American Housing Dilemmas: Gender, Race, and the Challenge of Statistical Citizenship

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Abstract: Since the late 1960s, interdisciplinary academic research, militant community activism, and alternating factions of Federal public policy have fought the enduring legacy and current complexity of racial discrimination in U.S. housing markets. In recent years, however, the restructuring of American social policy has more tightly woven gender inequalities into racial divisions, exposing weaknesses in a policy apparatus that ignores feminist thought and activism. In this paper, we examine the interdependency of gender and race in a new dilemma of U.S. housing finance: the rising share of home mortgage disclosure records with missing information on applicant race and gender. Deploying Hannah's (2001) theory of statistical citizenship and Massey and Meegan's (1986) perspectives on the inseparability of politics and method, we analyze how contested sites of individual agency and identity -- and the prospects for collective activism -- are subverted by the restructuring of the mortgage lending industry. Econometric analysis of home loan applications filed in New York City between 1998 and 2001 reveals that institutional and regulatory regimes -- not the characteristics of individual owners and buyers -are responsible for the rise of non-disclosure. Powerful forces threaten the statistical citizenship of (inter alia) low-income elderly African American widows, emphasizing the need for scholarship and organizing to mobilize grassroots social theory, rigorous strategic positivism, and proactive policy relevance.

Key words: gender; race; housing discrimination; classification; policy.

Beatrice

Beatrice is an African American woman in her seventies who has lived for almost fifty years in the same house in a predominantly Black neighborhood in Newark, New Jersey. One day in 1995, after receiving yet another one of those targeted telephone solicitations that have become a fixture of American marketing, Beatrice and her son decided to enter into a contract for exterior home repairs. Beatrice says that the agent who called her, Gary, told her "not to worry, he would get me financing" for the costs of the repairs, and indeed over the next weeks and months he did just that. Gary sent a limousine to take Beatrice and her son to the offices of East Coast Mortgage, a local storefront lender, and he did much of the leg-work of obtaining income documentation and other details required to process the loan application. After a few interior repairs were added to the contract, and after several months of interim financing arranged by Gary, the final closing documents were signed in late April, 1996. The loan terms specified \$46,500 at an annual interest rate of 11.65 percent, adjustable after six months, and charges of four discount points; at the time, the average initial rate for one-year adjustables was 5.73 percent, and the average points on one-year adjustables was 1.4. The loan was a "balloon" type, requiring monthly installments for fifteen years and then a final payment of \$41,603; Beatrice was understandably confused by the avalanche of obtuse financial documents and legal disclosures, but at closing she asked the attorney for East Coast Mortgage if everything had to be paid in fifteen years, and he told her not to worry about it. Beatrice signed.

Within days, East Coast Mortgage assigned the loan to Associates Home Equity Services, a national firm with a reputation for abusive and deceptive business practices. East Coast Mortgage, playing the role of broker, had received \$2,325 from Associates for securing the loan; in a common industry practice known as a yield spread premium, Associates tied its brokers' payments to interest rates, paying proportionately more for loans with higher rates. In any event, Beatrice and her son were horrified at the "unconscionably poor" workmanship of the home repairs arranged by Gary, and they were also shocked to learn the precise loan terms and

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¹ Discount points are a standard mechanism used by lenders to obtain up-front fees, often in exchange for a more competitive long-term interest rate offered to the borrower. Each "point" is one percent of the loan amount, and the charge is typically deducted from the loan proceeds (for example, one point on a \$100,000 loan is obtained by giving a borrower \$99,000 after the applicant signs documents specifying repayment of \$100,000). Discount points are generally regarded as an innocuous component of the mortgage transaction in middle- and higher-income submarkets, but the approach is vulnerable to abuse in low-income and minority markets.

requirements when they re-read the numerous and confusing loan documents. Eventually they stopped making payments, and Associates filed for foreclosure in May of 1998. Beatrice and her son filed a counter-claim against Associates, and a third-party claim against Gary and East Coast Mortgage. Beatrice and her attorneys claimed violations of a variety of laws, including the Consumer Fraud Act and the Law Against Discrimination (New Jersey statutes), as well as the Fair Housing Act, the Civil Rights Act, and the Truth In Lending Act (U.S. Federal statutes). The trial court granted summary judgment dismissing all of Beatrice's claims and entering a judgment of foreclosure in favor of Associates; but on appeal the Appellate Division of the Superior Court of New Jersey reversed most (but not all) of this decision, allowing the plaintiffs to proceed on discovery on the claim of predatory lending activities and on claims of unconscionable business practices by the home repair contractor and East Coast Mortgage. This case is believed to be the first appellate court decision recognizing that predatory lending practices can violate federal and state civil rights laws. The court found that a civil rights claim may be established by demonstrating "unfair and predatory" practices and that individuals were targeted on the basis of race or there was a disparate racial impact.²

Beatrice endures an ambiguous and difficult subject position. Her situation exemplifies the contemporary circumstances of neighborhoods shaped by broad fashions of policy, theory, and ideology. In the deregulated, post-civil rights world of the last decade, market forces were assumed to be hard at work rooting out irrational bigotry and inefficient, unpriced risks; economic growth, work, and personal responsibility were supposed to expand access to the familiar American Dream of homeownership and some measure of equity, in all senses of the word. Unfortunately, Beatrice has a lot of company. The kinds of problems she faces have grown more widespread in recent years, even as it has become much more difficult to document, analyze, and challenge such practices. Due to hidden details of federal bank reporting laws and sweeping changes in American housing finance, a rising share of mortgage disclosure records include no information on applicant gender or race. Far more than a simple problem of missing

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² This account is based on Lustberg and Kaufman (2001), Superior Court of New Jersey (2001), and Zimmerman (2001). The primary author conducted an analysis of Home Mortgage Disclosure Act (HMDA) data for New Jersey and Essex County, and submitted a Certification on racially segmented lending patterns in support of the *amicus curiae* prepared by Lustberg and Kaufman (2001) and cited by the Superior Court. Zimmerman (2001) summarized the Appellate Division's reasoning on the issues of racial targeting and disparate impact, and observed, "This appears to be the first time an appellate court anywhere in the country has adopted these standards" (p. 2).

data, the growth of non-reporting exposes serious methodological dilemmas for the measurement of urban credit flows, regulatory scrutiny of geographic and racial inequalities, and strategic mobilization for community reinvestment. In this paper, we examine the politics and method (Massey and Meegan, 1986) of the intersection of gender and race in urban mortgage markets: in terms of public policy, regulation, and scholarship, hundreds of thousands of low-income women of color are being rendered invisible.

The rest of the paper is organized as follows. First, we describe the problem of non-disclosure, its relation to federal regulations, and the methodological paradox it highlights in the context of public policy, urban research, and community organizing since the 1970s. In the next section we draw on the work of Hannah (2001) and others to conceptualize the relations between gender and statistical citizenship, and to propose two alternative hypotheses for the recent growth in non-disclosure. Then we present an empirical analysis of non-disclosure in New York City. Simple tabulations and maps reveal that the disappearance of gender and race is worst in those places where accurate information is most important. Econometric methods adapted from the urban economics literatures indicate that non-disclosure is more a function of lending institution and regulatory conditions than of individual homeowner and homebuyer characteristics. The evidence suggests that the erosion of statistical citizenship in urban neighborhoods results from lending industry restructuring and the marketing tactics of a new breed of high-risk institutions. In the concluding section we examine the implications of these trends and the need to mobilize for a more balanced informational burden of proof in urban housing research and regulation.

The Disappearance of Gender and Race

In the United States, anyone who wants to borrow money for a house confronts a blizzard of paperwork and documentation. Along with the many requirements for detailed information on income, employment, debts, and property data is an optional item that is easy to miss: at the bottom of the Uniform Residential Loan Application is a request for "Information for Government Monitoring Purposes." (Figure 1). With only a few exceptions, lenders are legally required to present this request (or a suitable facsimile) to anyone who files an application for home purchase, renovation, or refinance credit backed by a residential dwelling. This information, along with a selection of other data on the applicant and the loan (income, loan

amount, type of loan, the lender's decision) are reported annually to the federal government and distributed publicly (Federal Financial Institutions Examination Council, annual).

INFORMATION FOR GOVERNMENT MONITORING PURPOSES The following information is requested by the federal government for certain types of loans related to a dwelling in order to monitor the lender's compliance with equal credit opportunity, fair housing, and home mortgage disclosure laws. You are not required to furnish this information, but are encouraged to do so. The law provides that a lender may not discriminate on the basis of this information, or on whether you choose to furnish it. However, if you choose not to furnish the information and you have made this application in person, under federal regulations the lender is required to note race or national origin and sex on the basis of visual observation or surname. If you do not wish to furnish the information, please check below. APPLICANT: CO-APPLICANT: I do not wish to furnish this information. I do not wish to furnish this information. Race or National Origin: Race or National Origin: American Indian, Alaskan Native American Indian, Alaskan Native Asian, Pacific Islander Asian, Pacific Islander Black Black Hispanic Hispanic White White Other (specify)_ Sex Sex Female Female Male Male

Figure 1. Sample Data Collection form for Gender and Race/Ethnicity Information. *Source:* Federal Reserve Board (2000).

From a methodological and analytical standpoint, these data are extremely valuable: this is not a sample of the sort provided by the Census, the American Housing Survey, or the Survey of Consumer Finances. It is a complete enumeration of all records submitted in accordance with legal requirements. The relevant reporting laws do not cover all institutions, and there are instances where covered lenders fail to report. But the data still constitute a population rather than a sample: any records that are not included in these files are missing for very specific regulatory reasons (or because of the malfeasance or incompetence of lenders) and have nothing to do with respondent bias or sampling error.

The applicant is asked to identify his or her gender and "race or national origin," and these questions are also asked of (one) co-applicant if the file is a joint request (Figure 1). The form

outlines the rationale for the request -- "to monitor the lender's compliance with equal credit opportunity, fair housing, and home mortgage disclosure laws" -- but it is also clear that the information is optional. If the applicant chooses not to furnish the information, what happens next depends on how the loan application is filed. If the application is taken by fax, mail, or over the Internet, the lender's annual disclosure simply reports "information not provided" for this application. If the borrower is meeting with a loan officer face to face (or through a video banking system) and declines, then the banker is told to "note this fact on the form and note the data, to the extent possible, on the basis of visual observation or surname." (Federal Reserve Board, 2000, p. 85). The loan officer is also directed to "inform the applicant that if the information is not provided...you are required to note the data on the basis of visual observation or surname." (Ibid.) Interestingly, the loan officer must use one of the five specified race/ethnicity categories -- a problematic taxonomy that emerged from federal standardization of the many data collection efforts underway since the passage of civil rights legislation in the 1960s (U.S. Office of Management and Budget, 1997). The lender is barred from marking "other" on behalf of non-reporting applicants, although there is no requirement to so inform the borrower.³

This simple form and the regulatory guidelines behind it, then, commit a certain amount of epistemological violence on contemporary notions of identity, gender, ethnicity, and race. Next year this scheme will be revised to conform with the multiracial design of the 2000 Census, but serious problems will remain -- and in any event a major source of our information on credit flows in the last few years has been irreversibly biased and irretrievably lost. Gender is reduced to sex. There is no recognition of the possibility of a transgendered identity. There is no way to interpret what "co-applicant" means.⁴ Anyone who rejects the act of categorization itself (by marking the box for "I do not wish to furnish this information") is immediately slotted into the

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³ It is also worth noting that applicants who wish to describe themselves as "other" are offered the opportunity to specify an identity on the form, an unmistakable implication that whatever is written in this space will have some effect (however small) on the entire enterprise. But only the "other" designation appears in the publicly available summaries and loan-level databases. Anything to the right of the "other" box disappears: there is no provision for lenders to code any individual responses before submitting the disclosure records to their federal regulators.

