CHANGING FINANCIAL MARKETS AND COMMUNITY DEVELOPMENT

A Federal Reserve System Community Affairs Research Conference

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Editors
Jackson L. Blanton
Vice President and Community Affairs Officer
Federal Reserve Bank of Richmond

Alicia Williams
Vice President and Community Affairs Officer
Federal Reserve Bank of Chicago

Sherrie L.W. Rhine
Economist, Consumer Issues Research
Federal Reserve Bank of Chicago

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PREFACE

Building bridges between our educational institutions, the private business sector, and community organizations will be an essential aspect of our efforts to increase familiarity with new technological and financial tools that are fundamental to improving individual economic well-being.

Alan Greenspan
Chairman, Board of Governors
of the Federal Reserve System

The Community Affairs Officers of the Federal Reserve System are pleased to present the proceedings of the Changing Financial Markets and Community Development conference, held April 5 and 6, 2001, in Washington, D.C. The proceedings include papers or summaries of the papers presented by distinguished economists and scholars from across the country. The papers are reviewed by conference discussants, who have extensive experience in the field. We are grateful to the authors and discussants for sharing their findings on an important aspect of our free enterprise system.

This research represents the latest work in the field from academia, policy institutions, and the Federal Reserve System. The papers and the reviews offer fresh insight into new industry developments and products and how they and alternative service providers affect the delivery of services to the unbanked, techniques developed to increase accumulated wealth in low- and moderate-income populations, and measures of how bank consolidation and CRA have affected the delivery and profitability of lending programs.

These proceedings are designed to further understanding of community development lending and credit issues among scholars, practitioners, and policymakers. We hope that future conferences and publications like this one will further encourage ongoing research and discussion of these and other topics related to community economic development.

WELCOMING ADDRESS: RESEARCH IN THE POLICY PROCESS

Edward M. Gramlich
Member, Board of Governors of the Federal Reserve System

I am pleased to welcome you to the second Community Affairs research conference, Changing Financial Markets and Community Development. For this two-day conference, we have succeeded in bringing together participants from academia, financial institutions, faith-based organizations, community organizations, foundations, and government. We have designed the conference to present new academic research on how changes in the financial markets are affecting low- and moderate-income communities and on the effectiveness of community development programs. During your time here, you will hear about changing financial markets, about the unbanked population and alternative financial service providers, and about developments in the financial industry, wealth creation, and the effectiveness of the Community Reinvestment Act. We hope that the research findings and the debate and discussion generated will leave us all better informed about community development.

The past decade has seen a dramatic change in financial services. Consolidation, globalization, deregulation, and technological innovation have altered the manner in which banks do business. But these market forces have not changed the urgent needs that are still apparent in many low- and moderate-income neighborhoods. Community development organizations have met the challenges of the new marketplace, have embraced their rapidly expanding roles, and are working to ensure that their constituents, the residents of underserved communities, have access to affordable housing as well as to fundamental financial management, credit, and wealth-building tools. Community developers have responded by becoming more knowledgeable and more sophisticated and by undertaking increasingly more complex development tasks. These groups recognize that bricks and mortar are not the only building blocks for distressed communities. Jobs, training, education, and opportunity are also vital components in the transformation of neighborhoods.

Financial institutions have likewise been challenged to find new opportunities for development. Over the past decade, lenders have found new market niches, broken geographic barriers, employed advanced banking technologies, and developed sophisticated products and services to keep pace with ever-changing financial markets.

In this dynamic environment, we continually search for information and knowledge to help us broaden our understanding of the issues facing both financial services and community development. The various research gatherings we have hosted help us write more effective regulations, develop innovative services, revitalize communities, and expand economic opportunity, especially for lower-income households. This morning I make just a few observations about the effect of research on public policy — and why it serves our interests at the Federal Reserve Board to have you continue to delve into the intricacies of issues related to financial services and community development.

Research helps to inform our decision-making process. It can help us define the issues or problems being addressed and sharpen our understanding of financial markets. It also offers us a means to challenge the assumptions we develop as we review policy options and revise regulations.

Research also enables us to quantify the likely impact of the rules we write — to see if the rules can be expected to have the desired effects or if unintended adverse consequences could ensue. Once rules and regulations are in place, research helps us measure and assess how well the law and our regulations are achieving their intended goals.

And, as a former academic, I should also stress that research is in a sense its own reward — it stimulates clearer thinking, better behavioral models, more efficient data collection, and in general more knowledge about the way community processes work.

Recently, one particular policy issue has emphasized the valuable role that research plays in informing the policy and decision-making process. Distressing reports of abusive lending practices connected with home-secured loans have captured our attention and prompted calls for regulatory action. Anecdotes about predatory loans — high-cost loans that are unaffordable, unsuitable, unfair, deceptive, or fraudulent — have proliferated around the country. And yet, the information we have about predatory lending is essentially anecdotal. We have no ready method for measuring the amount of predatory lending or determining how prevalent a problem it truly represents.

Studies of urban metropolitan data submitted under the Home Mortgage Disclosure Act (HMDA) have shown that lower-income and minority consumers, who have traditionally had difficulty in getting mortgage credit, have been taking out loans at record levels in recent years. Specifically, conventional home-purchase mortgage lending to low-income borrowers nearly doubled between 1993 and 1999.

Much of this increased lending can be attributed to the development of the subprime mortgage market. Again using HMDA data, we see a thirteen-fold increase in the number of subprime home equity loans and a sixteen-fold increase in the number of subprime loans to purchase homes. The rapid growth in subprime lending has expanded homeownership opportunities and provided credit to consumers who have difficulty in meeting the underwriting criteria of prime lenders because of blemished credit histories or other aspects of their profiles. As a result, more Americans now own a home, are building wealth, and are realizing cherished goals.

However, this attractive picture of expanded credit access is marred by those very troubling reports of abusive and unscrupulous credit practices, predatory lending practices, that can strip homeowners of the equity in their homes and ultimately even result in foreclosure. We readily draw a distinction between the types of credit practices that are legitimate and those that give rise to concern. Subprime loans to low-income borrowers made under practices in which both lenders and borrowers truly understand the deal should go on — these are an important part of the American dream for low-income borrowers. Abusive practices should be stopped.

Though we have held discussions on the different categories of subprime loans, the credit profiles of vulnerable borrowers, and the marketing and underwriting tactics that predatory lenders employ, we find that the absence of hard data inhibits a full understanding of the predatory lending problem. Exactly what are the most egregious lending practices? How prevalent are they? How can they be stopped? Absent the available data and the analysis and relationships they reveal, rulemakers and policymakers are challenged to ensure that their actions do not have unintended consequences. We are mindful that expansive regulatory action intended to deter predatory practices may discourage legitimate lenders from providing loans and restrict the access to credit that we have worked so hard to expand.

The Board has recently proposed changes to the Home Ownership and Equity Protection Act (HOEPA) and to HMDA in an effort to enhance the public's and the regulatory agencies' understanding of the home mortgage market in general and the subprime market in particular. The expansion in the HOEPA definition of a high-cost loan will broaden the scope of mortgage loans subject to HOEPA coverage and prohibit specific acts and practices. Changes to HMDA reporting requirements would improve the quality and utility of the resulting data by:

- increasing the number of nondepository lenders required to submit data;
- clarifying and expanding the types of reportable transactions; and
- specifying new loan elements to be included in the data, such as the average percentage rate of interest.

Increased data collection is one step in gaining a broader understanding of the business practices of subprime lenders and in helping us distinguish appropriate from inappropriate lending practices.

We will all benefit from the studies and research that result from an expanded knowledge of subprime lending. Certainly our understanding of credit discrimination has already been improved by research using HMDA data. HMDA data and the analysis that researchers and others have undertaken using the data have helped us to detect possible instances of discrimination and created a heightened awareness of fair lending issues. The new data should give us another lens with which to examine lending practices and should offer us a more complete picture of the home mortgage market — a result we could all agree is beneficial.

The Federal Reserve System works to promote a better understanding of the forces that shape our economy. This conference, I believe, will offer fresh insight into changing financial markets and community development. I hope the outcome will be more research, more study, more publication, more discussion about community development issues, and better regulatory policies. I look forward to the discussions and wish you a successful conference.

Edward M.Gramlich took office in November 1997 as a member of the Board of Governors of the Federal Reserve System to fill an unexpired term ending January 2008. Before becoming a member of the Board, Gramlich served as Dean of the School of Public Policy at the University of Michigan. He also served as Professor of Economics and Public Policy, Chair of the Economics Department, and Director of the Institute of Public Policy Studies. Gramlich has extensive governmental experience. He was Chair of the Quadrennial Advisory Council on Social Security, and Deputy Director and Acting Director of the Congressional Budget Office. He also was Director of the Policy Research Division at the Office of Economic Opportunity, Senior Fellow at the Brookings Institution, and a staff member of the Research

Division of the Federal Reserve Board. Gramlich's popular text on benefit-cost analysis is in its second edition; he has also written several other books and many articles on such topics as macro-economics, budget policy, income redistribution, fiscal federalism, social security, and the economics of professional sports. He received a B.A. from Williams College and his M.A. and Ph.D. in economics from Yale University.

Keynote Address: The Importance of Education in Today's Economy

Alan Greenspan
Chairman, Board of Governors of the Federal Reserve System

I am pleased that this conference has drawn together such a knowledgeable group of economists, academics, lenders, practitioners, and other experts to address issues of great significance to consumers and banking communities. There are, no doubt, many different views on the effects that credit scoring, wealth creation strategies, and the Community Reinvestment Act are having on the availability and accessibility of financial services to lower-income populations and small businesses. But I think we would all agree that sound analysis and open discussion in meetings like this are essential to furthering our understanding of financial markets and how they serve the diverse financial needs of our populace.

In my remarks today, I would like to offer some observations on how the rapid adoption of new information technologies has expanded the scope and utility of our financial products and on how we can address some of the challenges these changes pose to our efforts to ensure that our financial system meets the evolving needs of businesses and consumers.

Given the importance of accurate and timely information in the financial services industry, it is not surprising that this sector has been affected enormously by the adoption of new technologies. The resultant advances in the flow of information have greatly facilitated the development of a wide range of new financial products. Similarly in the case of household and business credit, computer and telecommunications technologies have lowered the cost and broadened the scope of financial services. As a consequence, we have seen a proliferation of specialized lenders and new financial products that are tailored to meet very specific market needs. At the same time, the development of credit-scoring tools and the securitization of pools of loans hold the potential for opening doors to national credit markets for both consumers and businesses.

Overall, our evolving economic and financial systems have been highly successful in promoting growth and higher standards of living for the majority of our citizens. But we need to reach further to engage those who have not been able to participate fully. The results of the Federal Reserve's most recent Survey of Consumer Finances, for example, indicate that families with low-to-moderate incomes and some minority groups did not appear to fully benefit from the highly favorable economic developments of the mid-1990s. Between 1995 and 1998, the median real net worth for all families increased 17.5 percent, whereas the median net worth for families with incomes below $25,000 declined and medians for non-whites and Hispanics were little changed. Although this performance leaves much to be desired, positive signs can also be found. For example, between 1995 and 2000 the homeownership rate among minorities rose from 44 percent to 48 percent, and for the first time, the fraction of households without some kind of transaction account fell below ten percent.

One challenge we face in expanding opportunity for all Americans is to overcome the anxieties created by technological innovation. In the workplace, for example, significant segments of our population have exhibited fears that their skills will not be adequate to deal with a rapidly changing work environment. Clearly, technological advances make some jobs obsolete — for example, switchboard operators and tenders of typesetting machines. But even for many other workers, a rapidly evolving work environment in which the skill demands of their jobs are changing can lead to very real concerns about losing their jobs.

One very tangible response to this anxiety has been a massive increase in the demand for educational services. The day when a high-school or college education would serve a graduate for a lifetime is gone. Today's recipients of diplomas expect to have many jobs and to use a wide range of skills over their working lives. As a result, we are moving toward a more flexible educational system — one that integrates work and training and that serves the needs both of experienced workers at different stages in their careers and of students embarking on their initial course of study. Community colleges, for example, have become important providers of job skills training not just for students who may eventually move on to a four-year college or university but also for individuals with jobs — particularly older workers seeking to retool or retrain.

As in the workplace, fostering education that will enable individuals to overcome their reluctance or inability to take full advantage of technological advances and product innovation in the financial sector can be a means of increasing economic opportunity. As market forces continue to expand the range of providers of financial services, consumers will have more choice and flexibility in how they manage their financial matters. They will also need to accumulate the appropriate knowledge on how to use new technologies and on how to make financial decisions in an informed manner.

Indeed, surveys repeatedly demonstrate a strong link between education and the use of new financial technologies. For example, data from the Survey of Consumer Finances suggest that a higher level of education significantly increases the chances that a household will use an electronic banking product. In particular, in 1998, the typical user of an electronic source of information for savings or borrowing decisions had a college degree--a level of education currently achieved by only about one-third of U.S. households.

Similarly, education can play a critical role in equipping consumers with the fundamental knowledge required to choose among the myriad of products and providers in the financial services industry. This is especially true for populations that have traditionally been underserved by our financial system. In particular, financial literacy education may help to prevent vulnerable consumers from becoming entangled in some types of financially devastating credit arrangements.

One long-standing source of concern is abusive lending practices that target specific neighborhoods or vulnerable segments of the population and can result in unaffordable payments, equity stripping, and foreclosure. With this issue in particular, consumer and community advocates, bankers, and policymakers have all sought to raise consumer awareness about the dangers of such aberrant lending practices, and financial education is an important component of their efforts.

In addition, education can help to provide individuals with the financial knowledge necessary to create household budgets, initiate savings plans, and make strategic investment decisions for their retirement or children's education. Such financial planning can help families to meet their near-term obligations and to maximize their longer-term financial well-being.

While data available to measure the efficacy of financial education are not plentiful, the limited research available on the benefits of financial education programs is encouraging. For example, a recent study by Freddie Mac, one of the nation's largest purchasers of home mortgages, finds that homebuyers who obtain structured homeownership education have reduced rates of loan delinquency. Similarly, an evaluation conducted by the National Endowment for Financial Education on its high-school-based programs found that participation in financial-planning programs improved students' knowledge, behavior, and confidence with respect to personal finance, with nearly half of participants beginning to save more as a result of the program. And a recent study of the relationship between financial behavior and financial outcomes revealed that comprehension of the general principles of sound financial behavior, such as budgeting and saving, is actually more beneficial in producing successful financial results over time than specific and detailed information on financial transactions.

