).

Indeed, for many borrowers, subprime loans were not means for acquiring homes, but instead means for generating cash flows to make ends meet. Schloemer et al. (2006) found that distress refinancing –

not new home acquisition – provided the motivation for more than half the subprime loans made in the 2000s. In communities where housing prices were not appreciating, foreclosures became an epidemic well before subprime lending collapsed in September 2007. Figure 2 uses median data from the Survey of Consumer Finances to illustrate the weak or negligible

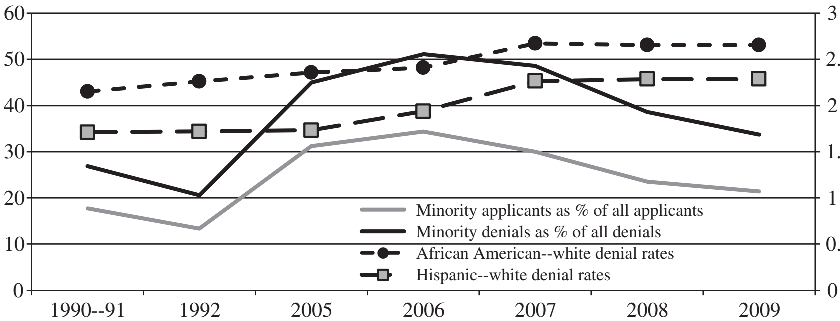

Figure 1 Racial and ethnic minority loan application and denial figures and rates, 2005–09 conventional home-purchase, owner-occupied loans
Note: Joint mortgage applications from applicants of different races are excluded, as are any applications from applicants reporting more than one race or with missing information about race or ethnicity.
Sources: Robert B. Avery, Patricia E. Beeson, and Mark S. Sniderman (1994); Glenn B. Canner and Wayne Passmore (1994); Robert B. Avery, Kenneth P. Brevoort, and Glenn B. Canner (2006, 2007); Robert B. Avery, Neil Bhutta, Kenneth P. Brevoort, and Glenn B. Canner (2010); Robert B. Avery, Neil Bhutta, Kenneth P. Brevoort, Glenn B. Canner, and Christa N. Gibbs (2010).

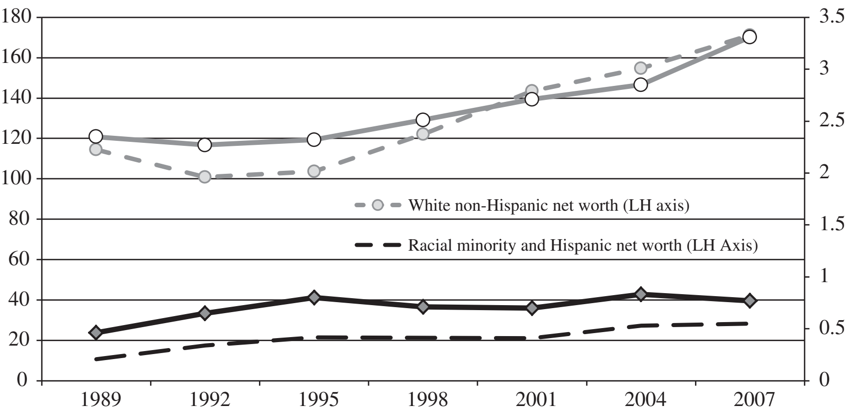

Figure 2 Net worth and net worth-to-income, median values for minority and non-minority households, 1989–2007 (thousands of 2007 US dollars)
Sources: Board of Governors of the Federal Reserve System (1989–2007).

impact of the subprime lending period on minority wealth accumulation. While the levels of net worth and net worth-to-income levels for white (non-Hispanic) households climbed steadily from 1995 to 2007, those for minority households remained essentially flat. No cumulative aggregate wealth "catch-up" effect is evident, even before the housing market crash took full effect.

In sum, subprime lending was never the rosy alternative path to homeownership that Austan Goolsbee (2007) made it out to be; it was embedded in the evolving race- and gender-differentiated circumstances of cities and towns with stagnant incomes and rising housing prices.