⁴ A plurality of applications are filed by non-Hispanic white male primary applicants and non-Hispanic white female co-applicants, evoking the image of married couples traditionally courted by mainstream banks. Yet a variety of other circumstances have grown more common in housing markets, but remain invisible in these data -- same-sex partners, unmarried heterosexual couples, siblings, parent-child applicants, and sub-groups of larger collectives such as the rotating credit associations common in some immigrant communities.

pre-packaged social pigeonholes approved by the federal government. But if the approach looks offensive when viewed from the standpoint of critical theories of identity, it takes on a very different meaning in an age of attacks on affirmative action and challenges to the state's interest in collecting social data to monitor various kinds of inequalities. Alternative uses of demographic data turned out to be an important factor in the different fates of the University of Michigan's undergraduate and law school admissions policies before the U.S. Supreme Court in 2003 (U.S. Supreme Court, 2003a, 2003b). And California's upcoming recall election includes the little-noticed Proposition 54, the Classification by Race, Ethnicity, Color or National Origin Initiative Constitutional Amendment. The petition seeks to "eliminate racial classifications" used by the State of California under nearly all circumstances; "'classifying' by race, ethnicity, color, or national origin shall be defined as the act of separating, sorting, or organizing by race, ethnicity, color or national origin including, but not limited to, inquiring, profiling, or collecting such data on government forms." (California Department of Justice, 2003).⁵

These are the background circumstances informing any attempt to make sense of the simple quantitative trends in the national mortgage application data. As a practical matter, responses to the question posed in Figure 1 are dichotomous -- for all but a handful of applications, either we have full information on gender and race/ethnicity, or both are missing. All signs point to an explosion of non-disclosure for both gender and race in the 1990s. In the first year the data were collected and reported, well over 90 percent of all single-family loan applications had complete information on race and ethnicity (Canner and Gabriel, 1992, p. 297). Between 1993 and 2001, non-disclosure increased from about 8 percent to approximately 30 percent for all loan purposes (FFIEC, 2003). For several years, "unknown" has been the second-largest racial/ethnic group in the home improvement and refinance markets. In the year 2000, the racial/ethnic identities of some 4.7 million applicants for single-family loans were unknown.

A Brief Data Historiography

More than anything else, the obscure regulatory provisions of this data collection effort represent the internal clockwork of a system born of the civil rights movement. After the passage of

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⁵ The initiative's most prominent backer is Ward Connerly, whose previous authorship of Proposition 209 banned affirmative action in California and provided a model for similar efforts elsewhere.

landmark fair housing legislation in the late 1960s, racial redlining and other forms of discrimination persisted in less overt ways -- and enforcement of federal laws remained a low priority. Activists working in Chicago struggled for several years to document and challenge the biased practices of local banks, eventually securing the passage of anti-redlining laws in the City Council and the state legislature; a few years later the organizers worked with Wisconsin Senator William Proxmire to introduce two bills at the federal level: the Home Mortgage Disclosure Act (HMDA), enacted in 1975, and the Community Reinvestment Act (CRA) of 1977 (Squires, 1992, 2003). HMDA required depository institutions (banks and thrifts holding consumers' savings) to report the dollar volume and neighborhood location of residential loans they granted, while CRA required these institutions to make credit available to all areas from which they accepted deposits. Soon the data began to attract press attention and community activism, with advocacy groups using the information to monitor particular neighborhoods or banks. But it was a series of intersecting developments in the late 1980s and early 1990s that allowed the militant activism of earlier years to attain the status of a mature, mainstream, and increasingly professionalized community reinvestment movement (Schwartz, 1998). First, the magnitude of the savings and loan debacle created a rare, bipartisan consensus on the failures of (this case of) deregulation and on the need for clear federal oversight. At the same time, several high-profile press investigations drew attention to the persistence of discrimination, and thus last-minute amendments to HMDA and CRA passed along with the bailout legislation (U.S. Congress, 1989). HMDA was amended to require the collection and disclosure of individual information on all loan applications -- including the decision whether to accept or deny the request -- and the statute was broadened to include most 'non-depository' independent mortgage companies. CRA was amended by strengthening provisions that gave standing to community groups who protested a bank's fair lending record when it sought regulatory approval for mergers, acquisitions, or major branch realignments (Fishbein, 1992).

These provisions took on enormous significance within a few years. The Clinton Administration strengthened fair housing and lending enforcement beginning in 1993; the Administration and successive Congresses achieved durable consensus on policies to direct greater subsidies to homeownership, reconciling conservatives' market-oriented goals of privatization with liberals' efforts to protect measures dealing with racial and geographic equity; massive automation in a

climate of falling real interest rates turned mortgages into commodities and forced lenders to seek out new, "non-traditional" homeowners; and major changes in the secondary market helped to standardize underwriting and pool the risks of default and prepayment in mortgage-backed securities. In the context of tight labor markets and sustained growth, the 1990s funneled an enormous wave of capital into housing -- and a substantially increased share of this lending went to low- and moderate-income communities, racial and ethnic minorities, and other "underserved markets" (Squires, 2003; White, 2000). Between 1994 and 2000, home purchase mortgage loans increased by 89 percent for African Americans and 138 percent for Hispanic buyers, compared with 25 percent among non-Hispanic Whites (Retsinas and Belsky, 2002, p. 4). By the end of the decade the national homeownership rate reached an all-time high (67.7 percent in the third quarter of 2000), as the dominant secondary market institution (Fannie Mae, the Federal National Mortgage Association) became the country's second largest financial company, trailing only Citigroup.

The Boom in Subprime and Predatory Lending

Unfortunately, the well-intentioned efforts to demonstrate the viability of the inner city as a market worked only too well. Important changes in securitization encouraged a new breed of institutions specializing in loans to borrowers with blemished or incomplete, "subprime" credit records. Between 1994 and 1999 subprime loan originations ballooned from \$35 billion to more than \$160 billion, and in the refinance market subprime loans are five times as likely in predominantly black neighborhoods compared with predominantly white neighborhoods (HUD-Treasury Joint Task Force, 2000). The economic justification for the subprime sector is riskbased pricing: lenders are said to charge higher fees to cover the more labor-intensive nature of documentation and credit evaluation required in this sector, while higher interest rates are justified on the basis of elevated delinquency and default risks among borrowers with unstable incomes and poor credit histories (Litan, 2001). Unfortunately, the evidence suggests that a subset of lenders in this tier of the business have exploited overlapping vacuums -- in competition (from traditional banks more interested in upscale submarkets), regulation (with relevant statutes specifying thresholds that are easily avoided by juggling or disguising various loan terms), and information (encouraging deceptive practices, especially in communities where residents have long been treated poorly by traditional banks) (Drysdale and Keest, 2000; Engel

and McCoy, 2002; HUD-Treasury Joint Task Force, 2000). Beatrice's case illustrates some of the common tactics -- hidden fees, extremely high interest rates, balloon payment terms, etc. -- all of which contradict traditional economic assumptions of Pareto optimality in urban credit markets. Particularly in the home repair, refinance, and home equity lending markets, lenders have many opportunities to extract profits through "equity stripping": lenders and brokers often arrange credit on expensive terms, and return with repeated offers to refinance the debt with new rounds of hidden fees and charges for the services of brokers, contractors, lenders, appraisers, and attorneys. The borrower may ultimately be pushed into foreclosure, at which point a new set of brokers and investors come into play: *American Foreclosures and Auctions*, published by a firm in Oradell, NJ, is only one of several monthly magazines with listings of defaulted notes that can be purchased from the lender. But as long as a borrower still has some home equity and is able to make some payments, the cycle of equity stripping provides lucrative profits.

In this sense, the contemporary problems of predatory lending bear a striking resemblance to the notorious abuses of the 1968 amendments changing the loan loss provisions in the Federal Housing Administration (FHA) insurance program. Full indemnification of lenders created perverse incentives for banks to make high-risk loans to almost any borrower, and to pursue speedy foreclosures on loans with high points; after adjusting for transaction costs, net yields depended not just on the interest rate but also on the speed at which principal was returned. Government-backed lending permitted enterprising lenders to accelerate this process through foreclosure (Wachter, 1980). The FHA has gone through repeated and contentious reforms since the 1970s, but predatory lending in the 1990s involved genuinely new and creative mechanisms tied to the evolution of the national and global capital markets. The mortgage contract has been splintered into its constituent elements, each of them priced, traded, and hedged in secondary markets for referral, origination, servicing, and insurance. Increasingly sophisticated portfolio models and risk tranches have already securitized the expectation of high default rates for investors and insurers (Engel and McCoy, 2003). All of these changes have greatly lubricated the links between national capital markets and local housing markets, eliminating credit bottlenecks for the average borrower dealing with a reputable lender. But the changes have eliminated the incentives for lenders and servicers to do everything possible to avoid foreclosure. Contemporary subprime lending does not conform to the old, axiomatic assumption that default

and foreclosure is risky, costly, and unprofitable for everyone involved in the transaction; servicers earn much of their profits off late fees, and thus profit from defaults, and special-purpose vehicles designed to launder the legal liability of individual predatory loans have eliminated many of the costs of foreclosure (Eggert, 2003; Engel and McCoy, 2003).

Politics and Method in the Community Reinvestment Movement

The HMDA and CRA amendments were a critical part of the community reinvestment of the 1990s. The loan-level data were invariably the first step for almost anyone: regulators seeking initial signs of bias or pre-screening (Interagency Regulatory Task Force, 1994), institutions seeking new market opportunities (Listokin et al., 2000), scholars working on studies eventually used by the federal agencies to alter key criteria or benchmarks (Ross and Yinger, 2002), attorneys trying to document institutional pattern and practice affecting their clients (Relman, 2003), and community groups concerned about the practices of particular local institutions (Mariano, 2003). For the subset of depository institutions covered by the CRA, the trend towards consolidation gave community groups more leverage to protest banks' lending practices; the initial stages of this process invariably involves maps and tabulations of HMDA records (Squires, 1992, 2003). The quickening pace of mergers and acquisitions led an increasing number of large banks to forge pre-emptive "CRA Agreements" to avert formal protests, typically providing a package of targeted lending commitments, support for homeownership counseling, and other investments in low-income and minority neighborhoods. More than 360 agreements have been signed since the passage of CRA, accounting for some \$1 trillion of promised investment; the vast majority of these commitments were reached after 1992 (White, 2000, p. 38). And as the old problems of credit rationing and redlining evolved into the proliferation of high-risk, predatory lending, HMDA again served as a crucial first step in documenting the problem (ACORN, 2000; Engel and McCoy, 2002; Hurd and Kest, 2003; HUD-Treasury Joint Task Force, 2000; Scheessele, annual). HMDA includes no information on loan terms or applicant credit history, ⁶ and so anyone who uses the data to suggest lender culpability or market failure immediately faces intense criticism from industry advocates. Yet the data offer the only publicly available source of loan-level data nationwide, and they began to

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⁶ Beginning in 2004, HMDA will require the disclosure of limited additional information on high-cost loans, but even the enhanced files will be insufficient for rigorous measurement of loan terms and applicant credit.

offer an important glimpse of high-risk parts of the industry when researchers at the U.S. Department of Housing and Urban Development (HUD) began to compile lists of specific lenders doing business in the subprime market (HUD-Treasury Joint Task Force, 2000; Scheessele, annual).

This broad history is the context for what happened to Beatrice in the late 1990s. Her experience is a textbook case of mortgage discrimination, the dynamics of redlined, racially segregated inner-city housing submarkets, and the rise of a new breed of predatory lenders and contractors using deceptive, innovative tactics to extract home equity. To understand these problems in relation to Beatrice's race and class position, we can turn to an extensive, interdisciplinary academic and policy literature (see, among others, Browne and Tootell, 1995; Dymski, 1999; Haag, 2000; Holloway, 1998; LaCour-Little, 1999; Listokin and Casey, 1980; Munnell et al., 1996; Myers and Chan, 1995; Ross and Yinger, 2002; Turner and Skidmore, 1999; Yinger, 1995, 1998). We can also consult the Federal laws and a variety of obscure policy documents (e.g., Federal Reserve Board, 2000; HUD-Treasury Joint Task Force, 2000; Interagency Regulatory Task Force, 1994; U.S. Congress, 1975, 1977, 1989). There is also a literature documenting the rich tradition of militant community organizing (Bradford and Rubinowitz, 1975; Coalition for Responsible Lending, 2002; National Community Reinvestment Coalition, 2002, annual; Squires, 1992, 2003). Yet Beatrice remains invisible when we search for scholarly perspectives on her experience as an African American woman confronting the contemporary realities of the U.S. housing finance system. Despite an established heritage of feminist urban research on housing and urban design since the 1970s, gender divisions in local mortgage markets are ignored, or subordinated to concerns of race, ethnicity, and economic circumstance⁷ (but see Christie, 2000; Hanson and Pratt, 1995; Jarvis, 1997; Skaburskis, 1997; Smith, 1990). Compared with the hundreds of empirical studies of racial disparities revealed by the annual releases of mortgage loan data in the United States, there is almost no attention to gender (for a single recent exception, see Sanders and Scanlon, 2000).

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⁷ We deliberately avoid the term *class*, since research on U.S. mortgage markets is dominated by a neoclassical economic perspective on human capital and individual choice.