These findings underscore, in particular, the importance of beginning the learning process as early as possible. Indeed, in many respects, improving basic financial education at the elementary and secondary school level is essential to providing a foundation for financial literacy that can help prevent younger people from making poor financial decisions that can take years to overcome. For example, through a fundamental understanding of the mathematics of compounding interest, one can appreciate the cumulative benefit of routine saving. Similarly, learning how to conduct research in a library or on the Internet can be instructive in where and how to look for information to evaluate decisions.

As I noted earlier, we have seen the market respond to an increased demand for conceptual job skills by increasing the range of educational options available to individuals. We are beginning to see similar efforts to provide consumers with information and training that will improve their knowledge on financial matters throughout their lives. For example, the U.S. military, in response to surveys that revealed that nearly one-third of enlisted service members reported moderate-to-severe difficulty in paying bills, has mandated that all incoming enlisted personnel receive financial education as a means of reducing stress related to personal fiscal matters. Similarly, we are starting to see some school systems introduce financial management classes as part of their high-school curricula and many employers are taking up the challenge as well. At the Federal Reserve Board, for example, interest in financial education prompted an employee committee to host a seminar on financial planning strategies, and our Consumer and Community Affairs staff recently hosted several well-attended educational programs for employees who are thinking of buying their first home.

More fundamentally, the recognition that more-productive workers and learning go hand-in-hand is becoming ever more visible both in the workplace and in schools. Similar collaborative efforts to increase awareness of, and access to, information that promotes financial literacy are increasingly seen as necessary to ensure that consumers can meet their immediate obligations as well as achieve their broader goals of buying a home, funding higher education for themselves or their children, and preparing for retirement. Just as we have recognized how critical it is to demystify technology and to increase workers' comfort and familiarity with the new tools required for their success, so should we work to educate consumers on evaluating the broad array of products offered by financial service providers and to empower them to make the choices that contribute to their overall economic well-being.

An example of a collaborative effort in which the Federal Reserve System is involved is the Treasury Department's financial literacy initiative. This nonpartisan, public-private endeavor promotes the development of personal financial literacy skills by capitalizing on the educational efforts of the partners. In particular, an Internet web site was created that offers users the ability to instantly access a broad spectrum of financial-management information from a wide variety of market participants, including governmental agencies, associations, and private-sector financial services providers.

As researchers, lenders, and leaders in community economic development, you have all been dealing with the practical effects of technological change in the financial services industry, which have increased opportunity but have also presented important challenges. The twenty-first century will certainly bring us new technologies and, along with them, new challenges and new possibilities. We cannot know the precise directions in which technological change will take us, but as in recent years, the future role of banks and other providers of financial services will surely be significantly affected by the same basic forces that guide the real economy. Building bridges between our educational institutions, the private business sector, and community organizations will be an essential aspect of our efforts to increase familiarity with new technological and financial tools that are fundamental to improving individual economic well-being. And the success of such efforts will have a critical bearing on how well prepared we are to meet the challenges of an increasingly knowledge-based global economy.

Alan Greenspan took office in June 2000 as Chairman of the Board of Governors of the Federal Reserve System for a fourth four-year term ending June 2004. He also serves as Chairman of the Federal Open Market Committee, the System's principal monetary policy making body. From 1954 to 1974 and again from 1977 to 1987 Greenspan was Chairman and President of Townsend-Greenspan & Co., Inc., an economic consulting firm. From 1974 to 1977 he served as Chairman of the

President's Council of Economic Advisers and from 1981 to 1983 as Chairman of the National Commission on Social Security Reform. Greenspan has also served as a member of President Reagan's Economic Policy Advisory Board, a member of Time magazine's Board of Economists, senior adviser to the Brookings Panel on Economic Activity, and consultant to the Congressional Budget Office. He has had numerous Presidential appointments and he has served on many boards of directors, both corporate and noncorporate. He received a B.S., an M.A., and a Ph.D. in economics, all from New York University. He also has performed advanced graduate study at Columbia University and has received numerous awards and honorary degrees.

Luncheon Address: Financial Investment in the Inner City: A Confluence of Interests

Robert L. Woodson, Sr.
President, National Center for Neighborhood Enterprise

A noted expert on crime trends and their societal impact, James Q. Wilson has stressed the importance of distinguishing between economic factors and cultural factors that impact our society. He stated, "If we predict that behavior is driven by economic incentives, and if we alter those incentives and behavior does not change, or changes contrary to our prediction, we have to say that something else is working there. That something else is a combination of values, beliefs, perceptions, mind sets — in short, culture." Let's couple Professor Wilson's point with a piece of folk wisdom: "If you keep doing what you do, you'll keep getting what you've got." Now we have a foundation for discussion of a new approach to inner-city America that can tap capacities that have, for too long, gone unrecognized and underutilized. This new approach can yield a mutual relationship between inner-city residents and the business community, where new markets can emerge and economic development initiatives can have sustainable impact.

Ending the Confusion Between Economic and Cultural Consequences

In the 1960s, concern grew about worsening conditions and societal disintegration that was taking place in impoverished inner-city neighborhoods. At that time, it was in these communities which lacked the buffers of economic stability, that the effects of such problems as drug addiction, family dissolution, and violent crime were taking their greatest toll. In response, the federal government launched its War on Poverty, which, in turn, gave rise to a massive anti-poverty bureaucracy that was established to manage and maintain a plethora of federal programs.

Anti-Poverty Programs Have Not Solved Societal Disintegration

For more than thirty years, on the premise that the cause of these societal problems was economic, more than $5.3 trillion dollars was spent on myriads of anti-poverty programs. Yet, increased funding for these programs proved to have a negligible impact on their incidence. Our nation's capital, Washington, D.C., is a prime example of the failure of the War on Poverty. In the mid 90s, per-capita anti-poverty expenditures in the District were among the highest in the nation, yet the city ranked the lowest in comparison to all states with respect to 21 quality-of-life categories, including infant mortality and homicide rates. Conditions became so bad that the life expectancy of a Black male in our nation's capital is one of the lowest in the Western Hemisphere, second only to Haiti. The persistence — and rise — of a societal crisis in spite of a massive influx of funds for economic remedies was compelling evidence that the source of the problem had been misdiagnosed.

Social Disintegration Penetrates Boundaries of Race and Income Level

Subsequent events would provide even more startling evidence that the root causes of our most devastating societal problems did not lie in external circumstances. A shocking wave of youth violence in rural and suburban communities brought this message straight to the heart. The tornadoes of violence touched down without warning in communities ranging from Littleton, Colorado, to Paducah, Kentucky, and, most recently, Santee, California. One teenager built pipe bombs to destroy his classmates in the same garage where he parked his BMW. It has become painfully clear that poverty does not produce crime and violence any more than affluence can provide immunity from it.

The devastation of alcoholism and drug addiction, like that of youth violence, recognizes no boundaries of race, ethnicity, or income level. Carroll O'Connor and Gloria Vanderbilt are among the affluent celebrities who have felt the pain of losing a child to substance abuse or suicide. George McGovern's daughter died a lonely alcoholic, frozen in the winter snow. Margaux Hemingway, supermodel and granddaughter of Ernest Hemmingway, was found dead in her condominium after a long struggle with alcohol and bulimia. The promising young actor, River Phoenix, likewise, met with tragic self-destruction. Celebrity status and wealth provided no immunity for John Belushi and Chris Farley. Robert Downey, Jr., who has repeatedly succumbed to substance abuse and addiction in spite of top-of-the-line professional treatment, and even incarceration, is a stark reminder that our nation's most pressing societal problems are not external in nature and cannot be solved or prevented by affluence or external remedies.

Poverty Does Not Cause Social Dysfunction

The myth that poverty causes social dysfunction is debunked by our nation's own history and by the fact that, in the past, even widespread poverty and unemployment did not unravel our social fabric. Throughout the decade from 1930 to 1940, our country experienced the deepest depression in its history. Unemployment rates often exceeded 25 percent, with a negative GNP. Yet, during those dark financial years, rather than disintegrating, families and communities came together in networks of mutual support. The rates of crime and substance abuse were minimal compared with today's, and a single-parent household usually meant that someone had been widowed. Those who accepted financial assistance did so with a strong sense of personal responsibility and reciprocity.

In sharp contrast, in the early 1970s, after the longest period of sustained prosperity in post-war America with a rising GNP and unemployment rates sharply decreased, social indices began to plummet. Crime rates doubled and drug use rose rapidly. The number of single-parent families increased dramatically, and the welfare rolls swelled. Ironically, the causal relationship between poverty and societal disintegration was disproved by our nation's own experience at precisely the same time that the federal government continued to press a War on Poverty based on that false assumption.

The Root Cause of Cultural Disintegration

Today across the nation, people are recognizing that the root causes of our nation's most critical problems are essentially internal and spiritual in nature. In a nationwide poll, more than half of the respondents said that they were more concerned about America's moral crisis than its economic problems. Nearly 40 percent said that they felt that our country's moral foundations were "very weak." In response, there has been a steadily growing interest in the role that faith-based groups can play in addressing these problems at their core.

Like the biblical figure, Joseph, who was able to address and avert Egypt's impending doom when the Pharaoh's counselors could find no solution, faith-based grassroots leaders in cities across the nation have emerged as modern-day Josephs to address our country's spiritual and moral crises. Most of these Josephs have life experiences and qualities of character in common. They refuse to let external circumstances control their destinies and, regardless of the odds they face, they refuse to accept the label of victim. Most have undergone a personal transformation, after which they dedicated themselves to helping others in similar circumstances achieve productive, fruitful lives.

Through personal outreach, these community healers address the spiritual and moral atrophy of our civil society at its root, and their impact goes far beyond that of conventional remedies of professional therapy and economic assistance. Many effective grassroots approaches of personal and community revitalization are faith-based. Even those that are not rooted in a particular religion have a spiritual motivation for their tireless, heartfelt commitment and their unwavering confidence in the potential of every human being.

The power of today's Josephs is evidenced by the undeniable transformations that have taken place in the lives of the people they have served. They may not have degrees and certifications on their walls, but they do have the powerful, uncontestable testimonies of people whose lives have been salvaged through their work. This impact must be appreciated even by observers who may be skeptical about a faith-based approach.

We have only to look at the comparative success rates of faith-based intervention and conventional therapeutic programs to appreciate what today's Josephs have to offer. Many faith-based substance-abuse initiatives, for example, have success rates as high as 70 and 80 percent, while the success rates of most secular therapeutic programs hover in the single digits. A comparison of recidivism rates of the two different approaches would reveal an even greater gap. This is due not only to a difference in the approach that is used but also to a fundamental difference in the goals of each.

The goal of most conventional programs for substance abuse and violence intervention is termed “rehabilitation.” At best, the rehabilitation produced by these programs amounts to no more than simply restoring a client back to the state he was in before he exhibited social deviance. But there is no reason to expect that, if an individual in that state was previously susceptible to the temptations of drugs or alcohol, he would not be susceptible again when he is returned to that state. Statistics show that when these rehabilitated individuals re-enter their dysfunctional environments they are likely to return to old patterns of behavior.

In contrast with psychological therapy and treatment that relies on medication, the goal of grassroots programs is not rehabilitation but “transformation.” These programs, the majority of which are faith-based, do not seek simply to modify behavior but to engender a change in the values and vision of the people enrolled to affect behavior. Unlike the volatile effects of behavior modification, the impact of a transformation lasts a lifetime. The neighborhood-based programs that inspire transformation do not simply curb deviant behavior but offer something more — a fulfilling life that eclipses the power of temptation. When transformed individuals re-enter their old environments, most do not become recidivists, and many have had the power to change those environments.

Faith-based grassroots leaders have also forged solutions to youth violence, even against the greatest odds in inner-city areas where the epidemic of violence has taken its greatest toll. In communities once riddled with violence, drug dealing, and desolation, young people whose lives have been reclaimed now function as antibodies against the disease. Incarceration did not change these young people, nor did therapy or any change in their environment. These youths were not disarmed by having their guns taken away. They achieved a state of disarmament when they no longer had the desire to use guns. Their transformation was internal, on the level of heart and spirit.

Those young people responded to the sincere, consistent outreach of God-centered men and women in their neighborhoods, who had faith in their potential and a conviction in the principles and values that could guide them to fulfill that potential. These "character coaches" and "moral tutors" took on a role that was beyond that of a mentor or a therapist. They engaged in a process of re-parenting the youths, providing long-term, unwavering commitment that broke down walls of toughness, resentment, and distrust, awakening dreams and stirring a revitalization of the spirit. Through this process, young people who were once agents of destruction emerged as ambassadors of peace, ready and willing to take the risks and make the investment to reach out to other youths.

How Grassroots Neighborhood Leaders Benefit Business

Now, perhaps as never before, community leaders who have engendered transformations in their communities offer much that is of value to the business and corporate arena. Today, the landscape has changed dramatically and the needs of business have shifted. Currently, much of our economy is linked to human services, information, and communications industries. Businesses need workers who are capable of retraining every seven years and are equipped with both the skills and attitude needed to perform complex functions. At the same time, throughout the past three decades, poverty has had a powerful impact on low-income neighborhoods, where a culture of dependency has undermined the values of responsibility and reliability that are the backbone of a work force.

A Source of Work-Ready Employees

Many businesses today confront problems regarding human resources. Employers cannot obtain the quality of people they need in order to operate successfully. The issue isn't training. The problem is getting enough people for entry-level jobs who have work-ready attitudes and values. As the vice president of a telecommunications company wrote in the Wall Street Journal:

> "It's not trained people that businesses need: it's dependable, hard workers. Just give me an unskilled but dependable person of character, and I'll take care of the rest. I can train a person to disassemble a phone. I can't train her not to get a bad attitude when she discovers that she's expected to come to work every day when the rest of us are here. I can train a worker to properly handle a PC board. I can't train him to show up sober or respect authority."