SUBPRIME LENDING AND STRUCTURES OF MARKET POWER

This meso analysis makes visible the interplay between socially excluded fragments of society and the market institutions they depend on for credit and financial services. A further paradox remains. The spread of subprime lending from minority communities to the broader housing market involved an asset boom that saw a great expansion in the number of mortgage brokers. How is it, then, that the disproportionate disadvantage of minority borrowers remained in place even in this boom period? Why weren't more borrowers with higher-rate, higher-fee, shorter-term mortgage packages shifted to lower-rate, lower-fee, longer-term packages?

The answer lies in the intersections of subprime lending with structures of social and market power. To borrow Elson's point: it was profitable. To see how and why requires an exploration of the archaeology of racial power. One set of agents has power over another when the former can restrict the choices, constrain the freedoms, and/or impose additional costs on, the latter. In economic settings, power arises when an agent or a cartel (that is, a self-policing group of buyers or sellers) on one side of a market can extract rent from those on the other side of the market. The former group imposes losses or higher costs on the latter group. Economists have largely set aside this concern in subprime loan markets: price or rationing differences can be interpreted as arising from the presence of different risk classes among borrowers, not from the exercise of market power.

The points of entry for the subprime crisis go back to the migrations of diverse populations to US cities. These migrations involved competitions determining who had access to what resources and social positions, on what terms, and who did not. These competitions were resolved in part through race-making (Herbert Blumer 1958; Lawrence D. Bobo 1999). Markets were not neutral in these processes; they were tools for controlling access to scarce resources (William Darity Jr. 1989; Rhonda Williams 1991). In many cities, public–private partnerships organized at the neighborhood level assigned access to mortgage credit. These partnerships revolved around organized multiscaled networks of real estate professionals intent on establishing and protecting market position by collaborating with public institutional rulemakers.

Race and gender were two means of drawing lines in clear and decisive ways: gendered racial and ethnic divides that had emerged in long histories of enslavement and dispossession specified whose rights to liberty, life, and property took precedence over those of others. These divides led to restrictive racial property covenants and government redlining guidelines that both drew on and reinforced popular prejudices. Subordinate groups were denied access to homeownership and forced into segregated spaces with systematically lower levels of wealth ownership. In these processes, social groups operated as cartels to gain monopoly control over access to markets (Robert Cooter 1994). Daria Roithmayr (2007) has pointed out that housing market monopolization of this kind, organized by "racial cartels," has been a common feature in many cities' development; borrower race is used as a fundamental category for assigning market position.

After civil rights laws were passed in the 1960s and 1970s, explicit racial barriers to neighborhood entry broke down. Nonetheless, racial biases continue to permeate all aspects of the housing and housing finance market processes, even if some participants therein were not aware of it (Margery Austin Turner, Stephen L. Ross, George C. Galster, and John Yinger 2002) As Blumer (1958) was among the first to point out, disparate racial (and we add, gender) treatment leads to vulnerability via segregation, which generates disparate impacts via weakened market position. Those in this situation can enter the market place only under disadvantageous terms, defined as excessively risky – which is where subprime and other predatory forms of lending came in. Michael A. Omi puts it as follows: "the idea of 'race' and its persistence as a social category is only given meaning in a social order structured by forms of inequality – economic, political, and cultural – that are organized, to a significant degree, along racial lines" (2001: 254).

In effect, disparate treatment in one period leads to disparate outcomes in the next. As procedural unfairness rigidifies into structural disadvantage, what once required a cartel to coordinate explicitly is transformed into a perceived natural order of risk and return possibilities.

Power relations in subprime lending

A survey of 2005 and 2006 experience found that 55 and 61 percent of those acquiring subprime mortgages, respectively, had credit scores high enough to obtain conventional loans (Rick Brooks and Ruth Simon 2007). Why didn't they? Another result in Brooks and Simon's investigation provided the answer: mortgage brokers selling these claims earned fees far higher than conventional mortgages would have netted. "Subprime" loan pushing resulted from incentive systems that paid brokers higher fees for subprime than for prime loans (Michael W. Hudson 2010).