Gender, Statistics, and Citizenship

Paradoxically, scholarly silence and obscure regulations erased gender from the public discussion of housing and homeownership in the 1990s, precisely when a wave of innovative and critical inquiry was reshaping geographers' approaches to cartography, quantification, labor markets, and historical urban processes (Cope, 1998; Gilbert, 1998; Hanson and Pratt, 1995; Kwan, 1999). Gender must be central in any attempt to assess the consequences of the homeownership boom of the last decade. Anecdotal evidence on the tactics and thinking of predatory lenders and brokers cries out for demographers' comprehensive study: How many of today's abusive loans were made to the elderly cohort of African American widows who were part of the first generation of homeowners directly affected by the fair housing legislation of the late 1960s? How did the federal policies of that time, such as the revisions to Federal Housing Administration underwriting criteria in 1968, affect these women and their husbands? How were their life courses affected by the changing economics of homeownership and credit from the 1970s to the early 2000s? How many women followed the paternalist strictures of personal responsibility embodied in the welfare reform legislation of 1996, managed to earn enough to save a downpayment to buy a home, only to be assaulted by a sophisticated predatory broker a few years later? And in an entirely different urban world, how many middle-class white women are offended when they are presented with the request for "Information for Government Monitoring Purposes," and refuse to supply the information?

We are not aware of any published work on these questions, which in any event would require detailed data of the kind that are disappearing from public view. But we think it is clear that gender cannot be ignored. Indeed, we must consider the parallels between the construction of the multifaceted realities and myths of homeownership, and the construction of gender relations in workplaces, educational institutions, and millions of ever-changing households, homes, and families (Hanson and Pratt, 1995; Hayden, 1984; Hochschild, 2003). Moreover, the accelerated and sophisticated automation of all kinds of financial services (including the mortgage instrument) requires that we understand housing debt as a site of statistical citizenship. We are borrowing the term from Hannah (2001), who offers a valuable and penetrating analysis of the politics of quantification and representation that were highlighted in the fights over redistricting, sampling, and the "mark one or more" multiracial question in the 2000 Census. Undercounting

denies equal representation in the hundreds of government funding formulas, regulatory benchmarks, and eligibility criteria tied to various Census measures -- and thus statistical citizenship can be seen as a way to mobilize for rights as well as a set of obligations.

But of course the Census and other officially-sanctioned data are deeply implicated in various forms of social exploitation and methodological reification, including what Goss (1995) terms the "instrumental rationality" by which geodemographic marketing systems can gradually shape the social worlds they try to model for direct-mail campaigns or new retail store locations. As automated data reflections of (parts of) our economic decisions proliferate and find their way into a broader range of decisions of power and authority, Curry (1997) suggests that we recognize their autonomy as separate "digital individuals" with distinct identities and rights. It is easy to imagine many troubling scenarios for these digital individuals, and indeed we can already see a few frightening developments in American business (consider recent press accounts of genetic profiling in health insurance screening by several employers; the use of credit scores to price unrelated services such as auto insurance; or the proliferation of facial recognition technology and other means of automated surveillance). But the politics and method of HMDA and the community reinvestment movement suggest a different story. The historically contingent intersection of a vibrant social movement, an unexpectedly receptive federal legislature, and innovative researchers and legal advocates has built a comprehensive infrastructure of rigorous but strategic positivism. The erosion of statistical citizenship constitutes a serious analytical, methodological, and strategic threat to this entire infrastructure and to the trillion-dollar success it has enabled.

Hypotheses

These considerations have direct relevance for the utility of mortgage lending data in challenging gender inequalities and racial exploitation. Unfortunately, we know very little about the circumstances of non-disclosure. There is a rich literature on discrimination and a smaller body of work on specific practices inside lending institutions, but there are only a handful of articles on non-disclosure (e.g., Huck, 2001) -- and we have no behavioral surveys or ethnographic accounts of applicant or loan officer perceptions. Nevertheless, we do know enough about recent

changes in the lending industry to propose a distinct set of hypotheses through an account of hypothetical, ideal types.

To the degree that contemporary economic and socio-cultural shifts have exacerbated the tensions of gendered constructions of private homes and public workplaces, the financial details of homeownership debt are inseparable from gender relations. Especially in upscale housing submarkets, the owner-occupied home can be used as a portfolio asset leveraged by ever-higher debt ratios in large part because of the increased returns to paid labor among working women in well-paid niches of service industries. For a middle-class working wife, a rising home price enriches the household financial portfolio and expands liquidity options, as long as the contradictions of domestic labor can be resolved (say, by hiring a working-class immigrant or African American woman) and as long as the household remains intact according to legal definitions of marriage and family. Given the importance of female workforce participation in household income and spending, much of this woman's adult life has been shaped by the instrumental rationality of aggressive marketing and a social construction as an economic being (Goss, 1995; Hochschild, 2003). Economists, bankers, developers, and retailers may have seen the working wife as a curiosity in the 1960s; now she is an integral part of the household balance sheet, and a lucrative customer for an infinite array of goods and services.

Consumer Choice

Consider, then, the circumstances of a middle-class white woman confronted with the request for "Information for Government Monitoring Purposes." Her approach to issues of statistical citizenship will be shaped in part by the experience of the digital individual in late-1990s consumer life (Curry, 1997). If the state of American politics is any indication, this woman will not see herself as a feminist, and she will probably not think much of the civil rights movement when she glances at the HMDA race-and-gender question. She may simply react as the harried, beleaguered economic species she has to be in order to help her family afford the mortgage. She may lash out at yet another demand for information in a consumer society that seems to require the surrender of ever greater streams of personal data for even the most trivial commercial transaction. Equally likely, this backlash may come from her husband filling out the form for the

couple's joint application. Both scenarios suggest a consumer choice hypothesis for the disappearance of gender and race.

Now consider an elderly, racially marginalized widow, who managed to buy a home many years ago with her husband, and who gets by on Social Security, survivor benefits, and the occasional offer of help from her middle-aged children. This woman has accumulated substantial home equity, but of course the underlying asset (the house) may be old and in need of substantial repair, and it is not appreciating rapidly if it is located in an urban or minority neighborhood. We are thoroughly unqualified to speculate on how this woman will react if she is asked whether she is a feminist. But we have no doubt that she knows first-hand the way banks and underwriters behaved in the 1960s and 1970s, and that she knows about the struggles against redlining and discrimination. It is reasonable to believe that this woman will recognize the civil rights and enforcement aspects of the question on gender and race. There may be a case for the economists' theory of asymmetric information (Nakamura, 1993), which implies that poorlyqualified applicants will try to reveal as little about themselves as possible. But it is questionable that this woman will react purely as a consumer. If she does not decide to provide the information, her consumer "choice" is best seen as a frustration that is very different from the concerns of the middle-class white woman. The woman of color may very well be suspicious of the promise that "a lender may not discriminate on the basis of this information, or on whether you choose to furnish it" (Figure 1). But of course she also knows that she will be slotted into a category if she is meeting with a loan officer face-to-face -- the "visual observation or surname" bureaucratese -- and so it is plausible to assume that her consumer choice will be to answer the question.

The consumer choice hypothesis, then, suggests that we might be able to distinguish non-reporters if we have enough information about individual homeowners and homebuyers (Huck, 2001). This hypothesis certainly demands consideration, but even without empirical validation it suffers from two logical flaws. First, it presumes a sudden and sweeping change in consumer perceptions: if non-disclosure is simply a matter of suspicion, or of consumers fed up with requests for data, then we have seen a truly astonishing shift in only a few years. This is possible, but extremely unlikely in view of a second flaw: the spread of new marketing and

application media exposes the loopholes that alter the expression of any consumer choice. Until this year, lenders were not even required to request gender and race information for applications taken entirely by telephone. Lenders are required to request the information for applications taken by mail, fax, or the Internet, but non-response triggers no "visual observation or surname" clause. Anything that alters the medium through which applications are filed changes the entire basis of the consumer choice hypothesis.

Market Segmentation

Changes in application media, it turns out, are closely tied to broad shifts in the business practices and organizational structure of a variety of firms involved in the mortgage business. Thus we must consider a market segmentation explanation for the disappearance of gender and race and the erosion of statistical citizenship. Several intersecting developments are crucial. First, the savings and loan crisis of the late 1980s accelerated the shake-out of small depository lenders and drove an expanding market share towards separate mortgage companies not affiliated with traditional banks. Through the 1990s, however, specialized mortgage subsidiaries of large commercial banks were gaining market share against independent mortgage firms, particularly in the regulatory-defined "affordable" lending business (Nothaft and Surette, 2002). On balance, then, today's borrower is less likely to be dealing with a local bank where they might have checking and savings accounts -- and more likely to be dealing with a firm or subsidiary that is solely in the business of mortgage lending. In turn, customers are less likely to be applying in person in a branch office -- the dominant scenario when HMDA was enacted in 1975, and still a common situation when the law was amended in 1989. Today, large national mortgage lenders operate toll-free call centers, rely on centralized automated underwriting and credit scoring, and accept applications over the telephone or over the Internet. Specialized subsidiaries and small subprime firms target carefully-defined niche markets through telephone solicitations, advertising in specific local ethnically-oriented newspapers or radio stations, sending direct mail offers to residents of zip codes identified through target-market GIS applications, and forging partnership with mortgage brokers and home improvement contractors (Canner et al., 1999; HUD-Treasury Joint Task Force, 2000).

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⁸ The revised provisions took effect for all applications received on or after January 1, 2003. These data will be available no earlier than July, 2004.

All of these industry practices erase the traditional image of an applicant meeting with a familiar loan officer at the neighborhood bank. Particularly in the home repair and refinance markets, face-to-face contact has become much less common: Affluent white wives as well as lowincome African American widows are more and more likely to deal with a lender by phone, mail, fax, or via the Internet. Obviously, these practices trigger the loopholes that increase the likelihood of non-reporting of gender and race. And although some consumers actively choose how and where to file a request, it is ultimately the lenders' business decision on how to market and how to receive applications. All of the evidence we have about subprime and predatory lenders adds up to a strong case that they engage in aggressive, market-making behavior to obtain supra-normal profits in low-income and minority submarkets (Drysdale and Keest, 2000; Engel and McCoy, 2002; HUD-Treasury Joint Task Force, 2000). Two versions of the market segmentation, therefore, are plausible. In higher-income white submarkets the process might be a benign, accidental outcome of partially automated business practices and user-friendly ecommerce solutions that trigger a few obscure loopholes. But in low-income and minority submarkets, the evidence suggests that segmentation is much more malignant. Lenders and brokers aggressively seek out business, sometimes through deceptive means. They make heavy use of telephone push marketing, broker referral networks, and other practices to find opportunities to earn exorbitant fees from loans made on the basis of accumulated equity rather than repayment stability. And some of them may even engage in deliberate malfeasance on the disclosure form, although it is nearly impossible to obtain systematic, direct evidence on this point; still, as predatory lending became a prominent policy controversy in the late 1990s, lenders faced powerful incentives to avoid reporting the kinds of information that might reveal any kind of discriminatory targeting. Penalties for a fair housing violation far exceed any possible sanctions for HMDA reporting problems. But even if we ignore all possibilities of deliberate falsification, we can test the hypothesis that non-disclosure results from the observable characteristics of those kinds of lenders actively seeking out the "perfect customer" described by one former employee of a subprime lender (Coalition for Responsible Lending, 2002, p. 3):

"...an uneducated widow who is on a fixed income -- hopefully from her deceased husband's pension and social security -- who has her house paid off, is living off

of credit cards, but having a difficult time making payments, and who must make a car payment in addition to her credit card payments."

The Case of New York City

To lend some empirical texture to our narrative, let us turn to New York City. Although the city's size and history of rental tenancy make it a somewhat unique case for studies of homeownership, it presents an unusually interesting setting for the kinds of divisions involved in the disappearance of gender and race. Clearly, the city has extraordinarily diverse landscapes of wealth and poverty, and is shaped by rich tapestries of race, ethnicity, and gender. These landscapes attract and reflect dynamic flows of capital in multiple and overlapping submarkets. The city government's level of housing investment and regulatory intervention is unparalleled among U.S. cities, suggesting a possible insulation from the worst abuses of predatory lending. At the same time, the city's familiar global-city role highlights the importance of a large cohort of wealthy, mobile professionals most likely to take advantage of convenient e-commerce options (and perhaps most likely to lead the consumer backlash).

A First Glance at Non-Reporting in New York

Tables 1, 2, and 3 present all combinations of gender information supplied on HMDA applications for loans backed by one-to-four family dwelling units (including condos) in the city between 1998 and 2001. Three findings stand out from these simple tabulations. First, as expected non-disclosure varies widely across loan purpose. Rates are quite low in the home purchase market: gender is missing for the primary applicant, co-applicant, or both for only one in nine records. This rate declined slightly between 1998 and 2001. Non-disclosure rates are much higher in the home improvement market (one of three in 1998) and for refinance requests (just over one in four), and both of these rates are increasing. By 2001, 63 percent of all home improvement records included no information whatsoever on gender. Second, the applicant pool is quite diverse, with the "traditional" arrangement of a male primary applicant and a female co-applicant retaining a slight plurality among purchase and refinance requests. Shares for this group fell from 33 percent to 28 percent among buyers, and from 31 percent to 21 percent among refinance applications. Unfortunately, as noted earlier, the data tell us nothing about what "co-applicant" means. Third, changes in non-disclosure tend to be all or nothing, driven by non-

reported sole applicants and pairs where both are unreported. Pairs in which one borrower reports gender and the other does not account for only 1.35 percent of purchase requests, and even less for the other purposes. Regardless of the relative importance of consumer choice and industry segmentation, these processes seem to affect applicant pairs in a similar fashion.