A base of loyal, honest, enthusiastic workers is what businesses desperately need because these qualities directly affect the quality of their services and products. Importantly, these qualities are all characteristics of men and women who have undergone personal transformations through the guidance of a grassroots Joseph. A by-product of reclaiming lives is the creation of a reliable work force.

In addition to identifying prospective employees, neighborhood leaders could also attract customers for businesses. On the foundation of trust and mutual benefit, grassroots organizations could also educate residents of their neighborhoods about the value of products and services provided by various companies, opening a viable, but untapped, market.

Opening New Markets for Business

Security is another concern of companies that provide services in inner-city districts. The business expenses of Bell Atlantic, for example, escalated when a union contract required that they send a security guard with each repair crew going into inner-city areas. If graduates of neighborhood-based programs were hired to repair and wire phones in their communities, they would be their own security force. The respect and reputation that these individuals had established previously on the streets would remain with them when they entered the work force. It is unlikely that their trucks would be vandalized or that they would be robbed while they were performing repair work in their own neighborhoods.

Plans are currently underway to apply this paradigm to meet the needs of an inner-city neighborhood in Washington, D.C., for taxi service. Young men who are participants in a violence-free zone initiative in their community will participate in a "taxicab apprenticeship" program. Youths who receive training and qualify for this position will ride with cab drivers serving their neighborhood. These young ambassadors for peace will wear distinctive uniforms identifying them with the peace initiative. The program will have multiple benefits. It will give cab drivers an enhanced sense of security and enable them to service underserved areas, to the residents' benefit. In addition, the apprentices will gain on-the-job training from experienced cabbies, preparing them to become taxicab owners.

Many corporations are also stymied when it comes to approaching inner-city communities. For example, in these areas, banks and insurance companies have difficulty making the same kind of character judgments that they make every day in middle- and upper-income areas. They don't know how to determine who should get a loan or who should be insured, and, consequently, they have made their decisions not on how people live but where people live. Because they established policies based on broad generalizations of the residents of low-income areas, they have been charged with redlining. Regulations now require insurance companies to insure in high-risk locations.

With the help of grassroots leaders who have a personal knowledge of their neighborhoods, banks and insurance companies would be able to make reliable character judgments. The Josephs of these neighborhoods could guide them to identify islands of excellence and areas of competence within inner-city communities. The companies then would be able to do business in low-income communities.

A Partnership for Progress

In a sense, business leaders of today are in the role of modern-day "pharaohs." They need not embrace the faith or spiritual orientation of our nation's Josephs in order to appreciate and benefit from the practical impact of their efforts. Today's pharaohs and Josephs should establish partnerships simply because it is good business.

One aspect of such a partnership would be to promote economic development in low-income areas. Through an alliance with grassroots leaders and organizations, business leaders could become involved in profitable efforts to stimulate entrepreneurship and revive once-active but now desolate inner-city business districts.

America's Josephs are healing agents and neighborhood antibodies. If businesses, even if motivated by their own interests, can join forces with them, providing financial support and technical assistance, there is the potential to create an entire immune system that will protect and preserve the health of our society.

The proper relationship between today's pharaohs and Josephs must go beyond the concepts of charity and compassion because both of these terms connote a one-way avenue from a gift giver to a receiver. In truth, the Josephs of today have something to give society that is far more valuable than anything they receive. In an era of spiritual hunger and moral disarray, today's Josephs are a source of both spiritual and economic renewal that will have an impact far beyond the boundaries of their neighborhoods.

Robert L. Woodson, Sr., is Founder and President of the National Center for Neighborhood Enterprise, a nonprofit research and demonstration organization created in 1981 to support grassroots initiatives addressing societal problems such as family dissolution, youth violence, and substance abuse. A strong proponent of strategies of self-help and empowerment, Woodson is frequently featured as a social commentator in the print and on-air media. Among the many awards he has received is the prestigious John D. and Catherine T. MacArthur Fellowship. His publications include Youth Crime and Urban Policy, A View From the Inner City (1981), On the Road to Economic Freedom: An Agenda for Black Progress (1987), A Summons to Life, Mediating Structures and the Prevention of Youth Crime (1988), and, most recently, The Triumphs of Joseph: How Today's Community Healers Are Reviving Our Streets and Neighborhoods (1998). Woodson received a B.S. from Cheyney University and an M.S.W. from the University of Pennsylvania.

CHANGING FINANCIAL MARKETS AND COMMUNITY DEVELOPMENT: AN OVERVIEW

Lynn Elaine Browne
Executive Vice President and Director of Research,
Federal Reserve Bank of Boston

Access to credit and financial services is generally seen as critical to the economic success of both individuals and communities, but such access is far from universal. Barriers to credit and services limit the economic opportunities available to low-income and minority individuals and communities. Over the years, various public- and private-sector programs have tried to break down these barriers. However, the success, and even the appropriateness, of many of these efforts remain contentious. Some of this contention reflects philosophical differences. But much is due to the absence of quantifiable results and careful analysis. Moreover, where programs have undergone rigorous scrutiny, the findings may be known only to a relatively small circle of researchers. This lack of solid information allows even parties who agree on objectives to engage in prolonged and frustrating debates about whether programs have had any impact and the magnitude of the associated costs and benefits.

To help rectify this lack, the Community Affairs Officers of the Federal Reserve System are sponsoring a series of research conferences. The goal of these conferences is to encourage more – and more careful – analysis of how financial institutions affect the economic well-being of communities and individuals and to draw attention to the research that is already being undertaken. The first of these conferences, *Business Access to Capital and Credit,* took place in 1999. The second, *Changing Financial Markets and Community Development,* was held in the spring of 2001; the dominant issues were the effectiveness of the Community Reinvestment Act (CRA) and the implications of several recent financial sector developments for low- and moderate-income individuals and communities.

This conference volume includes the shorter, less technical papers presented at the conference, discussants' comments, keynote addresses, and executive summaries of the longer, more academic conference papers. Most of the longer papers will appear in professional journals; until that time, they may be viewed on the CEDRIC web site offered by the Federal Reserve Bank of Chicago (www.chicagofed.org/cedric/).

A major conclusion of the conference was that the CRAdoes appear to have increased bank lending to low- and moderate-income borrowers and communities, at least in the 1990s; and for the most part, this CRA-lending has been profitable or has at least broken even. Evidence was presented suggesting that working with community development organizations may facilitate CRA-related lending.

The success of the CRA notwithstanding, nonbank financial institutions have made inroads in serving low- and moderate-income populations. The conference highlighted recent studies of the use of financial services by people who do not have bank accounts. One implication of this work is that efforts to encourage the "unbanked" to use banks should emphasize the value of establishing a pattern of saving and the long-term benefits of a relationship with a traditional financial institution, and not the low cost of basic banking services. Banks may not be the lowest-cost providers of the services most valued by those presently "unbanked."

The importance of helping low- and moderate-income individuals to accumulate assets was a recurring theme in the conference. Assets provide a cushion against economic vicissitudes and a foundation for climbing out of poverty. Research presented at the conference indicates that the poor can indeed save under the right circumstances.

Another thread weaving through the program was the tension between ensuring that low- and moderate-income individuals have access to credit and protecting them from exploitation. Predatory lending is broadly condemned. Yet efforts to curb predatory lending can limit the availability of credit to individuals whose risk profiles make them ineligible for traditional loan products from depository institutions. An intriguing suggestion advanced at the conference was that the concept of "suitability," which has been used to curb abuses in the securities industry, could be applied to lending and that making unsuitable loans could be the basis for legal action leading to loan forgiveness and damages.

Following is a brief review of the papers presented in each of the conference sessions.

The Unbanked and the Alternative Financial Sector

Two major studies of the use of financial services by individuals lacking bank accounts were presented at the conference. **Constance Dunham** reported on a survey of the unbanked in New York and Los Angeles conducted by the Office of the Comptroller of the Currency. **Sherrie Rhine** reported on work (in conjunction with co-authors) on the use of check-cashing outlets in the Chicago area. **John Caskey**, who has done much pioneering research on the unbanked and the institutions serving them, presented a proposal for encouraging the unbanked to join the financial mainstream.

In general, the unbanked have lower incomes than those who have bank accounts. They are more likely to be women, African-American, and Hispanic and to live in low-income and minority areas. They are less likely to work; they tend to be younger.

For many of the unbanked, expenditures on financial services are minor. Checks can frequently be cashed free of charge at issuing banks. For services imposing a charge on the unbanked, banks are not always the lowest-cost source. Bank fees for money orders, a convenient way of remitting funds to other countries, tend to be high. And while a checking account can be a lower-cost way of making payments than money orders and bill payment services, fees for occasional bounced checks can wipe out any cost advantage.

A bank savings account, however, is a safe and convenient vehicle for people of limited means to accumulate assets. Thus, attempts to bring the unbanked into the financial mainstream might be more effective if they emphasized the benefits of savings accounts rather than the more questionable cost advantages of checking accounts. **Caskey** presented a proposal whereby banks actively reach out to the unbanked by offering a package of services tailored to meet their needs. The centerpiece would be a “Christmas Club” saving account, but other services such as check-cashing and money orders would also be available. The goal would be to assist the currently unbanked in building savings and, ultimately, establishing a credit history and a greater comfort level in dealing with mainstream financial institutions.

New Industry Developments

Credit scoring, predatory lending, and community development venture capital funds were addressed in the session on new industry developments. None of these is truly a new development, but all grew in importance in the 1990s.

Credit scoring, which has long been used to assess creditworthiness for consumer credit, is increasingly being used in mortgage and small business lending decisions, according to **Cary Collins**, **Keith Harvey,** and **Peter Nigro**. While credit scoring may permit lower cost, faster, and more objective decision-making, some believe that credit scoring models understate the creditworthiness of nontraditional borrowers by omitting indicators, such as utility bill records, that are particularly indicative of this group's ability to service debt. **Collins** and his co-authors focused on customized credit-scoring models, which combine credit bureau information with information from the borrowers' loan applications and are validated using the lending institution's pool of approved applicants. They found that certain variables included in these models may disadvantage low- and moderate-income borrowers relative to the outcomes obtained from either a more judgmental approach or a strict application of a generic credit bureau scoring model. They urge banks to be sure that variables in their customized models that adversely affect lower-income groups do, indeed, relate strongly to loan performance, and to consider whether other variables might be equally predictive but affect these groups less negatively.

Increased lending to low-income and minority borrowers has been accompanied by increased concern about predatory or abusive lending. Predatory lending has been hard to address, in part because it has been hard to define. **Kathleen Engel** and **Patricia McCoy** have provided a definition based on six broadly defined problems, including violating common underwriting norms to borrowers' detriment and requiring borrowers to waive legal redress. They discussed how securitization has increased the incentives to engage in predatory lending. Key elements of their argument are the entry into the mortgage market of thinly capitalized lenders and reduced incentives to evaluate creditworthiness carefully. Rising property values in low-income and minority neighborhoods are also a factor. The authors reviewed the various remedies to predatory lending that have been proposed and found them generally inadequate. They recommend the adoption of a suitability approach similar to that employed by the Securities and Exchange Commission to combat high-pressure telephone sales of securities. Under this approach, lenders and brokers would be prohibited from making subprime loans that exceed borrowers' risk thresholds, from steering borrowers who qualify for prime loans to subprime lending subsidiaries, and from requiring borrowers to agree to mandatory arbitration. Suitability would be enforced by private action in the courts and by federal agency intervention.

Community development venture capital funds (CDVCs) make equity and near-equity investments in small businesses, with the goals of creating good jobs and fostering community economic development.

Julia Sass Rubin provided a detailed description of the structure and functioning of these entities. An assessment of their success is not yet possible because so many CDVCs are very young. Although their origins date back to the 1960s, the formation of a trade association in 1994 spurred their expansion.

Wealth Creation

As **Mark Schreiner** and his co-authors pointed out, the accumulation of assets, financial, human, or social, is essential if low-income households are to improve their economic situation. As noted above in discussing the unbanked, perhaps the greatest benefit of a banking relationship is a convenient vehicle for accumulating savings. However, some doubt whether the poor, whose resources are limited relative to their needs, are capable of saving. **Schreiner** reported on an experimental program designed to address this and related questions by offering low-income participants the opportunity to build assets through Individual Development Accounts (IDAs). The American Dream Demonstration matches the savings of participants in the program at roughly a 2:1 rate if participants use these savings for buying a home, post-secondary education, or self-employment. The results indicate that the poor can save. Participants made relatively regular deposits and succeeded in accumulating savings; some were able to take advantage of the match. Within the group, the level of saving was not linked to income; the very poorest actually saved larger shares of their income than the less poor.

The other papers in this session looked at asset-building from a business perspective. A number of institutions have been formed in recent years to finance business activity in low-income and minority areas. **Timothy Bates** argued that the experience of Minority Enterprise Small Business Investment Companies (MESBICs), which have existed for roughly 30 years, offers useful lessons for these newer organizations. Most MESBICs failed. Successful MESBICs have tended to be asset-based lenders or, less frequently, venture capital firms that have focused on larger minority-owned companies with growth potential. Bluntly, successful MESBICs are hard-nosed. **Bates** cautioned against investment strategies oriented to small equity investments and working capital loans; administrative costs and risk of loss are high.

Brian Uzzi explored the role of social attachments in the lending relationship. He argued that social interactions between banker and entrepreneur result in greater trust and cooperation, reducing the need for formal governance arrangements and facilitating information flows. His statistical analysis suggests that such relationships can lead to tangible benefits for firms in the form of lower interest rates and collateral requirements. For minority and women entrepreneurs, establishing such social links may be challenging, as loan officers are predominantly White men.

Evaluation of the Community Reinvestment Act

The Community Reinvestment Act requires that banks and other depository institutions help meet the credit needs of their local communities, including low-income neighborhoods, and that the federal supervisory agencies consider an institution's CRA record in approving merger and other applications. Although the CRAwas enacted in 1977, a confluence of forces caused lenders to take their obligations under the CRA more seriously in the 1990s.

The CRA is controversial. Some observers see it as successful social policy, having increased access to credit for large numbers of low-income and minority households at modest cost. Others see it as an unfair tax on banks and other depository institutions, forcing them to make uneconomic loans or to devote substantial effort to documenting activities they would have done anyway. Despite the strong feelings it arouses, the CRAhas been relatively little studied. Views of its success and the costs it imposes are heavily impressionistic. Two papers presented at the conference help to remedy this deficiency.