To see how this worked, note that the "originate and distribute" loan model creates a new role for banks within the architecture of lending and borrowing. The loan applicant interfaces with mortgage brokers who arrange loans with lenders that have client relationships with banks; and the banks in turn bundle subprime loans (usually intermixed with other loans) into collateralized debt obligations (CDOs) that are placed with investors. The bank is no longer the lender, but instead is the enabler in this chain. It occupies the fulcrum position in a lending–servicing–investment complex. And at the hub of this complex is a small set of megabanks with privileged access to global investors and to the underwriters and derivatives markets that permit risk sharing or offloading.[12]

The top twenty-five subprime lenders accounted for $987 billion in new subprime loans in 2005–07; as of December 2006, just under half of this ($470 billion) was financed by one of the fourteen largest bank holding companies (Center for Public Integrity 2009). Based on data reported by the Office of the Comptroller of the Currency (2010), the latter figure represents one-third to one-sixth of all subprime lending in these years. In short, the many thousands of loan brokers working with clients were funneled, directly or indirectly, into a relatively small number of financial channels. This funneling is one factor explaining the largest banks' near-monopoly position in derivatives-linked hedging markets and in overnight liquidity markets, and in turn the largest banks' increasingly dominant share of all US bank assets (Gary A. Dymski 2011).

This financing funnel helps explain why more competition on the "front end" did not reduce subprime participation on the "back end." In the placement step at the end of the process, where the funnel is tightest, higher-yield paper is preferred. Investors demanding this paper generally want to meet or beat the market rate of return; and until September 2007, credit–default swaps were available to neutralize investors' downside risk. Banks earned higher fees for placing higher-yield paper; and they in turn paid mortgage companies more for it. The brokers working for mortgage companies (and interacting directly with loan applicants), in turn, received higher fees, the more subprime features that were incorporated into the loan contract.[13] The fact that so many brokers were seeking to move subprime paper increased profits for the centralized lender-bundlers: these brokers, who often had "cultural affinity" with borrowers, circulated independently in historically redlined neighborhoods, reducing fixed-cost investments for lender-bundlers trying to reach loan applicants there.

Figures 3 and 4 provide an indication of how cumulative racial and gender disadvantage translates into social power in the mortgage market. These figures array data for home purchase loans in 2005, a year that represents the peak of subprime lending.[14] Figure 3 distributes home purchase loans

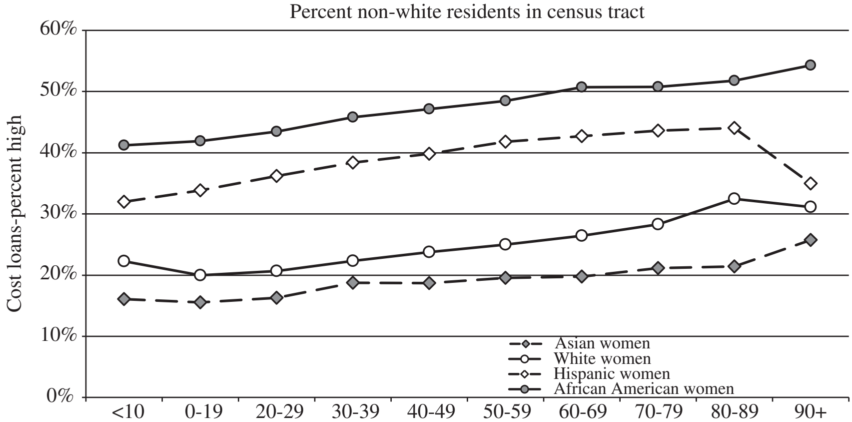

Figure 3 Percentage of first mortgages that are high cost for women by percentage non-white residents in census tract of loan origination
Source: FFIEC (2005).