Table 1. Gender Composition of Applicants for Home Purchase Loans in New York City, 1998 to 2001. Number of applications (top panel), percentage shares (bottom panel).

	S	ole applic	ants	Applicant-coapplicant Pairs									
						Male-fema	le couples,	Co-applicant	unreported,	Primary a	applicant		
				Two	Two	primary ap	plicant is	primary ap	plicant is	unreported, co	-applicant is	Both	
	Male	Female	Unreported	males	females	Male	Female	Male	Female	Male	Female	unreported	Totals
1998	15,913	12,805	3,740	1,904	1,887	21,511	4,068	240	130	19	48	2,652	64,917
1999	19,279	15,288	2,526	2,331	2,214	23,918	4,850	276	135	57	46	2,006	72,926
2000	19,702	15,876	3,652	2,170	1,981	21,325	4,876	352	218	33	44	2,438	72,667
2001	19,730	14,998	3,530	1,919	1,772	19,492	4,480	482	353	29	65	2,463	69,313
1998	25	20	5.8	2.9	2.9	33	6.3	0.37	0.20	0.029	0.074	4.1	100
1999	26	21	3.5	3.2	3.0	33	6.7	0.38	0.19	0.078	0.063	2.8	100
2000	27	22	5.0	3.0	2.7	29	6.7	0.48	0.30	0.045	0.061	3.4	100
2001	28	22	5.1	2.8	2.6	28	6.5	0.70	0.51	0.042	0.094	3.6	100

Notes:

Data Source: Federal Financial Institutions Examination Council (1999-2002).

Table 2. Gender Composition of Applicants for Home Improvement Loans in New York City, 1998 to 2001 Number of applications (top panel), percentage shares (bottom panel).

	Sc	ole applic	ants	Applicant-coapplicant Pairs									
						Male-fema	le couples,	Co-applicant	unreported,	Primary o	applicant		
				Two	Two	primary ap	plicant is	primary aț	plicant is	unreported, co	-applicant is	Both	
	Male	Female	Unreported	males	females	Male	Female	Male	Female	Male	Female	unreported	Totals
1998	5,451	4,869	4,035	166	275	2,546	807	94	62	2	5	2,838	21,150
1999	4,763	5,133	3,396	207	419	3,165	1,133	42	16	11	11	2,793	21,089
2000	3,051	3,187	6,787	199	301	2,491	775	49	21	27	70	3,734	20,692
2001	2,374	2,176	8,986	144	205	1,898	625	117	46	21	47	4,275	20,914
1998	26	23	19.1	0.78	1.3	12	3.8	0.44	0.29	0.0095	0.024	13	100
1999	23	24	16.1	1.0	2.0	15	5.4	0.20	0.076	0.052	0.052		100
2000	15	15	32.8	1.0	1.5	12	3.7	0.24	0.10	0.13	0.34	18	100
2001	11	10	43.0	0.69	1.0	9.1	3.0	0.56	0.22	0.10	0.22	20	100

Notes:

Data Source: Federal Financial Institutions Examination Council (1999-2002).

^{1.} Excludes applications from non-person entities (corporations, partnerships), records without income or neighborhood information, and applicati from persons reporting incomes less than \$10,000 per year.

^{1.} Excludes applications from non-person entities (corporations, partnerships), records without income or neighborhood information, and applicat from persons reporting incomes less than \$10,000 per year.

Table 3. Gender Composition of Applicants for Refinance Loans in New York City, 1998 to 2001.

Number of applications (top panel), percentage shares (bottom panel).

_	Se	ole applic	ants	Applicant-coapplicant Pairs									
						Male-fema	le couples,	Co-applicant	unreported,	Primary a	pplicant		
				Two	Two	primary ap	plicant is	primary ap	plicant is	unreported, co	-applicant is	Both	
	Male	Female	Unreported	males	females	Male	Female	Male	Female	Male	Female	unreported	Totals
1998	15,713	13,574	12,458	1,282	1,461	27,119	4,596	360	179	45	79	11,537	88,403
1999	19,021	16,362	10,007	1,265	1,721	25,877	4,807	275	139	35	70	8,918	88,497
2000	11,288	9,645	11,189	853	1,038	10,611	2,663	256	178	24	44	8,274	56,063
2001	18,278	15,631	18,858	1,430	1,523	22,176	5,762	730	454	51	142	19,489	104,524
1998	18	15	14	1.5	1.7	31	5.2	0.41	0.20	0.051	0.089	13	100
1999	21	18	11	1.4	1.9	29	5.4	0.31	0.16	0.040	0.079	10	100
2000	20	17	20	1.5	1.9	19	4.8	0.46	0.32	0.043	0.078	15	100
2001	17	15	18	1.4	1.5	21	5.5	0.70	0.43	0.049	0.14	19	100

Notes:

Data Source: Federal Financial Institutions Examination Council (1999-2002).

Disappearing Places

Non-reporting raises critical questions for the geography of credit flows, and so it is worth considering some of the specific local geographies etched out by this dilemma. In the home purchase market, the comparatively low rates of non-disclosure nevertheless etch out significant patterns (Figure 2). Gender is reported for most homebuyers, particularly in the middle-class zones of Queens and (with a few exceptions) the suburbanized Staten Island. But non-disclosure rates edge upward in pockets of Harlem, the South Bronx, and scattered districts of Bedford-Stuyvesant, Bushwick, and other parts of Brooklyn. Polyvalent narratives and realities of community are packed into the complexities of each of these neighborhoods, and the simplistic cartography used here commits atrocious violence to these stories. But it is clear that gender is disappearing for homeowners in many neighborhoods, and does not appear to be spatially random.

^{1.} Excludes applications from non-person entities (corporations, partnerships), records without income or neighborhood information, and applications from persons reporting incomes less than \$10,000 per year.

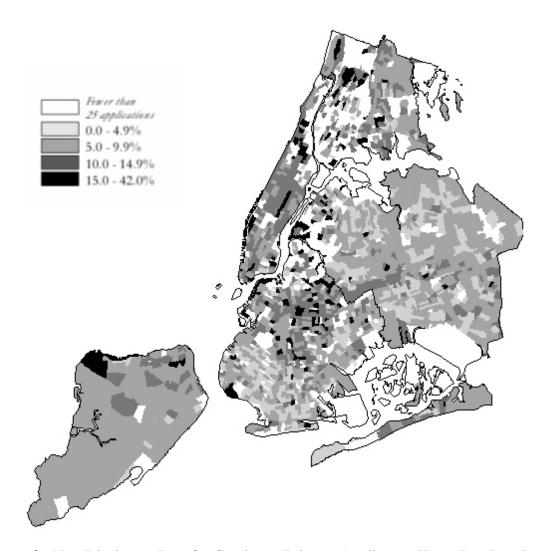


Figure 2. Non-Disclosure Rate for Gender on Primary Applicants, Home Purchase Loans, 1998-2001. *Source:* Federal Financial Institutions Examination Council (1999-2002).

A different pattern emerges in the home improvement market (Figure 3, next page). Although non-reporting rates do rise substantially in many parts of Brooklyn and the Bronx, the same applies to many areas in Queens and all across Staten Island. The overall pattern is consistent with two parallel explanations: predatory lenders have penetrated poor neighborhoods with targeted solicitations and broker networks, while middle-income commuters at work call their banks or file Internet applications for loans to renovate their 1960s-vintage homes on Staten Island. This polarized pattern is even clearer in the refinance market, where falling interest rates draw out selective cohorts of homeowners wishing to reduce interest payments or obtain cash to pay other expenses (Figure 4). The city is sharply partitioned into areas of low non-disclosure (most of Manhattan below 96th street, western Brooklyn, and Flushing, Queens), and more

severe cases of gender disappearance (the Bronx, Brooklyn stretching from Bed-Stuy through Jamaica, Queens, and most of Staten Island). Once again, however, each part of the map hints at complexity and contingency: extremely low rates of non-reporting in the exclusive new ownership units of Wall Street and in Tribeca, as well as the Russian areas of Sheepshead Bay in Southern Brooklyn; a greater incidence of non-disclosure in the gentrifying battleground of Hell's Kitchen (now often called Clinton), the distant resort and retirement beach homes of the Rockaways, the contemporary immigrant tapestry of Jamaica, and of course the different neighborhood milieux and shared experiences of urban poverty in the South Bronx, Bushwick, and Bedford-Stuyvesant.

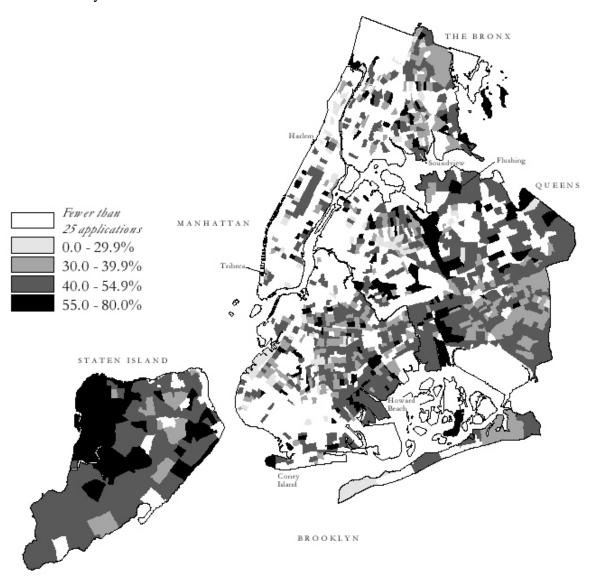


Figure 3. Non-Disclosure Rate for Gender on Primary Applicants, Home Improvement Loans, 1998-2001. *Source:* Federal Financial Institutions Examination Council (1999-2002).

These spatial patterns of non-disclosure are highly complex, and reflect the interplay of countervailing processes in the housing market. These maps, in other words, cannot be explained in terms of single causes. Still, it is worth considering the interaction of non-reporting with the broad demographic divisions of the city (e.g., Figure 5). The gender composition of the mortgage market, for example, may not *explain* the pattern -- note the many differences between Figure 5 and the non-disclosure maps -- but does suggest its *implications*. Particularly in the refinance market, non-disclosure rates tend to be high in those parts of the city where we would be most interested in complete, accurate information on mortgage market transactions. Statistical citizenship is being undermined in redlined inner-city neighborhoods, diverse working-class minority and immigrant communities, and in turbulent, contentious areas of gentrification. A fundamental question, then, is whether this trend results from the varied characteristics and choices of individual women and men, or if structural and regulatory conditions also contribute to the disappearance of gender and race.

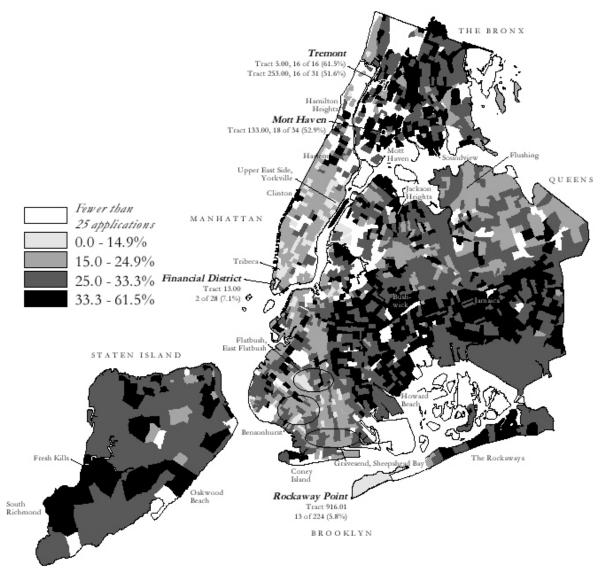


Figure 4. Non-Disclosure Rate for Gender on Primary Applicants, Refinance Loans, 1998-2001. *Source:* Federal Financial Institutions Examination Council (1999-2002).