Eric Belsky reported on work he has undertaken with several co-authors comparing the lending behavior of institutions subject to the CRA with that of institutions not under CRA's jurisdiction. For the period from 1993 to 1999, they found that home purchase loans to low- and moderate-income borrowers and areas (LMI loans) grew faster for CRA-covered institutions than for institutions not covered by the CRA. In addition, regression analysis indicated that the fraction of LMI loans made by CRA-covered institutions in 180 metropolitan areas was positively affected by variables representing regulatory pressures arising from the CRA. Taken together, these results suggest that the CRA did encourage institutions under its jurisdiction to increase lending to low- and moderate-income individuals and areas more than they would otherwise. The authors cautioned that it is less clear that overall LMI lending increased, as the gains of the CRA-institutions could have been at the expense of lending by non-CRAinstitutions. It is also possible that CRA-induced competition encouraged non-CRA institutions to expand their LMI lending as well.

If the CRA has caused institutions to increase their LMI lending, why did they not do so before? Many supporters of the CRAbelieve that lack of information and cultural barriers caused banks to ignore profitable opportunities available in serving low- and moderate-income areas. The pressure of the CRA forced banks to surmount these barriers. Opponents believe that the CRAlending is not profitable. Such concerns led the Congress, as part of the sweeping banking reforms in 1999, to direct the Federal Reserve Board to conduct a survey of the profitability of CRA lending.

The results of this survey, presented by **Bob Avery** (representing several co-authors), suggest that much CRA lending has been profitable or has at least broken even. Some institutions have had losses on some loan products, although institutions with both losing and profitable products are common. Home purchase lending is more likely to be associated with losses than other products; community development lending has generally been profitable.

On balance, these two papers suggest that the CRA has increased lending to low- and moderate-income borrowers and areas and that much, but not all, of this lending has been profitable.

Papers by **Thomas Holyoke** and by **Jim Campen** and **Tom Callahan** explored the role of community organizations in CRAlending. **Holyoke** looked at the role of political activism and capacity in encouraging lending by the CRA-covered institutions in different parts of the District of Columbia. Using voter turnout to measure activism, he found little effect. However, the number of nonprofit organizations that are focused on economic development or financial stability was positively associated with higher volumes of some types of loans. A possible interpretation is that the presence of community development corporations and related organizations may facilitate lending and, to the degree that it signifies a neighborhood commitment to economic development, may reduce the likelihood of default.

Campen and **Callahan's** paper focused on a mortgage program developed in Boston to make homeownership possible for households of very modest means. A combination of below-market interest rates and a variety of public subsidies significantly reduces monthly payments to participants in this program. Education classes for those who have bought homes through the program and careful monitoring of loan performance have resulted in very low delinquency rates. The authors hope that others will follow this model; but in sharing their experience, they also showed the critical role played by community organizations. It took a great deal of advocacy, negotiation, and persistence to bring this program about. However, the benefits accumulate. The partnerships formed in developing this program have sponsored other initiatives.

Among the reasons for greater attention to the CRA in the 1990s were public disclosure of banks' CRAratings and the availability of data on banks' approval and denial of mortgage loans. With more public information came more public pressure. In 1995 new CRA regulations were established requiring the reporting of geographic data on small business lending. **Katherine Samolyk** and **Christopher Richardson** have used this information to analyze how bank consolidation has affected small business lending. Their results suggest that merger activity, whether involving the bank itself or its holding company, had a negative effect on small business lending, including lending specifically targeted under CRA regulations. These patterns were strongly driven by changes in commercial lending overall, however, and their strength varied by time period.

Discussion

The Federal Reserve System's second Community Affairs research conference highlighted some interesting and provocative papers on issues of importance to the nation's low- and moderate-income communities. Research on the Community Reinvestment Act suggested that banks have increased their lending to low- and moderate-income borrowers and areas and that much of this lending is profitable or at least breaks even. Community organizations can be useful to banks in developing CRA-lending programs. Several papers stressed the role of banks as vehicles for saving as well as sources of credit. Helping the poor build assets is critically important. The conference also struck a cautionary note: increased access to credit can mean increased vulnerability to abusive lending.

The conference also provided a forum for policymakers, bankers, representatives of community organizations, and researchers to exchange views and learn from one another. The constructive tone of the discussions and the high level of interest seemed to validate the premise underlying this conference series – that more solid information and careful analysis are needed in order to design policies and programs that will bring everyone into the financial and economic mainstream.

Lynn Browne is Executive Vice President and Director of Research of the Federal Reserve Bank of Boston. In this capacity, she oversees the operations of the Bank's Research Department, as well as the Public and

Community Affairs Department. Mrs. Browne's primary responsibilities consist of supporting the president of the Boston Fed in her monetary policy and community functions, and overseeing the Bank's scholarly research. Mrs. Browne's personal research interests are eclectic. In recent years, she has authored or co-authored articles on regional real estate patterns, saving and investment, and the financial crisis in Asia. Prior to joining the Boston Fed in 1975, Mrs. Browne worked in the Department of Administration and Finance of the Commonwealth of Massachusetts. Mrs. Browne earned a B.A. degree in Economics from the University of Western Ontario and received her Doctorate in Economics from the Massachusetts Institute of Technology.

I. The Unbanked and the Alternative Financial Sector

The Role of Banks and Nonbanks in Serving Low- and Moderate-Income Communities

Constance R. Dunham
Office of the Comptroller of the Currency

Low-income Americans use a variety of financial services to meet such routine financial needs as receiving income, converting income checks to cash, paying bills, sending funds elsewhere, borrowing, and building savings. Many use services from the same banking institutions that most middle-income Americans use: banks, thrift institutions, and credit unions. However, many others operate outside the banking system. They obtain their financial services from nonbanking institutions, such as check-cashing outlets, post office branches, corner stores, or supermarkets. Still others manage to carry out their daily activities without obtaining financial services at all, and operate largely within a cash economy.

Many bankers, analysts, and policy makers speculate about why the "unbanked," those who do not have a bank account, do not participate in the banking system.[1] To date, it has been difficult to provide definitive answers when so little is known about their financial needs, the financial institutions and services they use, or how well their needs are being met. As a result, a critical policy question — to what extent do the unbanked choose freely not to have a bank account, and to what extent do they face barriers to banking — remains largely unanswered.

To understand better the answers to these questions, the Office of the Comptroller of the Currency (OCC) sponsored a survey of individuals living in low- and moderate-income neighborhoods of two major urban areas: Los Angeles County and New York City. The 1998-99 *Survey of Financial Activities and Attitudes* collected detailed information on the financial activities and attitudes of over 2,000 randomly

The views expressed in this paper are those of the author and do not necessarily reflect those of the Office of the Comptroller of the Currency or the Department of the Treasury. Please address any correspondence to Constance R.Dunham, Senior Financial Economist, Economic and Policy Analysis Department,Office of the Comptroller of the Currency, 250 E Street, S.W., Washington, D.C.20219 (phone: 202-874-4793; email:constance.dunham@occ.treas.gov).

selected individuals. Through statistical inference, their answers represent the experience of 2.6 million individuals living in the low- and moderate-income neighborhoods of these two major urban areas.[2]

The major objectives of this survey, as well as a summary of the survey design, are introduced in the *Survey of Financial Activities and Attitudes* section of this paper. The next section, *The Survey Population* provides background information on the survey population.

Financial Services and Sources provides information on the financial activities carried out by the survey population, with particular attention to unbanked individuals. It provides information on the services and institutions they used to receive their income and convert it to cash, pay bills, and hold savings. The survey data show that check cashing and money order purchases were prominent financial activities of the unbanked, and that check cashing outlets were market leaders in providing these services in the areas surveyed. The survey data also show that relatively few of the unbanked in the survey population held any savings at all, and that even fewer added regularly to their savings.

Financial Costs Incurred by the Unbanked examines the financial costs of two key financial activities of the unbanked, check cashing and money order purchases. It shows that many unbanked individuals paid relatively little for these services. This information on the financial activities of the unbanked and the financial costs they incurred supports two important conclusions:

- On the issue of equity, the low financial costs incurred by most unbanked individuals indicates that many may operate outside the banking system in order to economize, and not necessarily because they face barriers to having a bank account. However, a more definitive answer will require also examining the survey data on nonfinancial costs and the attitudes of the unbanked toward bank and nonbank services.

- The low financial costs incurred by most unbanked individuals also implies that banks may find it difficult to compete with nonbanks in this market. A more definitive answer will require examination of the survey data on the attitudes of the unbanked toward bank and nonbank services, as well as information (which cannot be answered by survey data) on the extent to which having a bank account helps the currently-unbanked to save.

Survey of Financial Activities and Attitudes

Purposes of the Survey

Early in the development of the survey, the OCC convened a forum of experts who discussed innovative ways of providing financial services to unbanked individuals.[3] Forum participants included representatives of banks, technology providers, check-cashing outlets, bill-payment firms, and consumer organizations, as well as financial sector consultants, academic experts, and policy makers. Among other things, the discussions revealed that survey information on the unbanked would be useful to many, that surprisingly few surveys on this population had been conducted, and that few of those studies were publicly available.

Accordingly, the OCC sought to supplement the sparse information then available on the unbanked population with a survey that was intended to provide several public benefits. The *Survey of Financial Activities and Attitudes* has generated new data on the financial activities of unbanked individuals living in low- and moderate-income communities of two urban areas, the costs they incurred, and their attitudes toward bank and nonbank providers of financial services. The survey also obtained similar information for individuals who lived in the same communities, but who were "banked." Knowing more about the characteristics of unbanked individuals and the differences between them and their banked neighbors should contribute to a better understanding of why so many Americans are unbanked.

The OCC hopes that the information generated by the survey will reduce the uncertainty that banks face in considering how to serve this potential market. The information may help inform bank efforts to design more appropriate products and more effective outreach methods, in order to increase financial access in low- and moderate-income communities. Public availability of the survey questionnaire and survey methodology may also reduce costs of market research by the private sector, which could further contribute to product development and outreach efforts.

Survey Implementation

Interviews for the survey began in September 1998 and ended in March 1999. Respondents in New York City and Los Angeles County were adults (18 years and older) selected through a multistage stratified random sample design. About half of the 2,006 interviews were conducted by telephone and half in person. Interviewers conducted approximately three-fourths of the interviews in English and about one-fourth in Spanish. Of all eligible respondents, 73 percent completed the interview, a response rate that strengthens the credibility of the survey results.

Several factors posed challenges to the development of a survey design that would achieve both good coverage and a high response rate.[4] These included characteristics of the survey's target population, the sensitive topic addressed by the survey (*i.e.*, personal financial matters), and the paucity of prior research on the topic. Characteristics of the target population that were considered in developing the survey design include relatively high rates of a primary language other than English, relatively low rates of telephone service, and varying levels of literacy.

The Survey Population

The survey was conducted in census tracts with median household incomes less than 80 percent of the median household income of the metropolitan area. (In 1997, the median household income was approximately $33,000 in New York City and $35,000 in Los Angeles.) Sixty-five percent of the survey population in New York City had household incomes under $30,000, compared with 48 percent of the survey population in Los Angeles County.

The sample of 2,006 randomly-chosen adults represents a survey population of 2.6 million individuals, of which 985,000 (37 percent) were unbanked. In addition to the unbanked, tens of thousands of individuals were "banked," but nevertheless routinely obtained financial services from nonbanks. They, too, represent a potential demand for additional services, and another opportunity for banks seeking to meet local financial needs.

Figure 1 shows that individuals with lower household incomes were more likely to be unbanked. Only 12 percent of high-income individuals (those with household incomes exceeding $45,000) were unbanked. In contrast, 68 percent of low-income individuals (those with household incomes of $15,000 or less) were unbanked. For them, being unbanked was typical rather than the exception.[5]

Figure 2 compares the survey population and the U.S. adult population. It shows that the survey population was younger than the U.S. population, had less education, and contained higher percentages of both minorities and immigrants. The survey population and the U.S. population were similar in the portion not working and in the ratio of females to males.

Characteristics of the Banked and Unbanked

Figure 3 compares the banked and the unbanked portions of the survey population. It shows that compared to the banked, a much higher percentage of unbanked do not work. On average, the unbanked are much less educated, with fewer than half holding a high school diploma, and are younger than the banked. The unbanked in the two urban areas surveyed are more likely than the banked to be foreign born and more likely to be Hispanic (but less likely to be non-Hispanic Blacks or Whites). On average, the unbanked have lower household incomes than the banked, and are more likely to receive government means-tested benefits such as welfare, Supplemental Security Income (SSI), Women, Infants, and Children (WIC) nutrition program payments, and Food Stamps.

Financial Services and Sources

Bank accounts provide three key functions: a way for people to receive their income and convert it to cash, a way to make payments, and a way to store savings. This section describes how people in low-income communities, both banked and unbanked, carried out these three functions.

Receiving Income and Converting It to Cash

Figure 4 shows that the great majority of the banked who received income (93 percent) did so either by check or by direct deposit (where their payment was deposited electronically and automatically to a bank account). Most banked individuals in the survey population used their bank account to receive income, either through direct deposit or by depositing their check.

For the unbanked, the most common way of receiving income was by check (Figure 4). None of the unbanked received income through direct deposit, but 19 percent received income by electronic benefits transfer, where their payment was sent electronically and automatically to a check cashing outlet or other nonbank. Income recipients then travelled to the nonbank, where they were presented with a paper check, which they could cash there or elsewhere.[6] Thus, 78 percent of the unbanked with income payments — both those who were sent a check (59 percent) and those who claimed their check at a nonbank (19 percent) — then had to convert their income checks to cash, usually for a fee.

Among the unbanked, a surprisingly large 19 percent received primarily cash income. They, plus the 14 percent of the unbanked who received no income and the 8 percent who signed their checks over to other individuals, meant that fully 41 percent of the unbanked in the survey population did not obtain financial services from an institution for receiving or converting income (Figure 6). This substantial portion of the unbanked also incurred no financial costs from check cashing or other services for the receipt and conversion of income.