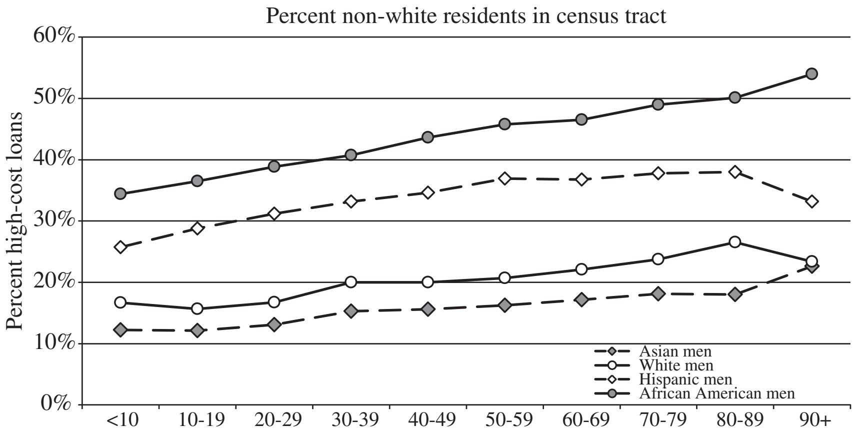

Figure 4 Percentage of first mortgages that are high-cost for men by percent non-white residents in census tract of loan origination
Source: FFIEC (2005).

obtained by women in different racial and ethnic categories across census tracts on the basis of these tracts' percentage of minority residents in the 2000 decennial census. Figure 3 shows that in every racial and ethnic minority residential concentration level, the ordering of borrowers in the subprime loan percentage is the same: African Americans, followed by Latinos, whites, and Asians. The likelihood that a woman in any category will have a subprime loan increases monotonically as the concentration of racial and ethnic minorities rises, almost without exception. However, this increase is not as dramatic as would be anticipated if subprime lending was a simple manifestation of residential racial segregation. To the contrary, the likelihood that an African American woman will not receive a subprime loan falls by only 24 percent if she shifts from the most heavily minority decile to the least.

Figure 4 then presents the parallel data for men. Figure 4 shows the same trends as Figure 3, with two notable differences: the percentage of subprime loans are lower at every decile and for every racial and ethnic category than for women; the differential in subprime loan percentages between the lowest- and highest-minority residential deciles is less than for women, but still flatter than would be expected if spatial-racial segmentation was the sole determinant of racial and ethnic disadvantage in home loan markets. There is clear evidence here that women are systematically more disadvantaged than men across racial and ethnic lines and degrees of racial and ethnic segregation.

Another telling indicator of gendered racial disadvantage involves market shares. African American women, on average, constituted 49.4 percent of all African American borrowers among recipients of high-cost home purchase loans (and 47.3 percent overall); and Asian American women constituted 42 percent of all high-cost home purchase loans made in 2005 (and 34 percent overall). By contrast, white non-Latino women constituted 33.6 percent of all home purchase high-cost loans in 2005 (versus 28.3 percent overall), and Latino women constituted 34.3 percent of high-cost loans for home purchase (versus 31 percent of all such loans). For every subgroup, the percentage of women increased as the percentage of non-white residents increased.

Overall, the patterns of differential outcomes by racial quintile in Figures 3 and 4 suggest the dynamic identified by Marylee C. Taylor (1998), Darity (1989), and Williams (1991): increasing concentrations of minorities constitute more of a "threat" to white residents in any geographic area, and thus generate a larger threat response – in this case, a higher percentage of subprime loans.