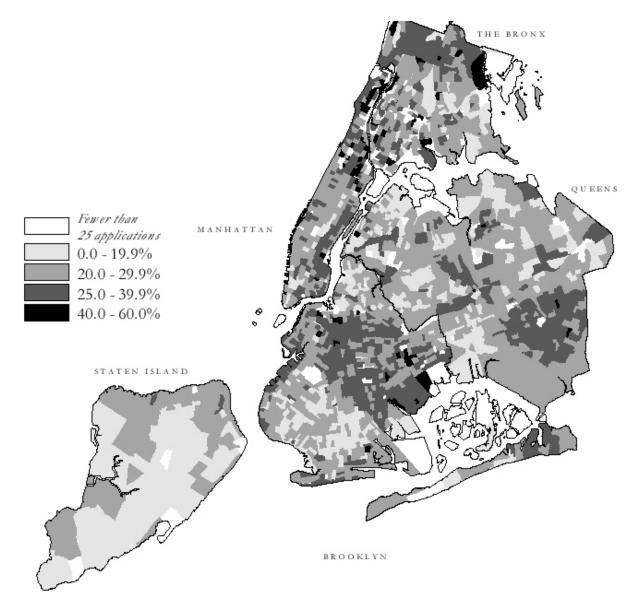


Figure 5. Share of Applications Filed by Female Primary Applicants, 1998-2001. Includes home purchase, home improvement, and refinance requests. *Source:* Federal Financial Institutions Examination Council (1999-2002).

Modeling the Disappearance of Gender

Consider a simple model predicting the likelihood that an individual loan application is filed without information on gender:

$$\ln \left[\frac{P_{Unreported}}{1 - P_{Unreported}} \right] = \beta_0 + \beta_A \mathbf{A}_i' + \beta_Y \mathbf{Y}_i' + \beta_D \mathbf{D}_i' + \varepsilon_i$$

[1]

where **A** is a vector of applicant financial characteristics (income, debt burden, etc.), **Y** captures yearly fluctuations in interest rates and other macroeconomic conditions, and **D** indicates the decision and outcome of the application -- approved and 'originated' by the financial institution, rejected, approved but turned down by the borrower, withdrawn, or closed as an incomplete file. Specifying the model in this way tests the consumer choice hypothesis while avoiding the methodological problems involved in efforts to model *loan rejection*; defining the decisions as right-hand-side variables places full faith in the self-interested deliberations of loan officers and underwriters, giving them the benefit of the doubt in terms of discriminatory outcomes. Note, however, that we cannot use race or ethnicity as right-hand-side predictors, since gender and race nonresponse events are virtually identical.

We can then expand the model to examine the market segmentation hypothesis:

$$\ln \left[\frac{P_{Unreported}}{1 - P_{Unreported}} \right] = \beta_0 + \beta_A \mathbf{A}_i' + \beta_Y \mathbf{Y}_i' + \beta_D \mathbf{D}_i' + \beta_L \mathbf{L}_i' + \varepsilon_i$$

[2]

where **L** includes measures designed to capture the position of individual lenders in the changing environment of deregulation, competitive pressures driving consolidation and automation to achieve economies of scale, and increasingly complex networks of subsidiaries and cross-ownership arrangements. If the consumer choice interpretation provides an adequate explanation of gender disappearance, then we should observe negligible deviations between the results for Models 1 and 2.

We estimated logistic regressions for Equations 1 and 2 for all single-family loan applications filed at HMDA-covered lenders and backed by homes located in New York City from 1998 to 2001; the dataset includes about 280 thousand home purchase requests, 83 thousand renovation applications, and 337 thousand refinance applications. The models include a standard set of variables commonly used to measure applicant- and loan-level characteristics (Holloway, 1998; LaCour-Little, 1999; Ross and Yinger, 2002; Turner and Skidmore, 1999), along with an additional indicator for loan rejections where the underwriter specifically cites credit history as a

justification. The lender-level variables measure broad industry variations governed by regulatory contrasts between depositories, independent mortgage companies, and specialized mortgage subsidiaries; variables are also coded for lenders specializing in the subprime market (Scheessele, 2002), lender assets, and each institution's share of all applications reported in the HMDA files nationwide.

Results

Model coefficients, odds ratios, and fit statistics are presented in Tables 4 and 5. The results provide partial support for the consumer choice hypothesis, while emphasizing the importance of market segmentation. First, note the widely divergent model fit statistics: non disclosure is more prevalent in the refinance and home improvement markets, where the phenomenon is much more closely tied to systematic variations in borrower and lender characteristics. This result is unsurprising, given the more arms-length nature of the mortgage transaction that is possible when a borrower has accumulated home equity or has an established record of mortgage repayment. Second, applicant characteristics are insufficient to understand the reasons for nonreporting. The high odds ratios for denials, withdrawals, and incomplete files do lend some support to the notion that marginally-qualified borrowers are choosing not to report gender; but adding lender variables greatly improves overall model fit, and alters many of the applicant-level coefficients. Renovation and refinance requests that are denied, for instance, are 3.4 times as likely to have no gender information compared with otherwise identical approvals; but once we account for the kind of lender where the application is filed, this figure drops to 2.7. Third, note that the fully-specified models reveal the most extreme odds ratios for institutional variables, not borrower characteristics. The distinction between lenders specializing in subprime credit and those avoiding it is striking: non-disclosure odds are doubled for home purchase and refinance requests at subprime lenders,

⁹ Not all lenders are required to report reasons for rejected applications, and so the interpretation of this indicator may vary with institution type. Widespread publicity and policy shifts on fair lending issues in the 1990s, however, gave lenders a powerful incentive to avoid charges of discrimination by justifying rejections -- and credit history is widely regarded as the most reasonable and prudent reason for loan rejection.

Table 4. Logistic Regression Models of Gender Non-Reporting, Home Purchase Applications.

Tronic i dicital	Mode		Model 2		
	coefficient	e^{β}	coefficient	e^{β}	
Intercept	-2.3173		-2.062		
Applicant income (\$,000)	0.000557	1.001	0.0005	1.001	
Applicant income squared	-5.59E-08	1.000	-6.12E-08	1.000	
Principal and interest ratio	-0.00796	0.992	-0.011	0.989	
Principal and interest ratio squared	5.56E-06	1.000	0.000	1.000	
Exceeds single-family loan limit	-0.1438	0.866	-0.047	0.954	
FHA-insured	-1.0939	0.335	-1.229	0.293	
Owner occupancy	-0.093	0.911	0.037 †	1.038	
Edit failure	0.168	1.183	0.467	1.596	
Approved, declined by applicant	0.485	1.624	0.291	1.337	
Denied	0.5954	1.814	0.357	1.429	
Withdrawn	1.4333	4.193	1.032	2.808	
Closed as incomplete	0.8154	2.260	0.790	2.204	
Denied for bad credit	-0.0271		0.770	1.080	
1999	-0.4552	0.634	-0.409	0.664	
2000	-0.4332	0.869	-0.409	0.858	
2001 Submine London	-0.1068	0.899	-0.024 † 0.791	0.977 2.206	
Subprime lender					
Bank (regulated by OCC)			-0.835	0.434	
Bank (FRB)			-0.830	0.436	
Bank (FDIC)			-2.128	0.119	
Thrift (OTS)			-2.006	0.134	
Credit Union (NCUA)			-2.809	0.060	
Mtg. co. owned by bank			-1.437	0.238	
Mtg. co. owned by thrift or credit union			-0.679	0.507	
Mtg. co. owned by bank/thrift holding co.			-1.494	0.224	
Lender national market share			0.508	1.662	
Market share squared			-0.203	0.817	
Assets 50 to 250 million			1.155	3.175	
Assets 250m to 1 billion			1.137	3.116	
Assets 1 to 5 billion			0.441	1.553	
Assets 5 to 10 billion			0.762	2.142	
Assets 10 to 25 billion			1.288	3.627	
Assets 25 to 100 billion			1.065	2.901	
Assets more than 100 billion			0.231	1.260	
Number of observations	278,990		278,990		
Unconditional non-reporting rate	8.3		8.3		
−2 Log Likelihood	152,287		144,476		
Chi-square vs. null model	7,766		15,577		
Chi-square vs. Model 1			7,811		
Nagelkerke (1991) pseudo-R ²	0.06		0.12		
Percent correctly classified	65.2		72.4		

Notes:

†Coefficient not statistically significant at P=0.05.

Reference categories for loan decisions are approved and originated loans; for years, 1998; for institutions, independent mortgage companies; and for assets, less than 50 million.

Data Source: FFIEC (1999-2002).

and multiplied by seven times in the rehab market. But even after controlling for the prime/subprime split -- a key economic and regulatory division in the industry (Board of Governors of the Federal Reserve System et al., 1999) -- other institutional characteristics are still important. Non-disclosure odds for homebuyers fluctuate widely with the asset category of the lender where they file their loan request; for renovation applications, non-disclosure varies widely by lender type, with particularly high rates of non-reporting for specialized subsidiaries and certain types of banks. Similar variations are apparent in the refinance market, although the mixed pattern of coefficients suggests few clear or consistent interpretations of specific regulatory conditions.

(table 5 on next page)

Table 5. Logistic Regression Models of Gender Non-Reporting, Home Improvement and Refinance Applications.

	Home Improvement			Refinance				
	Model	1 1	Model	2	Mode		Model 2	
	coefficient	e^{β}	coefficient	e^{β}	coefficient	e^{β}	coefficient	e^{β}
Intercept	-1.614		-2.790		-1.7188		-2.1023	
Applicant income (\$,000)	0.0012	1.001	0.0016	1.002	-0.0015	0.999	-0.00122	0.999
Applicant income squared	-1.71E-07	1.000	-2.14E-07	1.000	1.65E-07	1.000	1.37E-07	1.000
Principal and interest ratio	0.054	1.055	0.052	1.053	-0.0174	0.983	-0.0172	0.983
Principal and interest ratio squared	-0.001	0.999	-0.001	0.999	2.16E-06	1.000	2.13E-06	1.000
Exceeds single-family loan limit	-0.461	0.631	-0.256	0.774	-0.3303	0.719	-0.2565	0.774
FHA-insured	0.043	1.044	0.715	2.044	-1.9442	0.143	-1.5812	0.206
Owner occupancy	-0.136	0.873	-0.069 †	0.933	0.3061	1.358	0.2851	1.330
Edit failure	0.345	1.412	-0.258	0.772	0.9788	2.661	0.7413	2.099
Approved, declined by applicant	0.792	2.207	0.628	1.873	0.8005	2.227	0.589	1.802
Denied	1.236	3.443	0.980	2.665	1.2301	3.422	0.9786	2.661
Withdrawn	1.867	6.470	1.542	4.676	1.4763	4.377	1.2419	3.462
Closed as incomplete	1.016	2.763	1.209	3.350	0.8886	2.432	0.6698	1.954
Denied for bad credit	0.015	1.015	0.113	1.120	0.0314 †	1.032	0.1257	1.134
1999	-0.301	0.740	-0.310	0.733	-0.3691	0.691	-0.4522	0.636
2000	0.536	1.709	0.389	1.475	0.1198	1.127	-0.0344	0.966
2001	0.938	2.555	0.618	1.855	0.4528	1.573	0.5307	1.700
Subprime lender			1.938	6.948			0.7557	2.129
Bank (regulated by OCC)			2.452	11.615			0.6057	1.833
Bank (FRB)			2.753	15.682			0.5222	1.686
Bank (FDIC)			2.183	8.876			-1.9012	0.149
Thrift (OTS)			1.956	7.071			-1.351	0.259
Credit Union (NCUA)			1.402	4.065			-4.4592	0.012
Mtg. co. owned by bank			-0.648	0.523			-0.2187	0.804
Mtg. co. owned by thrift or credit unio	on		3.286	26.736			-0.4116	0.663
Mtg. co. owned by bank/thrift holding	g co.		0.311	1.365			-0.6151	0.541
Lender national market share			1.027	2.792			-0.0706	0.932
Market share squared			-0.333	0.717			0.0354	1.036
Assets 50 to 250 million			-1.260	0.284			0.3118	1.366
Assets 250m to 1 billion			0.751	2.120			2.7425	15.526
Assets 1 to 5 billion			-1.273	0.280			0.8521	2.345
Assets 5 to 10 billion			-1.332	0.264			0.4842	1.623
Assets 10 to 25 billion			-0.630	0.533			1.0628	2.894
Assets 25 to 100 billion			-1.104	0.332			0.7797	2.181
Assets more than 100 billion			-1.934	0.145			0.193	1.213
N 1 61	02.240		02.240		224 704		227.704	
Number of observations	83,340		83,340		336,794		336,794	
Unconditional non-reporting rate	44.2		44.2		30.0		30.0	
-2 Log Likelihood	98,760		90,498		363,710		342,200	
Chi-square vs. null model	15,667		23,928		47,675		69,186	
Chi-square vs. Model 1			8,262				21,510	
Nagelkerke (1991) pseudo-R ²	0.23		0.33		0.19		0.26	
Percent correctly classified	74.1		79.7		72.6		76.3	

Notes:

Reference categories for loan decisions are approved and originated loans; for years, 1998; for institutions, independent mortgage com and for assets, less than 50 million.

Data Source: FFIEC (1999-2002).

[†]Coefficient not statistically significant at P=0.05.