Income Conversion Services

As noted earlier, about half of the banked who received income payments received them primarily by check. Of these, 82 percent typically deposited their checks to their bank account (either all or in part), and 15 percent primarily cashed their checks. Most of the banked used their bank accounts to convert their income to cash or other negotiable media, either through cash withdrawals, automated payments, or by writing personal checks. Only a small portion of the banked (7.5 percent) used check cashing services to convert their income payments to cash.

In contrast, among the unbanked who received income, the great majority (78 percent) received income checks (either provided directly to them or sent electronically to a nonbank). The great majority of them (88 percent) then cashed their checks. As Figure 6 shows, check cashing services were used by 59 percent of the entire unbanked survey population. Unlike the banked, check cashing services figured prominently among the financial activities of unbanked individuals. Where did they obtain check-cashing services?

Sources of Check-Cashing Services

Most of the unbanked who cashed their checks primarily used the services of check-cashing outlets (71 percent), as shown in Figure 5. Despite the check cashing signs seen in stores throughout low-income communities, only five percent of the unbanked primarily cashed their checks at supermarkets or other stores.

Instead, banks were the second most important source of check-cashing services for the unbanked. Among the unbanked who primarily cashed checks, 23 percent did so at a bank. One clue as to why so many unbanked individuals cashed their checks at a bank is provided in the section that follows, *Financial Costs Incurred by the Unbanked*, which shows that most who cashed their checks at banks did so at little or no cost. Most likely, the unbanked presented their checks at the bank of issue, which often cashed these checks at little or no cost to the check recipient.[7] (Instead, the bank of issue is paid by the companies or government agencies that contract with them to issue the payroll or benefit checks.) The substantial numbers of unbanked individuals who cashed their checks at a bank exemplify the efforts that many of them made to economize on financial costs in conducting their routine financial activities.[8]

Continuum in Bank and Nonbank Services

Most of the unbanked cashed their checks at a nonbank. However, many others obtained check cashing services at a bank.

A substantial portion of the banked who cashed checks did so at a nonbank, especially at a check cashing outlet. Within this group, those who had only savings accounts were more likely to obtain services from a check cashing outlet (32 percent) than those with a checking account (21 percent). In contrast, checking account holders were more likely to cash checks at a bank (69 percent) than were those who had only a savings account (29 percent).

Thus, the survey data show no sharp dichotomy of the banked using only bank services and the unbanked using only nonbank services. Rather, they show more of a continuum in the use of bank and nonbank services. Those who had only savings accounts often occupied a middle ground, with many using both bank and nonbank services.

Overview: Income Receipt and Conversion Services

The percentages reported in the preceding figures were developed on the basis of various subgroups of the survey population, such as the percentage of those who received income or the percentage of those who cashed checks. Figure 6 puts these numbers into perspective for the various stages of income receipt and conversion, with percentages developed on the basis of the entire unbanked survey population.

Figure 6 shows that check-cashing outlets are the service providers most commonly used by the unbanked to receive and convert their income. Yet, only 42 percent of the unbanked obtained check-cashing services at a check cashing outlet. Thus, the costs incurred by the unbanked to receive and convert income are not synonymous with fees charged at check cashing outlets. Many of the unbanked had no need for such services, and many others made deliberate effort, sometimes requiring considerable resourcefulness, to seek out free or low-cost check cashing services elsewhere.

Making Payments

Bank accounts provide a second key function: a way to make payments conveniently. This paper focuses on bill payments because they are usually large in size and there are serious consequences for nonpayment, such as eviction from one's dwelling unit or cutoff of utility services. Most of the unbanked (92 percent) reported paying regularly-recurring payments such as utility bills (electric, gas, water, phone, or cable TV), credit card or loan payments, or rent. This section describes how people in low-income communities, both banked and unbanked, paid their bills.

Most banked individuals in the survey population paid bills primarily with personal checks (Figure 7). As might be expected, personal check usage was much more common for checking account holders than for those who had only a savings account (and who presumably used the personal checks of others).

Some of the banked paid bills with money orders or cash. Very few checking account holders used money orders or cash to pay bills, but most of those who had only a savings account did so, with 50 percent primarily using money orders and 29 percent primarily using cash.

Most of the unbanked who paid bills primarily used money orders (42 percent) or cash (41 percent). A substantial portion of the unbanked also used bill payer services (15 percent). For a fee, their bills were paid electronically at the check cashing outlets, supermarkets, and other stores that offered these services.

In summary, almost half of the unbanked did not use any kind of financial service to pay bills (Figure 9). Thirty-eight percent of the unbanked paid bills primarily in cash and eight percent did not pay bills. Most of the 52 percent of the unbanked who did use financial services paid bills with either money orders or through bill payer services. Where did the unbanked obtain these two services?

Sources of Bill Payer Services and Money Orders

Figure 9 shows that the great majority of unbanked individuals who paid bills through bill payer services used check cashing outlets, with supermarkets and other stores a distant second. The unbanked did not obtain bill payer services from banks.

The single most common financial instrument used by the unbanked to pay bills were money orders. Most unbanked individuals purchased money orders from check-cashing outlets, but some bought them at U.S. post office branches or at supermarkets or other stores.

Only three percent of the unbanked reported buying even one money order primarily from a bank in the prior year, and only 0.3 percent of the unbanked bought money orders from a bank to pay bills and other regularly-recurring payments. This is rather surprising given the large numbers of unbanked individuals who cash their checks at banks, the fact that banks have the legal authority to offer money orders, and that many banks do offer money orders.

Overview: Paying Bills

The bill-paying activities of the survey population revealed a continuum of usage, rather than a strict dichotomy of "banked" and "unbanked" activity. The banked used both bank and nonbank services, although most checking account holders used personal checks, and most savings account holders used money orders and cash.

In the case of bill-paying, however, this continuum does not show the same kind of symmetry as seen with income receipt and conversion services, where many of the unbanked also used both bank and nonbank services. Many banks offer bill payer services and money orders, but the unbanked rarely bought money orders from banks, and none reported using bill payer services at banks. While banks have the legal authority to offer money orders and bill paying services, they apparently have not priced, designed, or marketed them in a way to attract many unbanked (or banked) individuals in low-income communities.

The percentages reported in the preceding figures were developed on the basis of various subgroups of the survey population, such as the percentage of those who paid bills, or the percentage of those who paid with money orders or bill payer services. Figure 9 puts these numbers into perspective for the various aspects of bill payment activity, with percentages developed on the basis of the entire unbanked survey population.

Store of Savings

Bank accounts provide a third key function: a way to store savings. This section describes how people in low-income communities, both banked and unbanked, stored their savings.

Formal and Informal Savings Instruments

In order to capture information on how the unbanked saved, the survey questionnaire defined savings in terms of a broad array of formal and informal savings instruments.[9]

- Formal savings instruments included the respondent's bank account, another person's bank account, money market funds, other mutual funds, stocks, bonds, certificates of deposit, U.S. government savings bonds, pension or retirement plans, tax-deferred savings plans, thrift plans, or funds kept in a bank safe deposit box.

- Informal savings instruments included cash, uncashed checks or money orders, gold, or jewelry that might be sold for cash, investments in property or a business, funds lent to others at interest, and contributions to a savings circle.

Many informal methods of saving are convenient and entail little or no cost. While jewelry and gold must be sold before these savings can be used, a number of jewelry stores and pawn shops in low-income communities stand ready to buy or sell gold and jewelry, thereby increasing their liquidity. Still, many of these informal ways of saving are vulnerable to loss or theft and generate no interest income.

Stock of Savings

Within the survey population, 78 percent of banked individuals held savings, whereas only 30 percent of unbanked individuals held savings. Among the banked who held savings, 94 percent held savings in formal instruments, most commonly in their bank account. The most common informal method of saving used by the banked was investment in property or a business.

Among the unbanked who held savings, 40 percent held savings in formal instruments, typically the bank account of another person. Sixty percent of the unbanked saved in informal ways. The most common informal method of saving used by the unbanked was to hold cash, jewelry, or gold.

Flow of Savings

Figure 10 shows that saving regularly was a challenge, particularly for unbanked individuals. Among the banked, 51 percent added to their savings at least once a month, as compared with only 14 percent of unbanked individuals.

In part, this difference may be due to the large difference in average income between banked and unbanked individuals (Figure 3). Indeed, even among the banked, Figure 10 shows that higher-income individuals were more likely to save regularly than lower-income individuals. Yet, even when controlling for income, banked individuals were more likely to save regularly than unbanked individuals with similar household incomes (Figure 10).

Correlation and Causation

The survey data show that individuals with higher incomes and those with a bank account are more likely to hold savings and save regularly. Do these patterns mean that having a bank account improves an individual's ability to save? The answer to this question has important implications for government policy and for the design and pricing of banking services that are attractive to unbanked individuals. Unfortunately, survey data cannot answer this important question, since the data show only correlations, not causation. These correlations are consistent with several possible scenarios:

- For example, it is possible that having a bank account does not affect savings behavior. The correlations in Figure 10 might simply reflect the fact that those who have developed the habit of saving, and who accumulate savings, are then motivated to open a bank account in which to keep their savings. Also, those with higher incomes may be better able to save, after meeting their basic needs, than can those with low incomes. This scenario would imply that better savings habits, or actions that raise income, would be more likely to increase savings than would efforts to improve the availability of bank accounts.

- However, it is possible that having a bank account does increase saving, at least for some of the unbanked. If so, there would be real value in offering bank accounts that are designed and priced in ways that attract the unbanked. For example, the survey data on savings suggest that lowering minimum opening balances could make bank accounts more available to many of the unbanked who do not have savings, and who could not otherwise open an account.

Based on the first scenario, policy makers might focus on job training as a way to raise incomes and thereby increase savings. Or they might support school bank programs or public education messages that encourage people to form good saving habits.

Based on the second scenario, however, policy makers might focus on increasing access to bank accounts, in order to increase savings. A well-designed bank account that helped the poor to gradually accumulate savings and get ahead, or even avoid falling behind, might contribute significantly to financial and economic development in low- and moderate-income communities.

Random Assignment Experimental Studies

As noted earlier, survey data cannot reveal which of these two scenarios (or others) better explains the patterns shown in Figure 10. The answer would require information from a different sort of study, one that used techniques, such as random assignment experimental design, to show whether or not a well-designed bank account can increase saving by the poor.[10]

In order for such a study to be effective, the experiment must feature a bank account that is designed to meet the needs of the currently-unbanked. The danger in conducting a random assignment experimental design with a poorly designed bank account is that if program participants did not increase their savings (relative to the control group), the study might falsely conclude that bank accounts do not help the poor to accumulate savings. Thus, it is important in carrying out such a study to provide a bank account with the price and nonprice features that are attractive to currently unbanked individuals.

Financial Costs Incurred by the Unbanked

The previous section presented information on how unbanked individuals received and converted income, paid bills, and stored savings. This section estimates the annual costs they incurred in carrying out the first two functions. Estimates of annual check cashing costs were developed from answers supplied by unbanked respondents to survey questions on the cost of the most recent check they cashed and the number of checks they typically cashed per month. Estimates of annual money order costs were developed from their answers to questions on the cost of the most recent money order they purchased and the number of money orders they typically purchased each month.[11]

Check-Cashing Costs

Number of Checks

Among the unbanked who cashed income checks, the great majority (97 percent) reported receiving four or fewer income checks per month. Lower-income individuals, particularly government means-tested benefit recipients, received fewer income checks per month than higher-income individuals and non-benefit recipients.

For example, those with household incomes of $15,000 or less averaged 2.0 checks per month, while those with household incomes over $30,000 averaged 3.0 checks per months. Among the unbanked who cashed income checks, much of this difference is due to the fact that most of those (67 percent) who receive means-tested government benefits receive only one income check per month, while most of those (85 percent) who do not receive such benefits receive more than one income check per month.

Costs Per Check Cashed

Most of the unbanked who cashed checks at a bank (81 percent) did so at no cost, most likely because the bank was the bank of issue. Most of the unbanked who cashed checks at a store (63 percent) also did so at no cost, presumably as a result of the store's marketing decision to accommodate customers.

Relatively few of the unbanked who cashed checks at a check cashing outlet (9 percent) did so at no cost. Nevertheless, check-cashing outlets were the most common source of check cashing services used by the unbanked. Most unbanked individuals who used check cashing outlets (82 percent) cashed their check for $5 or less, paying on average $3.38, or 1.1 percent of the face value of the check.[12]

Among unbanked individuals who cashed checks, low-income individuals tended to pay higher costs per check than higher-income individuals. For example, those with household incomes of $15,000 or less paid an average of $3.08 per check (0.84 percent of the face value of the check), while those with household incomes of more than $30,000 paid an average of $2.40 per check (0.65 percent of the face value). Most of this difference was due to the fact that higher-income unbanked individuals were more likely to cash checks at banks (37 percent), usually at no cost, compared with only 11 percent of low-income unbanked individuals.

Annual Costs of Check Cashing

Annual costs of check cashing for the unbanked were developed by combining information on the number of checks cashed per year and the cost per check cashed.

The survey data show that 66 percent of the unbanked incurred no costs of receiving or converting income. Either they did not cash income checks in the prior year (51 percent) or they cashed checks at no cost (15 percent). Thus, only 34 percent of the unbanked population incurred any financial costs of check-cashing. Of these, only 33 percent incurred annual costs of $100 or more in check cashing costs, and this group represented only 11 percent of the unbanked survey population.

Among the unbanked with check-cashing expenses, high-income unbanked individuals (with over $30,000 in household income) were more likely to incur at least $100 in annual check-cashing costs than were low-income individuals (with $15,000 or less in household income). Within this group, 48 percent of high-income individuals incurred at least $100 in annual check-cashing costs, compared with only 26 percent of low-income individuals.

Check cashing outlets were the financial institutions most commonly used by the unbanked. However, focusing on the prices charged by check-cashing outlets could lead one to focus on the relatively high prices that are paid by their customers, such as the $4.95 average cost of cashing a check at check-cashing outlets in Los Angeles. Such prices can easily generate annual costs in excess of $100, especially for higher-income individuals. However, focusing instead on the activities of the unbanked survey population could lead one to focus on the fact that two-thirds pay nothing in the way of check-cashing costs, and that check cashing costs are less than $100 per year for two-thirds of those who do incur such costs.