But this evidence also suggests that subprime lending disparities cannot be reduced to racial segregation: for in census tracts populated by less than 10 percent non-white residents, only 17 percent of white men get high-cost loans but over 40 percent of black women do. Further, only 23 percent of white men in census tracts with more than 80 percent non-whites have high-cost loans – an amount 15 percentage points lower than for African American women in tracts with less than 10 percent non-white residents. It is clear that the pattern of subprime lending responds as well to applicant ethnicity.[15]

In sum, monopoly-like control was exercised by a small number of megabanks, on behalf of return-seeking investors, through their control over the securitization choke point in the mortgage process. Banks' shift from lender to enabler provided a new tool for reaching target populations that their upscale retail banking strategies had left behind, without taking on the risks that stemmed both from these populations' own fragile economic circumstances and from the onerous terms and conditions to which these populations were disproportionately exposed. The fact that well over half of subprime loans were made to women (Avis Jones-DeWeever 2009), who then had to absorb the financial fragility these loans imparted as well as handle their above-the-mean caregiving responsibilities on the basis of their below-the-mean wages, did not enter into banks' profit-maximization calculations. The dire implications of this lending scenario for the foreclosure crisis, while not the topic of this paper, are clear.

SUMMARY

Despite the extensive empirical evidence that subprime lending is linked to residential segregation and to applicant race and gender, economists' explanations of the subprime crisis have overlooked these factors. Indeed, the growing empirical invisibility of race and gender in credit market data, noted above, reinforces the analytical invisibility of race and gender in economists' accounts of subprime lending; and both trends reinforce their invisibility in policy debate. The spatial "bunching" of subprime loans in high-minority neighborhoods, which constitutes *ipso facto* proof that market mechanisms malfunctioned in some social scientists' view, proves the opposite point for most economists.[16]

We challenged this view by focusing on two questions: why were those who had previously been excluded from mortgage markets instead superincluded in subprime lending? And why didn't the flood of mortgage supply in the 2000s housing boom reduce the proportion of minority borrowers burdened with costly and unaffordable mortgages?

Our meso analysis has shown that the shift of minorities and women from disproportionately excluded to superincluded in mortgage markets occurred because of coevolving institutional changes in regulatory policy, banking strategy, minority communities, and financial markets. The explanation for why competition did not reduce minorities' proportions of exploitative loans is rooted in US cities' racial segregation, which is the legacy of a race-making process by a racial cartel in urban housing markets. Lenders' structural market power was (and is) systematically larger – and provided them with more opportunities to leverage short-term gains – in communities of color.

The gender dimensions of the subprime lending crisis amplify its racial dimensions. Women were targeted for subprime lending; and women were more likely than men to receive subprime loans when buying homes – across racial and ethnic groups, and independent of the degree of residential racial segregation. Consequently, the subprime crisis has disproportionately affected female-headed households.

The longer-term consequences of this crisis are dire. Women, like minorities, have less secure jobs, fewer assets, and more insecure prospects; their greater collective riskiness invites the creation of new exploitative lending instruments as means of megabank surplus extraction. As Brigitte Young and Helene Schuberth (2010) point out, one distinctive feature of current structures of bank management is the dearth of women in positions of power. Profit-maximizing megabanks whose cartel-like behavior exploited and worsened gendered racial inequality might move next to exploit the profit-taking potential in a gender cartel.

Gary Dymski
Leeds University Business School, University of Leeds
Leeds LS2 9EJ, United Kingdom; and
Department of Economics, University of California, Riverside
Riverside, CA 92521-0427, United States
e-mail: g.dymski@leeds.ac.uk

Jesus Hernandez
Department of Sociology, University of California, Davis
Davis, CA, United States
e-mail: jchernandez@ucdavis.edu

Lisa Mohanty
Department of Economics, Trident University International
Irvine, CA, United States
e-mail: lisa_mohanty@yahoo.com

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NOTES

[1] Only two of these references mention racial or gender discrimination per se; and these papers caution that definitive evidence of this sort of discrimination has not been shown.

[2] Further, the terms "subprime" and "crisis" appeared jointly in 272 NBER working papers; only ten of these (3.7 percent) also used the word "discrimination" at least once. The terms "foreclosure" and "crisis" appeared jointly in 103 papers, with only seven (6.8 percent) also using the word "discrimination" at least once.