Expanded Models

These results confirm that non-disclosure is not simply a matter of consumer choice -institutional characteristics and regulatory divisions are much more important. Yet the findings
shed no light on the links between gender non-disclosure and racial/ethnic divisions in the prime
and subprime segments of the credit market – and they tell us nothing about the local,
neighborhood geography of disappearance. To address these issues, we estimated a set of
expanded models, stratified for prime and subprime lenders (Tables 6, 7). These models include
a vector of institutional-level variables to capture market specialization by race and ethnicity – as
well as the institution's overall denial rate, use of government-backed loans, and racial nondisclosure rate – and a vector of census tract variables that provide a rough measure of
neighborhood-level variations in mortgage credit flows. To facilitate and refine interpretation,
this batch of model results is presented in terms of mean partial impacts. In

The expanded and stratified models provide a sharper image of the market and regulatory context of non-disclosure (see Tables 6 and 7). Fit diagnostics attain much more robust levels, with concordant classification rates ranging from a low of 81 percent for prime home purchase requests and 90 percent for refinance applications at subprime lenders. As before, the models attain substantially better fit in the renovation and refinance markets. Coefficients of

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models in Tables 6 and 7, we calculated the partial impacts, at the mean, for each independent variable. For each continuous measure
$$X_i$$
, the partial impact is $\left[e^{\alpha + \left(\beta_i \overline{X}_i + \beta_i \sigma_i\right) + \sum_j \left(\beta_j \overline{X}_j\right)}\right] - \left[e^{\alpha + \beta_i \overline{X}_i + \sum_j \left(\beta_j \overline{X}_j\right)}\right]$ where α is the intercept,

 σ_i is the standard deviation of variable *i*, and β_j and $\overline{x_j}$ represent the estimated coefficients and sample means for all remaining variables. This equation simply gives us the change in the probability of non-reporting with a one standard deviation increase in the predictor variable *i*. For a dichotomous variable X_i , the partial impact is

$$\left[e^{\alpha+\beta_i+\sum_j(\beta_j\overline{X}_j)}\right]-\left[e^{\alpha+\sum_j(\beta_j\overline{X}_j)}\right]$$
 with the first term denoting the probability when X_i is one, and the second term indicating the probability when X_i is zero.

¹⁰ To avoid circularity, the lender- and tract-level variables are calculated by aggregating all single-family loan applications (combining purchase, rehab, and refinance records) filed in New York City between 1998 and 2001. Although it would be desirable to enhance the models with an even longer menu of tract characteristics from the Census of Population and Housing or other sources, methodological issues make this difficult. The mortgage disclosure files, even in 2001, are coded to 1990 tract boundaries, forcing us to choose between outdated neighborhood characteristics or the loss of detail associated with tract aggregation procedures to match 1990 to 2000 boundaries. Under HMDA regulations lenders will be required to geocode applications to 2000 tract boundaries starting in 2003, and the 2003 submissions will be publicly available in July, 2004.

¹¹ Logit coefficients (β) and odds ratios (e^{β}) present the same information, although the latter are widely viewed as easier to interpret. Unfortunately, odds ratios can be confusing in certain circumstances. Thus for the expanded models in Tables 6 and 7, we calculated the partial impacts, at the mean, for each independent variable. For each

determination generalized to the case of binary choice models (Nagelkerke, 1991) range from 0.48 to 0.59 for home repair and refinance requests (Table 7).

From the deluge of numbers in these tables, we can extract four meaningful findings on the relations between non-disclosure and statistical citizenship. First, non-reporting cuts across class lines. After accounting for all other factors, neither income nor debt burden have any meaningful effect on non-reporting. The strongest link is for renovation requests, where a onestandard deviation increase in debt ratio boosts the probability of non-reporting by 8.5 percent. There is some evidence that initially supports the idea that non-disclosure is more common among marginally-qualified women and men: non-disclosure is substantially more likely for applications that are denied, with the strongest effect (a 29 percent jump in probability) for renovation requests at subprime lenders. But the evidence on applications rejected specifically for credit history (a variable with negligible effects across all submarkets) suggests that nonreporting has little to do with qualifications. The juxtaposition of coefficients for bad credit denials and withdrawals suggests the possibility that non-disclosure is due at least in part to business practices that create adverse impact discrimination (Interagency Regulatory Task Force, 1994; Ross and Yinger, 2002). It is also possible that these results stem from institutional efforts to mask potentially biased racial targeting. Yet high rates of non-disclosure for withdrawn and incomplete files are also consistent with consumer comparison-shopping. The only undisputable interpretation is that non-reporting, hence the prospects for the denial or erasure of statistical citizenship, cuts widely across class divisions.

The second key finding centers on the role of regulatory context. Non-reporting is tied closely to the rise of subprime lenders, and non-depository independent mortgage companies played a central role in the subprime boom of the 1990s; but these divisions are by no means simple, and it would be wrong to lump all of the complex trends together. In the mainstream home purchase market, for example, non-reporting is (as expected) less common among depository lenders; note

Table 6. Mean Partial Impacts for Expanded Logistic Regressions. Home Purchase Applications.

Variable	Subprime	All Others
Applicant income (\$,000)	0.5 †	0.04 †
Applicant income squared	-0.7 †	-0.04 †
Principal and interest ratio	-0.8 †	-0.6
Principal and interest ratio squared	1.1 †	0.2
Exceeds single-family loan limit	-2.3	-0.2
FHA-insured	-8.3	0.01 †
Owner occupancy	2.5	-0.4
Edit failure	12.7	1.7
Approved, declined by applicant	2.2	1.2
Denied	6.0	1.5
Withdrawn	19.4	3.0
Closed as incomplete	5.5	5.0
Denied for bad credit	-1.7	0.1 †
1999	-2.2	-1.8
2000	-4.4	-0.8
2001	-4.6	-1.6
Bank (regulated by OCC)	14.7	-4.7
Bank (FRB)	33.8	-5.3
Bank (FDIC)	-0.4 †	-4.4
Thrift (OTS)	8.4	-6.0
Credit Union (NCUA)	0.0	-4.3
Mtg. co. owned by bank	10.3	-6.9
Mtg. co. owned by thrift or credit union	1.9 †	-3.4
Mtg. co. owned by bank/thrift holding co.	27.1	-4.2
Lender national market share	8.5	-1.2
Market share squared	-4.9	0.7
Assets 50 to 250 million	-5.5	18.7
Assets 250m to 1 billion	-7.7	35.5
Assets 1 to 5 billion	-15.6	14.5
Assets 5 to 10 billion	-9.1	23.8
Assets 10 to 25 billion	-0.7 †	20.8
Assets 25 to 100 billion	-9.4	24.4
Assets more than 100 billion	-8.3	14.0
Lender denial rate	2.3	-1.0
Lender FHA share	0.04 †	-1.8
Lender percent Asian	-1.0	0.03 †
Lender percent Black	-0.2 †	0.4
Lender percent Hispanic	2.7	0.5
Lender percent Other	0.9	-0.5
Lender race non-reporting rate	25.5	4.8
Neighborhood Variables:		
Average applicant income	0.5 †	0.2
Denial rate	-0.4 †	0.3
FHA share	-0.8	0.02 †
Percent subprime	-1.5	-1.4
Asian share	0.4 †	-0.2
Black share	1.2	0.1 †
Hispanic share	0.5 †	-0.2
Other share	0.1 †	-0.2
Racial non-reporting rate	2.9	1.9
Predicted prob. for average application	11.67	4.17
Number of observations	26,604	252,386
Nagelkerke (1991) pseudo-R ²	0.44	0.23
Percent correctly classified	85.9	80.7

†Coefficient not statistically significant at P=0.05.

Data Source: FFIEC (1999-2002).

the negative mean partial impacts for all regulator indicators in the right-hand column of Table 6 (where the omitted category denotes independent mortgage firms). But in the subprime purchase market, independent mortgage companies are actually less problematic than mortgage subsidiaries of banks and bank holding companies, as well as lenders regulated by the Federal Reserve. The effects are even more pronounced for loans to existing owners (Table 7). Subprime specialization is far more common for independent, non-depositories than for traditional banks and thrifts, that among those banks who do specialize in subprime lending, non-reporting of gender and race is particularly widespread. For an owner approaching a subprime lender for a refinance loan, choosing a commercial bank (regulated by the OCC) or a mortgage subsidiary of a bank holding company increases non-reporting probabilities by more than 70 percent compared with an independent mortgage company. A full explanation of these effects would require extensive probing into the practices of loan officers as well as corporate boards and mid-level managers; but it seems as if mainstream banks lured by the profits of high-risk lending have relied heavily on business tactics that effectively erase applicant racial and gender information.

The third result highlights economies of scale and the changing competitive terrain of the mortgage business. Across most of the models, non-disclosure is more prevalent at lenders with substantial market share; but the results for the asset variables add complexity to the picture -- capturing differences in capitalization requirements and various institutions' specialization in residential loans as part of a diversified array of financial services products. Across all loan types, the subprime models reveal significant *negative* effects for the high-asset dummies (compared with the reference category, assets less than \$50 million), while the prime models yield *positive* effects. These findings thus support both of the contradictory hypotheses ventured earlier: the disappearance of race and gender is the product of small, subprime lenders emerging in the inner city (and no doubt using the kinds of schemes inflicted on Beatrice), as well as the

¹² The latter is attributable to a single lender, Provident Bank, a \$9 billion commercial bank based in Cincinnati reporting no gender information for 30 of the 45 applications it received for New York City properties.

¹³ Subprime lenders account for about 53 percent of all single-family loan applications to independent mortgage companies in the database, more than twice the figure for other institution types such as commercial banks or thrifts.
¹⁴ Although it is a simple matter to calculate institutions' reported assets from the HMDA files, the interpretation of these figures is somewhat complicated. Independent mortgage companies typically operate as pass-through entities – selling loans into the secondary market shortly after origination – and hold few assets. For diversified financial services firms, asset figures capture a variety of non-mortgage business holdings.

rise of deep- pocket, national financial services firms reaching customers through modern ecommerce solutions that inadvertently undermine the reporting provisions of HMDA.

Finally, a fourth set of findings centers on the role of local geographies. Across all loan types and lenders, neighborhood characteristics yield insignificant or negligible effects on the likelihood of non-reporting. The only coefficient even approaching substantive relevance appears in the mainstream home improvement market, where a one standard deviation rise in the overall neighborhood non-reporting rate increases the probability of individual non-disclosure by six percent; compared with all of the other predictor variables, this effect is almost meaningless. The obvious implication is that the intricate neighborhood patterns portrayed in Figures 2, 3, and 4 are purely incidental and derivative -- the byproduct of differences among homeowners and homebuyers, and of varied characteristics of lending institutions. But in light of the dominance of institutional factors across all of the model results, these patterns should not be seen as benign reflections of aspatial processes: they document the spatiality of mortgage industry practices in a time of turbulent change, as market competition creates an intricate web of predatory business practices atop a landscape of "classical" redlining and disinvestment (e.g., Bradford and Rubinowitz, 1975; Squires, 1992; Turner and Skidmore, 1999). It is worth noting that neighborhood-level factors pale in comparison with variables measuring specific practices and decisions of financial institutions: a one-standard deviation increase in a *lender's* non-reporting rate increases the probability of disappearance by at least 25 percent across all markets except prime, home purchase lending. For all purposes of research, regulation, and activism, local geographies of capital are being erased by the (unintended as well as deliberate) practices of lenders and brokers.

 Table 7. Mean Partial Impacts for Expanded Logistic Regressions,

 Home Improvement and Refinance Applications.