Money Order Costs

Number of Money Orders

The great majority (92 percent) of those who purchased money orders bought three or fewer money orders per month: on average 1.9 per month. Low-income individuals bought fewer money orders each month than did higher-income individuals. For example, those with household incomes of $15,000 or less bought an average of 1.4 money orders per month, while those with household incomes of over $30,000 bought an average of 2.7 money orders per month.

Costs Per Money Order

Most providers charged about $1 per money order. Although they charged somewhat higher-than-average costs per money order, check-cashing outlets sold many more money orders than did the other providers. Among unbanked individuals, 42 percent purchased money orders from check-cashing outlets, 13 percent from U.S. post office branches, and 9 percent from supermarkets and other stores. As noted earlier, very few of the unbanked purchased money orders from banks (3 percent).

Annual Money Order Costs

Fully 64 percent of the unbanked incurred at least some money order costs during the year. However, many bought money orders only occasionally, so their annual costs were quite low. Forty-six percent of the unbanked incurred annual money order costs of less than $25, and only 17 percent incurred annual money order costs of $25 or more.

Among the unbanked who did incur money order costs, high-income individuals (those with over $30,000 in household income) were more likely to incur at least $25 in annual money order costs than were low-income individuals (those with $15,000 or less in household income). Within this group, 45 percent of high-income individuals incurred at least $25 in annual money order costs, compared with only 17 percent of low-income individuals.

Annual Financial Costs Incurred by the Unbanked

Within the unbanked survey population, 14 percent cashed checks but did not purchase money orders, spending an average of $59 annually. Thirty-two percent purchased money orders but did not cash checks, spending an average of $19 annually. Another 35 percent cashed checks and purchased money orders, spending an average of $105 annually. The remaining 19 percent obtained neither service, and incurred no financial cost.

Figure 11 shows the distribution of the annual costs of check cashing and money orders that the unbanked incurred. While most of the unbanked (73 percent) incurred some costs, in most cases, these costs were not high. Only 17 percent of the unbanked survey population (168,000) incurred annual costs of $100 or more from cashing checks and purchasing money orders.

The average annual cost incurred by unbanked individuals was higher in Los Angeles than in New York City.[13] For example, 21 percent of unbanked individuals in Los Angeles (88,000 individuals) incurred annual costs of $100 or more for check cashing and money orders, compared with only 14 percent of unbanked individuals in New York City (78,000 individuals).

Yet the costs incurred by the unbanked, even in Los Angeles, were much lower than had been expected prior to the survey. Anecdotal evidence had suggested that it was rather typical for the unbanked to incur much higher costs for these two services. Policy concerns over equity, and concerns that barriers might be keeping the unbanked from opening a bank account, were motivated by the assumption that most of the unbanked were paying high costs for services from nonbanks.

However, since the survey results described in this paper focus on financial costs only, they do not preclude the possibility that at least some of the unbanked face barriers to obtaining a bank account. Certainly, they show that some unbanked individuals incur high costs in conducting their routine financial activities, even though the great majority of the unbanked incur low costs, or pay nothing at all. In addition, it is quite possible that unbanked individuals may prefer to have a bank account even though they now pay relatively little for nonbank services. A more definitive view as to whether the unbanked face barriers to opening a bank account will first require an examination of the survey data on nonfinancial costs and on the attitudes of the unbanked toward bank and nonbank services.

Potential for Bank Competitiveness

What do the survey findings imply for banks that might hope to attract the unbanked away from more expensive nonbank services to a less expensive bank account?

The first thing to consider is the price that a bank might reasonably charge for a simple, low-cost, yet profitable transactions account. Based on information on the low rate of savings by the unbanked discussed earlier, it seems reasonable to assume that most of those who are now unbanked are unlikely to hold balances of any significance in a bank account, at least initially. Rather than relying on net earnings on account balances, banks would have to rely primarily on fees to cover the costs of providing the account plus earn a reasonable profit. It has been estimated that a bank would require revenues of about $100 per year for providing a simple transactions account.[14]

By using $100 as a rough starting point, only 17 percent of the unbanked survey population would find such a bank account less expensive than what they now pay each year in check cashing and money order fees. On the basis of financial cost alone, therefore, banks could expect to attract only a small portion of the unbanked to a bank account. This percent might expand to as many as 33 percent of the unbanked, if adults living in the same dwelling unit pooled their resources and opened a joint bank account.[15] If the unbanked valued some features of bank accounts that they could not obtain from non-bank services, even more of the unbanked might open a bank account. If a well-designed bank account did help the currently-unbanked save more than they do now, then as their balances grew and banks relied less on account fees to cover the costs of bank accounts, still more unbanked individuals might open a bank account.

Thus, depending on a number of factors in addition to financial costs, a sizeable percentage of currently-unbanked individuals might be attracted to a well-designed, low-cost, yet profitable bank account.

Summary and Conclusions

This initial analysis begins to answer some of the questions that were set out as reasons for developing the *Survey of Financial Activities and Attitudes*.

Why So Many Individuals Are Unbanked

The survey data presented in this paper focuses on financial activities and financial costs. As such, it cannot provide a complete answer to the first question — why are there so many unbanked individuals? A complete answer will first require additional analysis of the survey data on respondent attitudes and on non-financial costs.

How Unbanked Individuals Conduct Their Financial Activities

The survey data provide considerable information on how unbanked individuals conduct their financial activities. This paper focused on how the unbanked received and converted income to a negotiable medium, paid bills, and stored savings.

An estimated 19 percent of unbanked individuals received income, paid bills, and (may have) saved without using any financial services at all. Rather, they operated in a cash economy.

Most other unbanked individuals obtained one or more financial services in order to cash checks, buy money orders, and/or use bill payer services. Most obtained these services from a nonbank, such as a check cashing outlet, although some unbanked individuals cashed checks at a bank, most likely the bank of issue, where they paid little or nothing for the service. Almost none of the unbanked obtained money orders or bill payer services from banks, even though they commonly paid their bills in these ways, and even though banks are authorized to offer these services and commonly do so.

The survey data show that most of the banked used their bank account to receive and convert income (through direct deposit or check deposits), pay bills (through personal checks), and store savings (in the bank account). However, a significant portion of the banked, particularly those with only a savings account, cashed checks or bought money orders at a nonbank. They primarily obtained these services from check cashing outlets, although the post office, supermarkets, other banks, and other stores were sources for some.

These patterns of financial activity demonstrate that there was not a dichotomy within the survey population, where unbanked individuals used only the services of nonbanks and banked individuals used only the services of banks. Rather, the data show more of a continuum along which individuals in the survey population operated. This continuum was evident in many dimensions: how individuals received income, how they converted it to cash or other negotiable media, how they paid bills, where they obtained check cashing services and money orders, and how they saved.

Costs Incurred by Unbanked Individuals

The survey data showed, surprisingly, that most of the unbanked did not incur high annual costs for two common financial activities, check cashing and money order purchases.

Most of the unbanked obtained check cashing and/or money order services at little or no cost. Only about 17 percent of the unbanked survey population incurred annual costs of $100 or more. Those who incurred higher annual costs tended to have higher household incomes than those with lower annual costs.

At the other end of the spectrum, many of the unbanked simply did without these services — sometimes because they did not need them, and some in order to economize. This group incurred no financial costs. For them, the equity concern should not be measured solely in terms of their lack of financial costs, but also in their doing without financial services, and their possibly higher transactions costs and greater risk of loss.

Barriers to Bank Accounts for the Unbanked

An initial concern motivating the development of the survey was whether demand barriers were preventing many of the unbanked from obtaining a bank account. Anecdotal evidence suggested that many were paying high costs for check cashing and other nonbank services. This raised the question of why they did not economize by opening a bank account, and whether barriers might be preventing them from doing so.

Barriers in Demand

The survey data show that most unbanked individuals incurred relatively low annual costs in operating without a bank account. This suggests that many people may be unbanked, not because they face barriers to obtaining a bank account, but because they can better economize on the costs of financial services without having a bank account.

This does not preclude the possibility that there may be demand barriers, at least for some of the unbanked. For example, the survey data show that minimum opening account balances may pose a significant problem for the many unbanked who have not accumulated any savings. However, before coming to any conclusions on the demand side, it is first necessary to examine nonfinancial costs incurred by unbanked individuals and their attitudes toward bank and nonbank services.

The survey data showed that individuals with higher incomes and those who had a bank account were more likely to have savings. However, survey data can only show correlations; it cannot inform us as to whether having a bank account would help currently unbanked individuals to save. Rather, a different kind of study, employing a random access experimental design and a well designed bank account, should be carried out to answer this important question.

Barriers in Supply

The survey data do raise questions about possible barriers on the supply side. In particular, it is not clear why banks do not effectively provide the unbanked with some of the services commonly used by the unbanked, such as cashing checks with immediate availability, or providing attractive money orders or bill paying services. These too, and not simply credit services, are important components of the financial service needs in low-income neighborhoods.

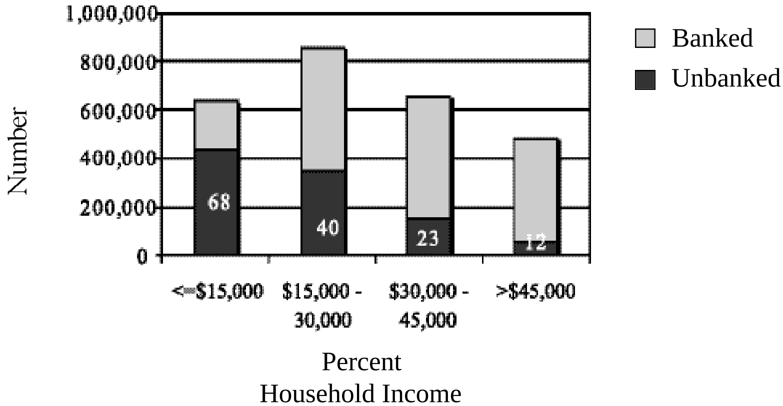
Check cashing, money order, and bill payer services present a real opportunity for banks seeking to better meet financial needs in their service areas. Yet few banks have gained a sizeable market share in these services. A good study of supply might reveal whether there are informational, operational, attitudinal, legal, regulatory, or other factors that prevent banks from effectively competing with nonbanks in supplying these financial services in low-income neighborhoods.

The survey data also suggest that regulatory efforts intended to help the unbanked can backfire if not crafted carefully. For example, binding regulatory ceilings on check casher fees could limit revenues to the suppliers of these services. They could make it more difficult for banks to enter this market by first offering check cashing services, and eventually attracting some of the unbanked to bank accounts and other services.

Negative regulatory attitudes, about whether it is proper for a bank to offer check cashing, money order, or bill payer services, could also discourage banks from offering these services in innovative and profitable ways. But those banks that succeed in doing so could not only increase financial competition in low-income communities, but could also provide more low-income individuals with a bridge to a broader range of financial services.

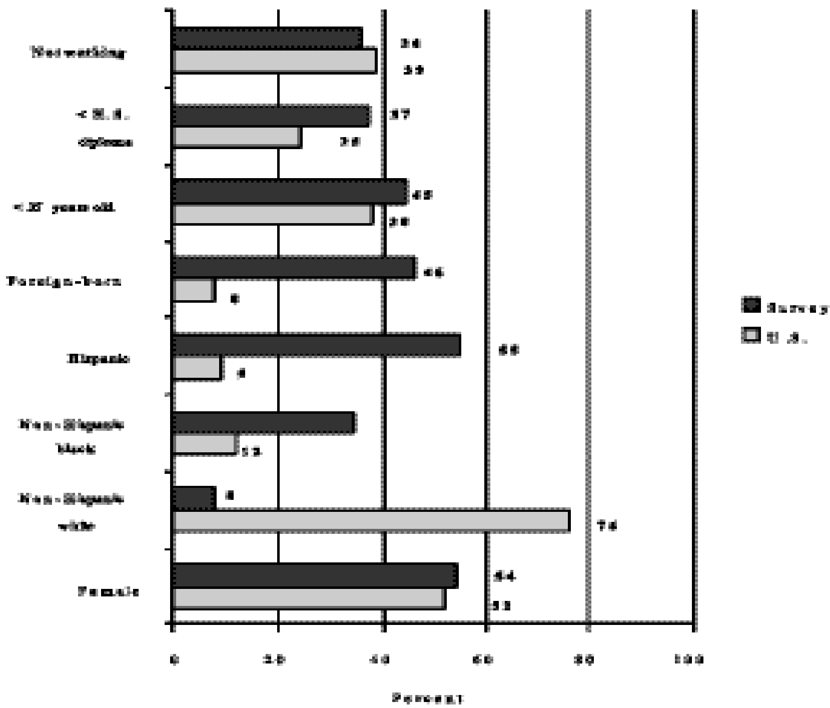
Constance R. Dunham is Senior Financial Economist at the Office of the Comptroller of the Currency, where she conducts policy research on financial access issues. Previously, Dunham served as senior economist for domestic finance and overseas development issues at the Council of Economic Advisers. Earlier, at the U.S. Agency for International Development, she managed the agency's principal project on microenterprise and small business finance and development. Before that, she conducted policy research at the Urban Institute on minority-owned businesses in the United States and on expanding access to credit for small business and housing here and overseas. Between 1979 and 1989, Dunham was a financial economist and then Assistant Vice President at the Federal Reserve Bank of Boston. She also consulted with the Harvard Institute for International Development on banking deregulation in Indonesia. Dunham holds a B.A. in economics from Yale University and a Ph.D. in economics from Stanford University.