[3] This argument has been forcefully debunked – see, for example, Elizabeth Laderman and Carolina Reid (2008) – and is not discussed further here. Nonetheless, Levine (2010) makes an argument about the influence of the CRA that is very similar to Wallison's (2009).

[4] The term "segregation" is used here to denote geographic areas in which a disproportionate percentage of residents are racial minorities.

[5] California Reinvestment Coalition [CRC], Community Reinvestment Association of North Carolina, Empire Justice Center, Massachusetts Affordable Housing Alliance, Neighborhood Economic Development Advocacy Project, Ohio Fair Lending Coalition, and Woodstock Institute (2010).

[6] For 1998–2002 loans, these authors found that a 1 percent decrease in housing price appreciation was associated with a 7 percent increase in foreclosures and a 3 percent decrease in distressed prepaid loans.

[7] For further elaboration on the legal context of discrimination law, and for summaries of empirical research on credit market and housing market discrimination, see Gary A. Dymski (2006) and Devah Pager and Hana Shepherd (2008).

[8] Joseph E. Stiglitz and Andrew Weiss (1981) show how banks might rationally redline minority neighborhoods if race is correlated with repayment risk.

[9] Goolsbee (2007) describes the positive social and economic impacts of subprime lending.

[10] Carolyn B. Aldana and Gary A. Dymski (2004) illustrate these patterns for Los Angeles County, California, in the 1990s.

[11] HMDA data are used. Figure 1 presents an interrupted time-series because HMDA data are not available as continuous time-series. Raw HMDA data require "scrubbing" before they can be reliably reported, and different analysts use different conventions when scrubbing. Figure 1 uses exclusively data reported in Glenn B. Canner and Wayne Passmore (1994), Robert B. Avery, Kenneth P. Brevoort, and Glenn B. Canner (2006, 2008), and Robert B. Avery, Neil Bhutta, Kenneth P. Brevoort, and Glenn B. Canner (2010).

[12] This structural situation virtually invites fraud; and according to the FCIC's (2010) thorough report, fraud permeated many aspects of the subprime lending and securitization process.

[13] Several rate sheets used by large California mortgage companies in 2006 show the incentives at work. For example, raising the initial start rate by 0.5 percent would result in a 1 percent "rebate" to the loan broker – on a $300,000 loan, this would work out to a bonus of $3,000.

[14] Avis Jones-DeWeever (2009) presents race and gender disparities for 2007 subprime loan ratios very similar to those shown here for 2005.

[15] Note that applicants' average income levels are relatively flat by race and ethnicity across racial and ethnic residential concentration categories. That is, statistics shown in Figures 3 and 4 are not proxying for income differentials.

[16] This near-unanimity of view may be changing. A recent Federal Reserve Bank of St. Louis working paper concludes that "despite decades of policies to eliminate racial discrimination and redlining, minorities are paying more for their loans and borrowers in historically credit-disadvantaged neighborhoods still do not have equal access to credit markets" (Andra C. Ghent, Rubén Hernández-Murillo, and Michael T. Owyang 2011: 32).

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NOTES ON CONTRIBUTORS

Gary Dymski is Chair in Applied Economics at the Leeds University Business School, University of Leeds, and is on leave as Professor of Economics at the University of California, Riverside. He holds a doctorate in economics from the University of Massachusetts, Amherst. His research encompasses banking and financial crisis; urban development; racial, ethnic, and gender inequality; housing finance; financial regulation; and economic policy.

Jesus Hernandez recently received his doctorate in sociology from the University of California, Davis, where he is now Lecturer. His research focuses on how institutional structures and market interventions articulate the nexus between race and economy and highlights the importance of equitable urban planning, housing finance, and public policy in building effective community-based economic development strategies.

Lisa Mohanty is Interim Program Director of General Education at Trident University International. She received her PhD in Economics from the University of California, Riverside. Her current research focuses on demographic economics with an emphasis on issues of race, gender, and marriage.