 Home Improvement
 Refinance

•	Home Improvement		Refina		
Variable	Subprime	All Others	Subprime	All Others	
Applicant income (\$,000)	1.4	1.4	0.3 +	-1.0	
Applicant income squared	0.2 †	-0.7 +	-0.6	1.0	
Principal and interest ratio	8.5	2.4	-1.7	-3.6	
Principal and interest ratio squared	-5.6	-1.8	0.5	3.2	
Exceeds single-family loan limit	-10.9 †	0.8 †	-2.9	-1.8	
FHA-insured	36.4	-30.0	-26.9	-9.5	
Owner occupancy	-7.1	4.1	-2.1	1.7	
Edit failure	-54.8	-8.5	-2.7 †	0.8	
Approved, declined by applicant	18.0	12.8	9.1	8.9	
Denied	28.8	16.7	17.0	10.4	
Withdrawn	30.7	33.2	25.4	15.2	
Closed as incomplete	35.0	25.4	10.5	27.4	
Denied for bad credit	1.6 †	4.0	1.6	0.5 †	
1999	1.5 †	2.6	-22.0	-0.6 †	
2000	11.2	1.8	-14.2	2.8	
2001	13.0	3.1	3.1	4.6	
	48.8	-38.6	72.2	7.4	
Bank (regulated by OCC)	44.3	-19.3	68.6		
Bank (FRB)				20.3	
Bank (FDIC)	43.8	-22.1	61.5	2.7	
Thrift (OTS)	61.0	-23.5	69.9	5.1	
Credit Union (NCUA)	25.0	-11.7 †	0.0	-15.6	
Mtg. co. owned by bank	35.0	-28.1	67.9	1.5 †	
Mtg. co. owned by thrift or credit us		30.3 †	-6.9	10.0	
Mtg. co. owned by bank/thrift holding		-29.7	70.8	-2.9	
Lender national market share	17.3	6.8	22.2	7.3	
Market share squared	-8.9	-3.6	7.7	-5.0	
Assets 50 to 250 million	-28.8	-7.0 †	-15.0	-6.2	
Assets 250m to 1 billion	-54.8	60.8	-21.9	28.7	
Assets 1 to 5 billion	-31.2	34.1	-30.6	6.4	
Assets 5 to 10 billion	-36.6	31.2	-29.6	8.8	
Assets 10 to 25 billion	-33.9	56.3	-8.0	14.6	
Assets 25 to 100 billion	-19.8	50.1	-33.9	17.5	
Assets more than 100 billion	-52.7	53.1	-31.3	11.4	
Lender denial rate	-12.1	-4.5	4.8	-5.0	
Lender FHA share	-10.5	16.4	8.5	-0.7	
Lender percent Asian	1.1	-2.9	9.8	1.1	
Lender percent Black	3.9	-12.4	9.3	2.7	
Lender percent Hispanic	-11.2	-5.6	-7.6	1.5	
Lender percent Other	2.9	5.0	-3.3	-1.2	
Lender race non-reporting rate	28.6	31.9	53.8	35.1	
Neighborhood variables:					
Average applicant income	0.5 †	0.2 †	0.3 †	-0.1 †	
Denial rate	0.7 †	-1.4	0.2 †	-0.2 †	
FHA share	1.4	-0.2 †	0.6	0.3 †	
Percent subprime	-5.8	-5.2	-2.4	-1.3	
Asian share	0.3 †	-0.9	0.4	0.2 †	
Black share	-3.8	2.0	0.4 †	-0.4	
Hispanic share	-1.7	0.3 †	-0.5	-0.1 †	
Other share	0.2 †	-0.1 †	0.5	-0.3	
Racial non-reporting rate	3.9	6.0	2.3	4.4	
Predicted prob. for average applicat		30.01	30.1	15.9	
Number of observations	33,952	49,388	150,625	186,169	
Nagelkerke (1991) pseudo-R ²	0.55	0.53 87.8	0.590	0.48	
Percent correctly classified	88.4	01.0	90.4	86.5	

†Coefficient not statistically significant at P=0.05.

Data Source: FFIEC (1999-2002).

Conclusions

What conclusions can be drawn from this research? Several facets of our analysis are quite simple. Gender has been almost completely ignored in fair lending research, obscuring the abuses of a growing number of low-income women of color in inner-city neighborhoods. Gender, race, and ethnicity have been partially erased from the main source of public data used to monitor urban credit markets. Disappearance is often most prevalent in precisely those places where complete information is most urgently needed. Although there is limited evidence that some women and men actively choose not to report the information, multivariate models strongly suggest that the process is much more closely tied to the characteristics and business practices of lending institutions, brokers, and others agents involved in the housing finance industry.

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But if our empirical findings are simple, they raise extremely complex and controversial implications. What are we to make of politics and method in these data? (Curry, 1997; Hannah, 2001; Ley, 2003; Massey and Meegan, 1986; Ross and Yinger, 2002) As one illustration, consider the perspective of Lawrence B. Lindsey, former economic policy adviser to President Bush, who previously held the Arthur F. Burns Chair at the American Enterprise Institute for Public Policy Research. In an essay a few years ago, Lindsey (2000) portrayed "community development at a crossroads." Juxtaposing the work of community development "professionals" working on financial deals with city leaders and private businesses with an account of "busloads of protesters" arriving at the home of then-Senate Banking Committee Chairman Phil Gramm, Lindsey (2000, p. 54) wrote:

"These are the two faces of community development: noisy protest and quiet accomplishment. Of course it is fair to argue that today's successes might not have been possible without the protests of the past. But that is a point about the past. Today we must look to our future.... Of course many of today's political leaders spent their college days in protest marches. One can act one way at age 20 and another at age 40. It is called growing up."

Lindsey blamed an alliance of noisy protesters and "extortionists" for tarnishing the good name of "real" community development professionals, and he compared the situation to the image crisis for Republicans when former Ku Klux Klan leader David Duke campaigned under the party's banner. Lindsey (2000, p. 54) advised the "real" professionals to distance themselves from the protesters at Phil Gramm's house: "Tell him you're sorry to hear what some people did to his yard. Tell him that you are a real community development professional, they aren't."

Lindsey's essay infuriated many in the community reinvestment movement (see, e.g., the contributions in Squires, 2003). But even if we try to view Lindsey's remarks in a sympathetic light, it is clear that the simple dichotomies of protest vs. "professionalism," or twenty-something vs. forty-something, are misleading. The community reinvestment movement *did* "grow up" as Lindsey advises. Most, but not all, advocates are spending less of their time organizing and agitating in the streets, and more of their time striking deals while a small staff or a group of interns labors to produce an almost endless array of numerical tabulations, Lexis/Nexis searches, maps of lending patterns, and regression models. We must not dismiss the professionalism and dedication of advocates working in offices and boardrooms, but we cannot ignore the professionalism of young and old protesters in the streets yesterday and today. Discomforting but creative and nonviolent protest built the entire infrastructure of fair lending, right-to-know laws, and community reinvestment. Congress did not enact laws on the basis of polite negotiations (impossible when legislators refused to meet with advocates) or incontrovertible econometric "proof" (impossible when the data did not even exist) -- but as an inherently political response to rights-claims advanced by a fundamentally political movement.

Unfortunately, this realm of statistical citizenship is in a precarious position. Non-disclosure weakens the analytical value of the data for fair lending research in ways that are difficult to measure (Huck, 2001) and even more tricky to convey to the press and legislators. And apparently Phil Gramm was unmoved by any apologies he might have received. In late 1999 he finally succeeded in his long-running drive to repeal the Glass-Steagall Act and its firewalls between banks, insurance companies, and securities firms. Gramm had long viewed community groups as extortionists, and thus in the House-Senate conference committee he stood firm on several measures weakening CRA in the final version of the Gramm-Leach-Bliley Financial

Services Modernization Act of 1999 (U.S. Congress, 1999). GLiBA legalized the previous year's temporarily-permitted merger of Travelers and Citicorp into the nation's largest financial services corporation, with assets of some \$668 billion.

But the end of the story is just the beginning. We are influenced here by David Ley's (2003) eloquent analysis of the text of "official" statistics in Canada's business immigration program: selective presentation of achievements among failed and marginal entrepreneurs holds partial benefits for the program's administrators as well as the migrants themselves, so that the "numbers represent, above all, the materialization of mutual desire....despite the 'certainty' of official statistics, despite even a putative suprahuman space of flows, all are embedded in a vital social world of intention, performance, and persuasion." (Ley, 2003, pp. 438-439). In the social world we have tried to map in this paper, the performers are varied indeed. In the years after Citigroup's birth from the 1998 merger, the firm seemed to be at the center of some very interesting, although perhaps purely coincidental, developments in the politics of numbers. The barrage of headlines paints a painfully ambiguous portrait of statistical citizenship in the shadow of power. When Citigroup's mortgage records for 1999 were released in July of 2000, fifteen of the firm's twenty-four HMDA reporting subsidiaries posted gender and race non-disclosure rates over 80 percent.¹⁵ In September 2000 Citigroup announced its acquisition of Associates First Capital, a large and highly profitable subprime lender that had been named in more than 700 private lawsuits alleging many different kinds of predatory practices (Oppel and McGeehan, 2000). The acquisition made Citigroup's consumer finance arm (Citifinancial) the nation's largest, but in March, 2001 the deal also got Citi named in a Federal Trade Commission lawsuit alleging a broad range of deceptive marketing practices (Oppel, 2001). A few months later, in July 2001, the Appellate Division of the Superior Court of New Jersey issued its decision allowing Beatrice's attorneys to proceed on discovery for evidence of unfair and predatory practices and racial targeting by Associates Home Equity Services (Superior Court of New Jersey, 2001). Citifinancial, now the owner of Associates, promptly filed a motion for reconsideration with the Appellate Court (Collins, 2001). Beatrice, who once owned her home free and clear, still lives in the same house (Newman, 2001). In August 2001 the obituaries

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¹⁵ This tabulation refers to a database of all single-family loan requests filed in 1999 in metropolitan areas with populations of at least one million.

reported the passing of one of those noisy protesters who stood on Phil Gramm's lawn -- Gale Cincotta, who led the anti-redlining struggles in Chicago in the early 1970s (Martin, 2001). She was remembered as the "mother of the Community Reinvestment Act" and for her war cry: "We want it. They've got it. Let's go get it." (Martin, 2001; Squires, 2003). In November 2001 former Treasury Secretary Robert Rubin placed a telephone call on behalf of Citigroup to ask whether Treasury officials might be willing to intervene with bond-rating agencies to stop the free-fall of a company named Enron (Thomas, 2002). Enron, whose board of directors included a former head of the Commodity Futures Trading Commission (Wendy Gramm) collapsed a month later. The firm's energy-trading business was subsequently acquired by Warburg, which was acquired by UBS which had acquired the PaineWebber brokerage firm for \$12 billion a few years earlier (McGeehan, 2002). In October 2002 Phil Gramm announced that after retiring from the U.S. Senate he would accept a position as a vice chairman of UBS Warburg, which soon renamed itself UBS because of massive consumer confusion in the wake of its repeated mergerinduced name changes. Responding to reporters' questions, Gramm said that Citigroup, arguably the biggest beneficiary of his legislation, had not offered him a job. But Gramm, who holds a Ph.D. in economics from the University of Georgia, was nevertheless enthusiastic: "I am as excited about being an investment banker as I was on the day I was elected to Congress and the day I got my Ph.D." (McGeehan, 2002). A week later Citigroup reported a 23 percent increase in third-quarter profits, prompting a sudden, healthy bounce in Citi stock and offering a brief respite from the ongoing investigations into possible conflicts of interest at the firm's investment bank, Salamon Smith Barney. Citigroup chairman Sanford I. Weill told analysts in a conference call, "Our company wants to do what is right, not just from a legal point of view, but what is understood by the man in the street." (Atlas, 2002).

References

ACORN. 2000. Separate and Unequal: Predatory Lending in America. Washington, DC: Association of Community Organizations for Reform Now.

Atlas, Riva D. 2002. "Earnings Up at Citigroup Despite Other Woes." New York Times, October 16, C1, C13.

Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision. 1999. *Interagency Guidelines on Subprime Lending*. March 1. Washington, DC: Federal Financial Institutions Examination Council.

Bradford, Calvin, and L. S. Rubinowitz. 1975. "The Urban-Suburban Disinvestment Process: Consequences for Older Neighborhoods." *Annals of the American Academy of Political and Social Science* 422: 77-86.

Browne, Lynne E., and Geoffrey M.B. Tootell. 1995. "Mortgage Lending in Boston: A Response to the Critics." *New England Economic Review*, September/October: 53-78.

California Department of Justice. 2003. Classification by Race, Ethnicity, Color or National Origin Initiative Constitutional Amendment. SA2001RF0027, Qualified for the October 7, 2003 Statewide Special Election. Available at http://www.caag.state.ca.us/initiatives/activeindex, last accessed August 27. Sacramento: Office of the Attorney General, California Department of Justice.

Canner, Glenn, Elizabeth Laderman, and Wayne Passmore. 1999. "The Role of Specialized Lenders in Extending Mortgages to Lower-Income and Minority Home Buyers." *Federal Reserve Bulletin* 85(November), 709-731.

Canner, Glenn B., and Stuart A. Gabriel. 1992. "Market Specialization and Lender Specialization in the Primary and Secondary Mortgage Markets." *Housing Policy Debate* 3(2), 241-329.

Christie, Hazel. 2000. "Mortgage Arrears and Gender Inequalities." Housing Studies 15(6), 877-905.

Coalition for Responsible Lending. 2002. *The Case for Predatory Lending Reform*. Available at http://www.responsiblelending.org/lending_basics/reform.cfm, accessed January 11, 2003. Durham, NC: Coalition for Responsible Lending.

Collins, Brian. 2001. "NJ Ruling May Set 'Reverse Redlining' Precedent." American Banker 10(13), August, 36.

Cope, Meghan. 1998. "Home-Work Links, Labor Markets, and the Construction of Place in Lawrence, Massachusetts, 1920-1939." *Professional Geographer* 50(1), 126-140.