Figure 1
Banked and Unbanked by Household Income



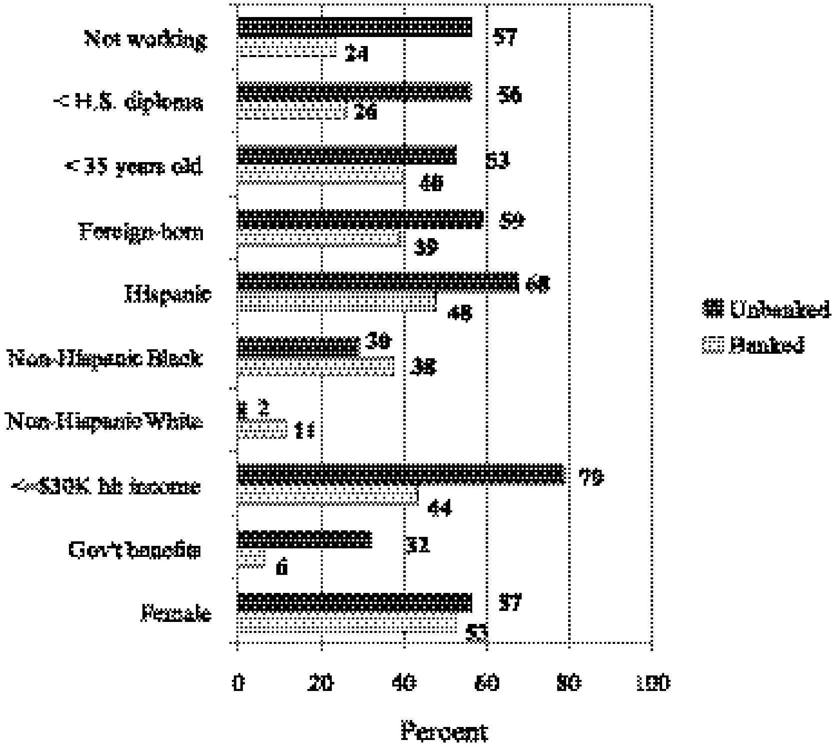
Source: Survey of Financial Activities and Attitudes.

Figure 2
Comparing the Survey Population and the U.S. Population



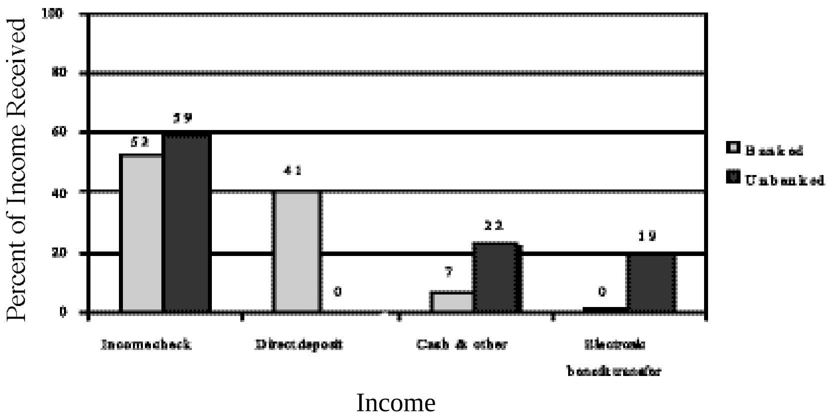
Sources: Survey of Financial Activities and Attitudes (18 years and over), 1990 US Census (18 years and over except for working status, 16 years and over).

Figure 3
Comparing Banked and Unbanked Within the Survey Population



Source: Survey of Financial Activities and Attitudes.

Figure 4
Ways of Receiving Income

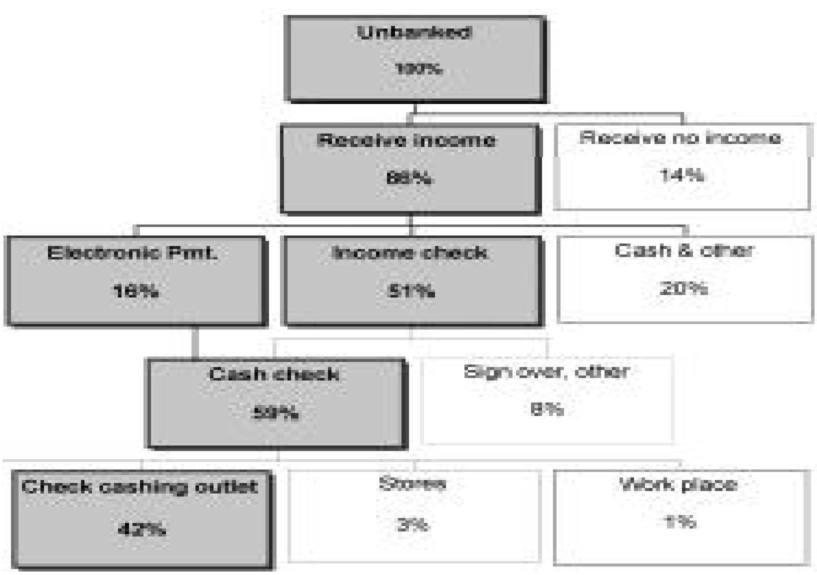


Source: Survey of Financial Activities and Attitudes.

Figure 5
Check Cashing Service Providers

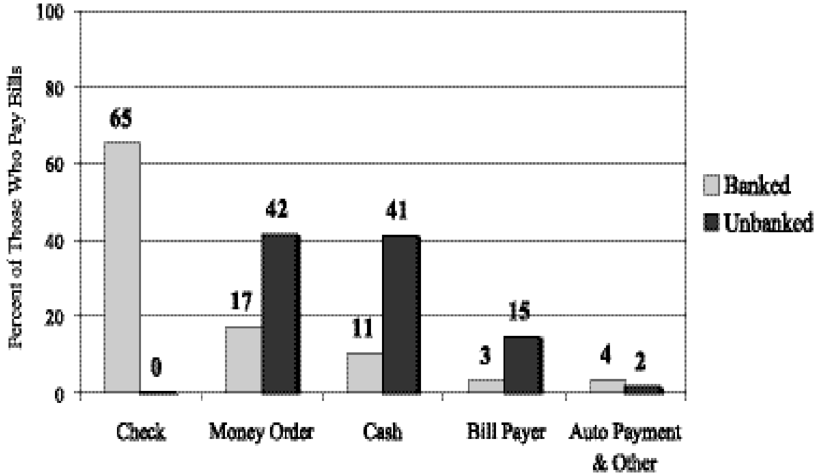
Source: Survey of Financial Activities and Attitudes.

Figure 6
Receiving and Converting Income by the Unbanked



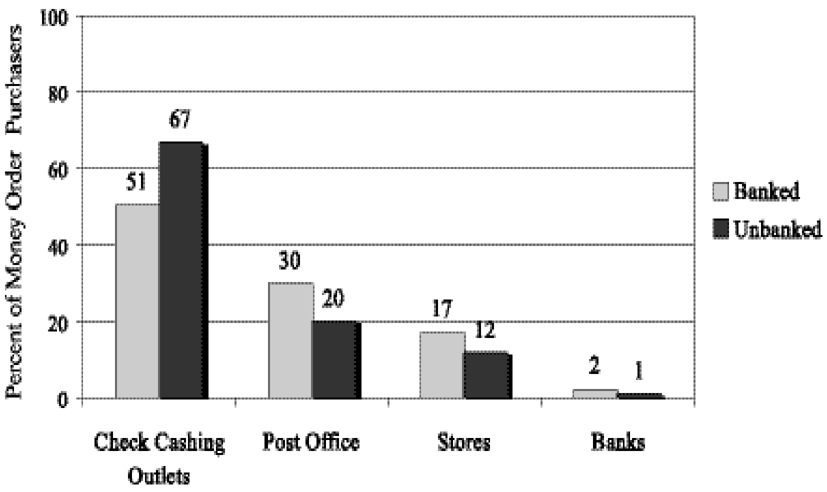
Source: Survey of Financial Activities and Attitudes.

Figure 7
Ways of Paying Bills



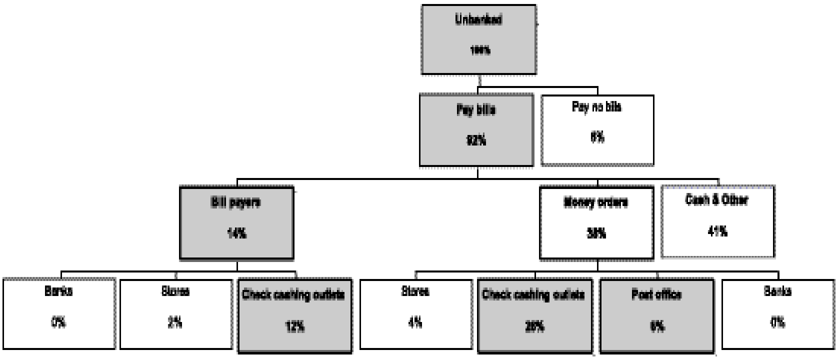
Source: Survey of Financial Activities and Attitudes.

Figure 8
Money Order Providers



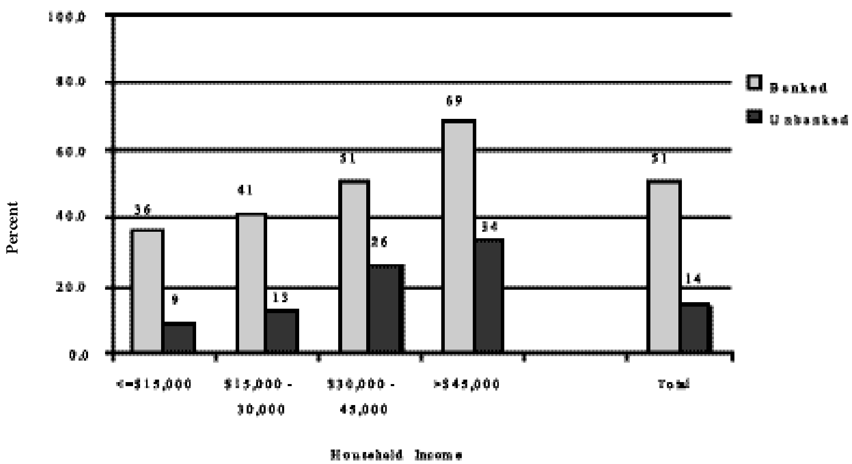
Source: Survey of Financial Activities and Attitudes.

Figure 9
Bill Paying by the Unbanked



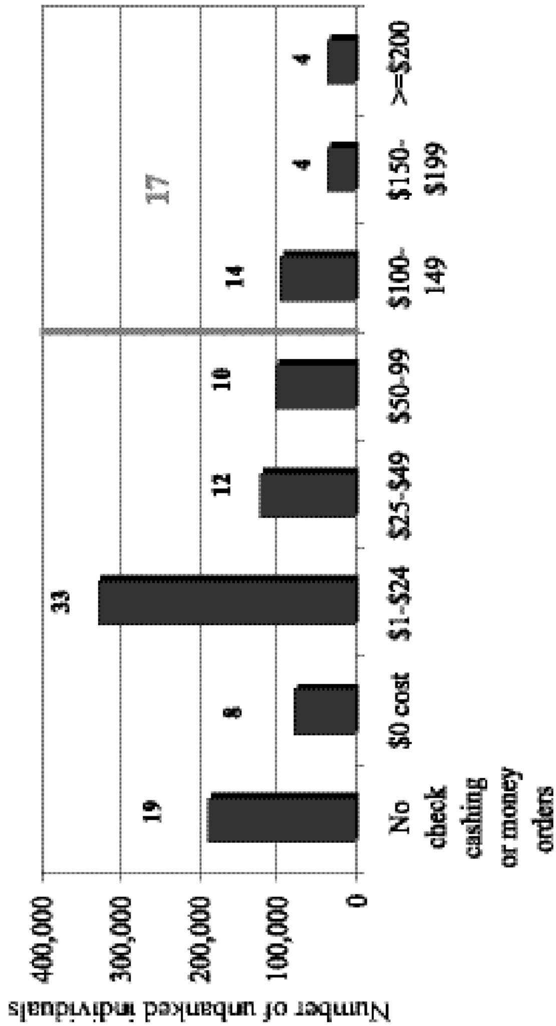
Source: Survey of Financial Activities and Attitudes.

Figure 10
Banked and Unbanked Who Save Regularly



Source: Survey of Financial Activities and Attitudes.

Figure 11
Annual Financial Costs Incurred by the Unbanked



Source: Survey of Financial Activities and Attitudes.

Notes

[1] "Banked" individuals are those who had a deposit account (either individually or jointly with another individual) at a depository institution at the time of the survey. "Unbanked" individuals are those who had no such account at the time of the survey. Deposit accounts may be checking, savings, or similar accounts at a commercial bank, thrift institution, or credit union. For simplicity, all such accounts are generically termed a "bank account" in this paper, and depository institutions are generically termed "banks."

[2] Nationwide, 9.5 percent of American households had no transactions accounts in 1998: see Arthur B. Kennickell *et al*., "Recent Changes in U.S. Family Finances: Results from the 1998 Survey of Consumer Finances," *Federal Reserve Bulletin* (January 2000) pp. 8-9.

[3] The forum proceedings, "Financial Access in the 21st Century (1997)," OCC, Washington, D.C., can be obtained at: http://www.occ.treas.gov/occfinac.pdf, or ordered from the OCC by calling 202-874-4960.

[4] Issues related to the survey design are addressed in: Constance R. Dunham, Fritz J. Scheuren, and Douglas J. Willson (1998), "Methodological Issues in Surveying the Nonbanked Population in Urban Areas," in *Proceedings of the Survey Research Methods Section, American Statistical Association*, pp. 611-616.

[5] The Survey of Financial Activities and Attitudes (SFAA) shows higher rates of unbanked at each level of household income than the Survey of Consumer Finances (SCF). One reason for this difference is that the SCF measures unbanked households, not unbanked individuals. Thus, if one out of three adults in a household had an individual bank account, the SCF would consider the household "banked," even if only one individual had effective control of the account, whereas the OCC survey would consider only one individual to be banked and two to be unbanked. Another reason is that SCF surveys the entire nation, whereas the SFAA is a survey of two urban areas that contain high percentages of some groups (*e.g.*, minority and foreign-born), which tend to have higher unbanked rates than others with the same incomes.

[6] At the time of the survey, government sources at the state and federal levels were working actively to reduce the number of payment checks they issued and, instead, to make these payments electronically, either by direct deposit or electronic benefits transfer. Thus, the percent of unbanked who receive electronic benefits transfers may be even higher at present.

[7] This hypothesis is consistent with the survey data that show that 71 percent of the banked who cashed their income checks reported doing so at a bank where they did not hold a bank account, often the bank of issue.

[8] To the extent that some of the unbanked incur added time and travel costs of using the bank of issue, however, their ability to economize is reduced. In addition, some receive checks issued by non-local banks and thus do not have a practical way of cashing them at the bank of issue.