Drysdale, Lynn, and Kathleen Keest. 2000. "The Two-Tiered Consumer Financial Service Marketplace: The Fringe Banking System and its Challenge to Current Thinking about the Socioeconomic Role of Usury Law in Today's Society." *South Carolina Law Review* 51, 589.

Dymski, Gary A. 1999. The Bank Merger Wave: The Economic Causes and Social Consequences of Financial Consolidation. Armonk, NY: M.E. Sharpe.

Eggert, Kurt. 2003. "Servicing Abuse and Predatory Lending." Paper presented at the *Symposium on Market Failures and Predatory Lending*. Chicago, IL, May. Boston, MA: National Consumer Law Center.

Ellen, Ingrid Gould, Michael H. Schill, Scott Susin, and Amy Ellen Schwartz. 2002. "Building Homes, Reviving Neighborhoods: Spillovers from Subsidized Construction of Owner-Occupied Housing in New York City." In Nicolas P. Retsinas and Eric S. Belsky, eds., *Low-Income Homeownership: Examining the Unexamined Goal*, 447-477. Cambridge, MA/Washington, DC: Harvard Joint Center for Housing Studies/Brookings Institution Press.

Engel, Kathleen C., and Patricia A. McCoy. 2003. "Securitization and Predatory Mortgage Lending." Paper presented at the *Symposium on Market Failures and Predatory Lending*. Chicago, IL, May. Boston, MA: National Consumer Law Center.

Engel, Kathleen C., and Patricia A. McCoy. 2002. "A Tale of Three Markets: The Law and Economics of Predatory Lending." *Texas Law Review* 80(6), 1255-1381.

Federal Financial Institutions Examination Council. Annual. *Home Mortgage Disclosure Act, Loan Application Register Data on CD-ROM.* Washington, DC: FFIEC.

Federal Financial Institutions Examination Council. 2003. Fact Sheet, Nationwide Summary Statistics for 2002 HMDA Data. Available at http://www.ffiec.gov/hmcrpr/hm_fs02.htm, last accessed August 26. Washington, DC: FFIEC.

Federal Reserve Board. 2000. "Part 203: Home Mortgage Disclosure (Regulation C)." 12 Code of Federal Regulations Chapter II, 1 January 2000 edition, 70-93.

Fishbein, Allen J. 1992. "The Ongoing Experiment with Regulation from Below: Expanded Reporting Requirements for HMDA and CRA." *Housing Policy Debate* 3(2), 601-636.

Gilbert, Melissa R. 1998. "Race,' Space, and Power: The Survival Strategies of Working Poor Women." *Annals of the American Association of Geographers* 88(4), 595-621.

Haag, Susan W. 2000. *Community Reinvestment and Cities: A Literature Review of CRA's Impact and Future*. Discussion Paper 00-02. Washington, DC: Center on Urban and Metropolitan Policy, Brookings Institution.

Hanson, Susan, and Geraldine Pratt. 1995. Gender, Work, and Space. London: Routledge.

Hayden, Dolores. 1984. Redesigning the American Dream. New York: Norton.

Hochschild, Arlie Russell. 2003. *The Commercialization of Intimate Life: Notes from Home and Work*. Berkeley: University of California Press.

Holloway, Steven R. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio." *Annals of the Association of American Geographers* 88: 252-276.

Huck, Paul. 2001. "Home Mortgage Lending by Applicant Race: Do HMDA Figures Provide a Distorted Picture?" *Housing Policy Debate* 12(4), 719-736.

HUD-Treasury Joint Task Force. 2000. Final Report and Recommendations of the Predatory Lending HUD-Treasury Joint Task Force. Washington, DC: U.S. Department of Housing and Urban Development.

Hurd, Maude, and Steven Kest. 2003. "Fighting Predatory Lending from the Ground Up: An Issue of Economic Justice." In Gregory D. Squires, ed., *Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions*, 119-134. Philadelphia: Temple University Press.

Interagency Regulatory Task Force. 1994. "Policy Statement on Discrimination in Lending." *Federal Register*, 15 April, (59): 18,266-18,274.

Jarvis, Helen. 1997. "Housing, Labour Markets and Household Structure: Questioning the Role of Secondary Data Analysis in Sustaining the Polarization Debate." *Regional Studies* 31(5): 521-531.

Kwan, Mei-Po. 1999. "Gender, the Home-Work Link, and Space-Time Patterns of Nonemployment Activities." *Economic Geography* 75(4), 370-394.

LaCour-Little, Michael. 1999. "Discrimination in Mortgage Lending: A Critical Review of the Literature." *Journal of Real Estate Literature* 7: 15-49.

Ley, David. 2003. "Seeking Homo Economicus: The Canadian State and the Strange Story of the Business Immigration Program." *Annals of the Association of American Geographers* 93(2), 426-441.

Lindsey, Lawrence B. 2000. "Community Development at a Crossroads." *NeighborWorks Journal*, Winter 2000, 54-55.

Listokin, David, and Stephen Casey. 1980. *Mortgage Lending and Race: Conceptual and Analytical Perspectives on the Urban Financing Problem.* New Brunswick, NJ: Center for Urban Policy Research, Rutgers University.

Litan, Robert E. 2001. A Prudent Approach to Preventing 'Predatory' Lending. Washington, DC: Brookings Institution.

Lustberg, Lawrence S., and Risa E. Kaufman. 2001. *Brief and Appendix of New Jersey Institute for Social Justice, Inc., Amicus Curiae for Defendants/Appellants Beatrice Troup and Curtis Troup.* Docket No. A-3410-00T1. Trenton, NJ: Superior Court of New Jersey, Appellate Division.

Massey, Doreen, and Richard Meegan, eds. 1986. *Politics and Method: Contrasting Studies in Industrial Geography*. London: Routledge and Kegan Paul.

Mariano, Joe. 2003. "Where the Hell did Billions of Dollars for Reinvestment Come From?" In Gregory D. Squires, ed., *Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions*, 27-42. Philadelphia: Temple University Press.

Martin, Douglas. 2001. "Gale Cincotta, 72, Opponent of Biased Banking Policies." Obituary. *New York Times*, August 17, B9.

McGeehan, Patrick. 2002. "Texas Republican to Join UBS After He Retires from Senate." *New York Times*, October 8, C5.

McLafferty, Sara. 1995. "Counting for Women." Professional Geographer 47(4), 436-442.

Munnell, Alicia, Geoffrey M.B. Tootell, Lynne E. Browne, and James McEneaney. 1996. "Mortgage Lending in Boston: Interpreting HMDA Data." *American Economic Review* 86: 25-53.

Myers, Samuel L., Jr., and T. Chan. 1995. "Racial Discrimination in Housing Markets: Accounting for Credit Risk." *Social Science Quarterly* 76: 543-561.

Nagelkerke, N. J. D. 1991. "A Note on a General Definition of the Coefficient of Determination." *Biometrika* 78(3), 691-692.

Nakamura, Leonard. 1993. "Loan Screening Within and Outside Customer Relationships." Federal Reserve Bank of Philadelphia Working Paper 93-15. Philadelphia: Federal Reserve Bank of Philadelphia.

National Community Reinvestment Coalition. 2002. 2002 Anti-Predatory Lending Toolkit. Washington, DC: National Community Reinvestment Coalition.

National Community Reinvestment Coalition. Annual. *America's Best and Worst Lenders*. Updated rankings and worksheets available at http://www.ncrc.org. Washington, DC: National Community Reinvestment Coalition.

Nothaft, Frank E., and Brian J. Surette. 2002. "The Industrial Structure of Affordable Mortgage Lending." In Nicolas P. Retsinas and Eric S. Belsky, eds., *Low-Income Homeownership: Examining the Unexamined Goal*, 64-104. Cambridge, MA/Washington, DC: Harvard Joint Center for Housing Studies/Brookings Institution Press.

Newman, Richard. 2001. "New Jersey Lawsuit Accusing Lender of Racial Bias May Set Precedent." *Bergen Record*, August 10.

Oppel, Richard A., Jr. 2001. "U.S. Suit Cites Citigroup on Loan Deceit." New York Times, March 7, A1.

Oppel, Richard A., Jr. and Patrick McGeehan. 2001. "Along with a Lender, is Citigroup Buying Trouble?" *New York Times*, October 22, Section 3, 1, 15.

Relman, John P. 2003. "Taking it to the Courts: Litigation and the Reform of Financial Institutions" In Gregory D. Squires, ed., *Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions*, 55-71. Philadelphia: Temple University Press.

Retsinas, Nicolas P., and Eric S. Belsky, eds. 2002. *Low-Income Homeownership: Examining the Unexamined Goal*. Cambridge, MA/Washington, DC: Harvard Joint Center for Housing Studies/Brookings Institution Press.

Ross, Stephen L., and John Yinger. 2002. *The Color of Credit: Mortgage Discrimination, Research Methodology, and Fair Lending Enforcement.* Cambridge, MA: MIT Press.

Sanders, Cynthia K., and Edward Scanlon. 2000. "Mortgage Lending and Gender." Affilia 15(1), 9-30.

Scheessele, Randall M. Annual. *Subprime and Manufactured Lender Lists*. Updated and downloadable lender lists, originally published as part of 1998 HMDA Highlights, Housing Finance Working Paper Series, HF-09. Available at http://www.huduser.org/publications/hsgfin Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Schwartz, Alex. 1998. "From Confrontation to Collaboration? Banks, Community Groups, and the Implementation of Community Reinvestment Agreements." *Housing Policy Debate* 9(3), 631-662.

Skaburskis, Andrejs. 1997. "Gender Differences in Housing Demand." Urban Studies 34(2): 275-320.

Smith, Susan J. 1990. "Income, Housing Wealth, and Gender Inequality." Urban Studies 27: 67-88.

Squires, Gregory D. 1992. From Redlining to Reinvestment: Community Response to Urban Disinvestment. Philadelphia: Temple University Press.

Superior Court of New Jersey, Appellate Division. 2001. *Associates Home Equity Services, Inc. v. Beatrice Troup et al.* (*Essex County*). Decided July 25, available at http://www.judiciary.state.nj.us/opinions/A3410-00.htm, last accessed August 8, 2001. Trenton, NJ: New Jersey Superior Court.

Thomas, Landon, Jr. 2002. "Guiliani to the Rescue of the World? No, Just WorldCom." *New York Times*, November 21, A31.

Turner, Margery A., and Felicity Skidmore, eds. 1999. *Mortgage Lending Discrimination: A Review of Existing Evidence*. Washington, DC: Urban Institute.

- U.S. Congress. 1975. Home Mortgage Disclosure Act: A Bill to Improve Understanding of the Role of Depository Institutions in Home Financing. Passed December 31. Public Law 94-200. Washington, DC: U.S. Congress.
- U.S. Congress. 1977. Housing and Community Development Act: A Bill to Amend Certain Federal Laws Pertaining to Community Development, Housing, and Related Programs. [Title VIII is widely known as the Community Reinvestment Act.] Passed October 12. Public Law 95-128. Washington, DC: U.S. Congress.
- U.S. Congress. 1989. Financial Institutions Reform, Recovery, and Enforcement Act of 1989: A Bill to Reform, Recapitalize, and Consolidate the Federal Deposit Insurance System, to Enhance the Regulatory and Enforcement Powers of Federal Financial Institutions Regulatory Agencies, and For Other Purposes. Passed August 9. Public Law 101-73. Washington, DC: U.S. Congress.

U.S. Congress. 1999. *Gramm-Leach Bliley Financial Services Modernization Act.* Passed October 28. Washington, DC: U.S. Congress.

U.S. Office of Management and Budget. 1997. "Revisions to the Standards for the Classification of Data on Race and Ethnicity." *Federal Register* 62(210), 5871-5890.

U.S. Supreme Court. 2003a. *Gratz et al. v. Bollinger et al.* Case 02-516, argued April 1, decided June 23. Slip Opinion. Washington, DC: Supreme Court of the United States.

U.S. Supreme Court. 2003b. *Grutter v. Bollinger et al.* Case 02-241, argued April 1, decided June 23. Slip Opinion. Washington, DC: Supreme Court of the United States.

Wachter, Susan M. 1980. "The 1968 Congressional FHA Amendments to the National Housing Act: Their Impact on Urban Areas." In Norman J. Glickman, ed., *The Urban Impacts of Federal Policies*, 426-448. Baltimore: Johns Hopkins University Press.

Yinger, John D. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. New York: Russell Sage Foundation.

Yinger, John D. 1998. "Housing Discrimination is Still Worth Worrying About." *Housing Policy Debate* 9(4): 893-927.

Zimmerman, Ken. 2001. *Memo: New Jersey Appellate Division Recognizing Predatory Lending*. July 29. Newark, NJ: New Jersey Institute for Social Justice.