[9] Some respondents offered additional categories, not all of which could be classified as formal or informal. For example, a number of immigrants noted that they kept savings in their country of origin. Some of them noted how they stored their savings, such as in a bank account in that country, but others did not explicitly identify how they stored their savings.

[10] In random assignment experimental studies, participants are randomly assigned in a lottery-like process either to a program group (which would have access to a well-designed bank account), or to a control group (which would not have access to the bank account). Over time, the study would collect information on the savings behavior of the participants in both groups, and the outcomes would be compared.

[11] The estimates of the total annual costs incurred by the unbanked for these services include the costs of check cashing incurred by any unbanked respondent who cashed any income checks during the prior year, not by only those who primarily received income by check and primarily cashed their checks. The estimate incorporates the check-cashing activities of those who received electronic benefit transfers as well as those who cashed income checks received directly. The estimates include the costs of buying money orders by any respondent who bought at least one money order in the prior year, not by only those who primarily paid their bills with money orders.

[12] Note that at the time of the survey, check cashers in New York State were restricted to charging 1.1 percent of the amount of a check or 60 cents, whichever was greater. 3 NYCRR section 400.12. In New York City, 89.1 percent of the unbanked who cashed checks at check cashing outlets did so for $5 or less, paying on average $2.61 (0.7 percent of the face value of the check), while in Los Angeles County, 69.0 percent of those who cashed checks at check cashing outlets did so for $5 or less, paying on average $4.95 (1.6 percent of the face value).

[13] However, it is not clear whether regulated ceilings on check cashing charges, lower average household incomes in the New York City survey area, or possibly greater competition among check cashers in New York City has had the greater influence on the lower check cashing fees there than in Los Angeles. In New York City, most of the unbanked who cashed checks paid check cashing fees that were less than 1.1 percent of the face value of the check, the regulated ceiling at the time of the survey. Seventy-seven percent of unbanked New York City respondents who cashed checks paid fees of 1.0 percent or less of the face value of the check.

[14] See the remarks of Seamus McMahon, First Manhattan Consulting Group, in *Financial Access in the 21st Century,* op. cit., pp. 25-26.

[15] Eighty-three percent of the survey population lived in dwelling units with two or more adults. If it is assumed that the other adults living in an unbanked respondent's dwelling unit were also unbanked and incurred similar financial costs, then 128,000 dwelling units contained unbanked individuals who together incurred at least $100 in annual financial costs. Under these assumptions, an estimated 325,000 currently unbanked individuals would pay the same amount or less for a bank account than they now pay for conducting routine financial activities without a bank account.

The Role of Alternative Financial Service Providers in Serving LMI Neighborhoods

Sherrie L.W. Rhine
Federal Reserve Bank of Chicago

Maude Toussaint-Comeau
Federal Reserve Bank of Chicago

Jeanne M. Hogarth
Board of Governors of the Federal Reserve System

William H. Greene
New York University

Using data from the 2000 Metro Chicago Information Center Survey, we explore transaction account ownership and the use of currency exchange (check-cashing) businesses for financial and nonfinancial services. The results from the estimated model suggest that being unbanked is jointly determined with obtaining financial services from a currency exchange. Our findings show that in the Chicago metropolitan area, currency exchanges play an active role in providing financial services to unbanked households, especially residents of low- and moderate-income (LMI) neighborhoods and Black and Hispanic households. Specifically, we find that unbanked households are 14.6 percentage points more likely than their banked counterparts to patronize a currency exchange. Unbanked households residing in an LMI community are 7.6 percentage points more likely to use a currency exchange than unbanked households residing elsewhere. Furthermore, we find that perceived unfavorable checking account characteristics and distaste for a checking account are important influences on the probability that an unbanked Black household obtains financial services from a currency exchange. Unbanked Hispanic households that obtain financial services from currency exchanges also are influenced by perceived

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unfavorable checking account characteristics. Conditioned on being unbanked, our findings show that households with lower income, who are younger, have less education, or who are employed are more likely to use a currency exchange, whereas households that possess a credit card or who are retired are less likely to patronize a currency exchange. From a policy perspective, financial education and cooperation between financial institutions and community groups may go a long way in helping households enter the mainstream financial sector, thus improving the flexibility of households in conducting financial transactions.

Introduction

Policymakers are interested in the banking relationships of low- and moderate-income (LMI) households for several reasons. First, banks target some of their lending and banking services to these households as part of their Community Reinvestment Act (CRA) responsibilities. Because many resources go into the development and monitoring of CRA accountability, we know a great deal about how banks are doing with respect to making primary product lines available to LMI households. It may be helpful to know more about the other side of that relationship – that is, how LMI households relate to financial institutions in their communities. Second, recent legislation (the Debt Collection and Improvement Act of 1996) provided for electronic payment of recurring federal benefits (such as Social Security, Supplemental Security Income and federal retirement payments). Treasury's implementation of this initiative drew attention to those households without direct deposit, including households without transaction accounts at financial institutions, many of whom are lower to middle income. The more we know about these households (the reasons for not having an account, the perceived barriers they face, the financial vehicles they are using in lieu of a transaction account), the better both banks and policymakers can target policies and educational programs to smooth the transition to an all-electronic Treasury payment system.

In the following section, we provide a description of the check-cashing/currency exchange industry. In the third section, we describe our data and present them relative to a national sample. We also explore several aspects of the financial relationships of households, especially LMI households. Of particular interest are transaction account ownership, reasons for not holding a checking account, sources used to obtain check cashing services, and currency exchange patronage by households. In the fourth section, we empirically investigate the potential joint relationship between being unbanked and obtaining financial services from a currency exchange. The results from this investigation offer interesting insights about the influence that specific characteristics have on an unbanked household's patronage of currency exchange businesses. In the final section, we discuss potential policy responses drawing on the study's findings.

The Check-Cashing Industry

Over 180 million checks, totaling $55 billion, flow annually through the check-cashing industry. The number of check-cashing establishments has doubled over the last five years, with locations in 35 states; 28 states and the District of Columbia regulate check cashing.[1] Presently, there are approximately 6,000 check-cashing establishments owned by roughly 3,700 businesses nationwide. The average fee charged for cashing a check ranges from 2 percent to 3 percent of the face value amount of the check.[2]

In the Chicago metropolitan area and elsewhere in the state of Illinois, check-cashing businesses are referred to as currency exchanges (hereafter referred to as such). The financial services offered by currency exchanges include cashing payroll, government, public assistance, and personal checks, selling money orders, providing money wire transfer services, and submitting bill payments (*e.g.*, local utility bills). In addition, currency exchanges provide a diverse collection of nonfinancial services, such as the sale of public transportation fares (*e.g.*, bus and train passes), postage stamps, prepaid telephone cards, notary services, and lottery tickets. These businesses also collect local tax (*e.g.*, property taxes) payments, distribute public assistance benefits, sell motor vehicle license plates, and handle vehicle title transfers.

The Illinois Department of Financial Institutions (DFI) regulates over 700 currency exchanges across the state, with 429 located in the City of Chicago. Check-cashing fees in Illinois are set according to a two-tier maximum fee structure based on the face value of the check. The maximum fee that can be charged for cashing a check valued up to $500 is 1.4 percent of the face value plus $.90 per check cashed. For a check greater than $500, the maximum fee is 1.85 percent of the check's face value. Similarly, under state regulations, currency exchanges can sell money orders for up to a maximum fee of 1 percent of the money order's value plus $.75 per money order. According to the

Financial Services Centers of America (FiSCA), a trade association representing the check-cashing industry, the typical check-cashing consumer is middle to lower income, younger, and looking for convenient, after-hours financial services. FiSCA purports that one-third of the consumers who seek financial services from currency exchanges are unbanked, while two-thirds are banked consumers who may be seeking convenience in the delivery of financial services.

Data and Sample Description

Data employed in this study were collected by the Metro Chicago Information Center (MCIC) in conjunction with its 2000 annual survey of households in the Chicago metropolitan area.[3] The sample used in this study is 2,483 households. Most of the data were collected in a telephone survey of a sample of households selected through a random-digit-dialing sampling technique. Supplemental surveys were conducted through face-to-face interviews as a way to include information from households in the sample population without telephones. In addition, survey interviews were conducted in Spanish to accommodate Spanish-speaking respondents.[4] The Federal Reserve Bank of Chicago sponsored a supplement of questions focusing on the use of currency exchanges for MCIC's 2000 survey. The definition of variables used in this study is given in Table 1.

While the majority of variables listed in Table 1 are self explanatory, a further discussion is needed concerning the household income categories used here. The income category, INCOME < $30,000, is equal to one if the respondent's household income was less than $30,000. This closely corresponds to the income threshold relevant to the U.S. Census definition of a low-income household, whereby family income is less than 50 percent ($31,893) of the metropolitan area's median income level ($63,800). INCOME < $30,000, therefore, is a conservative measure of the proportion of low-income households in the sample. The three remaining income categories reported in Table 1 are similarly calculated and roughly approximate the U.S. Census definition of moderate-, middle-, and upper-income households.

A description of the socioeconomic and demographic characteristics for the Chicago metropolitan sample population and the nation is provided in Table 2. The description for the nation comes from the 1998 Survey of Consumer Finances (SCF). A comparison between these two data sets reveals that the Chicago metropolitan area has a greater proportion of more highly educated households and households with greater income, relative to the nation. The Chicago sample also has a greater representation of minority households.

A comparison of LMI households to non-LMI households in the Chicago metropolitan area shows that LMI households tend to be minorities, younger, female, unmarried, and less-educated (Table 3). LMI households also are less likely to hold a checking and/or a savings account (banked) or to possess particular assets such as a home, a money market account, or an IRA.

Characteristics of the Unbanked

A comparison between banked households (own a checking and/or savings account) and unbanked households reveals different socioeconomic and demographic profiles (Table 3). The majority of unbanked households (70 percent) have income less than $30,000 or live in LMI areas (74 percent). Seventeen percent are unemployed in the labor force, while for the banked sample, four percent are unemployed. Unbanked households also tend to be minority, female, younger, unmarried, less educated, and nonhomeowners.

To further understand the circumstances that lead one to be or become unbanked, we explore the reasons given by households as to why they do not possess a checking account and/or have closed their checking account (Table 4). Of the 378 households without a checking account, 68 percent (258 households) resided in LMI communities. Given that the unbanked tend to have less income, it is not surprising that the most common reasons given for not having a checking account related to unfavorable checking account characteristics associated with cost. The specific reasons included the cost of account maintenance (*i.e.*, minimum balance), affordability (*i.e.*, high fees), or lack of sufficient funds to open a checking account. Over 62 percent of the households that lived in LMI neighborhoods gave these unfavorable account characteristics as the primary reason for not having a checking account. Another major reason given by respondents for not having a checking account was a distaste for an account. Close to 30 percent of the households revealed a distaste by stating that they did not like to deal with banks, did not trust banks, or desired to keep financial records private. Smaller proportions (a total of about seven percent) reported that checking accounts were too difficult to manage or that a member of the household had been turned down for an account.

Where, then, do the unbanked cash their checks? In the Chicago metropolitan area, we generally find that financial institutions (including banks, savings and loan associations, and credit unions) are the most frequently used source (81.2 percent) for check-cashing purposes (Table 5). Among the unbanked, however, a currency exchange is notably the primary place where checks are cashed (71.8 percent). This finding is in sharp contrast to Caskey (1994), Booz-Allen *et al* (1997), and Dove (1999), who found currency exchanges to be only the third most frequently used source, after banks and grocery stores.[5]

Currency exchange use is even more pronounced for unbanked households residing in LMI communities (Table 5). Here we find that almost 75 percent of the unbanked LMI households use currency exchanges to cash checks. Interestingly, banked LMI households also made more frequent use of currency exchanges for check-cashing purposes (13.2 percent) than did banked households in general. In part, this may reflect greater availability of currency exchange businesses in LMI neighborhoods.

Patronage of Currency Exchange Businesses

The survey results suggest that the most common financial services used at currency exchanges were cashing checks, purchasing money orders, paying bills, and making money wire transfers. Typical nonfinancial services included purchasing bus passes, vehicle stickers, and notary services. Close to 64 percent of the total sample of unbanked households, and 61.5 percent of the unbanked households residing in an LMI neighborhood, patronized a currency exchange to purchase only financial services (Table 6). Despite the fact that they already have a deposit account, 19 percent of the total banked households and 40 percent of the banked households residing in an LMI neighborhood used currency exchanges to obtain financial services. Clearly, having a deposit account does not preclude a household from seeking financial services from alternative sources.

Empirical Investigation and Analysis

The purpose of the empirical investigation is to evaluate the importance of specific characteristics on the likelihood that a household obtains financial services from a currency exchange. As suggested by the descriptive analysis, a high proportion of unbanked households (roughly 83 percent) obtained financial services from currency exchange businesses. The decision to use a currency exchange, therefore, appears to be heavily influenced by the decision to be unbanked.

A bivariate probit model is specified to evaluate whether being unbanked is jointly determined with obtaining financial services from a currency exchange (Greene, 2000). Patronizing a currency exchange (CURRENCY EXCHANGE – FINANCIAL SERVICES) and being unbanked (UNBANKED) are both binary variables each equal to one if the household uses a currency exchange to obtain financial services and if the household is unbanked, respectively. For this analysis, we are examining the probability that currency exchange use is equal to one (equation 1) when unbanked is equal to one (equation 2). Accordingly, the estimates from this model are used to tell us how specific characteristics influence an unbanked household's use of financial services from a currency exchange.

Equation 1: The Likelihood of Currency Exchange Use

The dependent variable, CURRENCY EXCHANGE – FINANCIAL SERVICES, is expected to be influenced by several of the household's socioeconomic characteristics. Because currency exchange businesses may offer unbanked households an alternative means of obtaining financial services, being unbanked (UNBANKED) is expected to have a positive influence on the likelihood of using a currency exchange. Credit cards also can serve as a vehicle in the delivery of many financial transactions, serving as both a payment and a finance medium. The potential substitutability between using a credit card and obtaining financial services from a currency exchange business suggests that having a credit card (CREDIT CARD) is negatively related to the likelihood of patronizing a currency exchange business.

Consumer advocacy groups have claimed that minority households (BLACK, HISPANIC and OTHER (Asian, Native American and Other)), lower-income (INCOME < $30,000) households, and households residing in LMI (LOWMOD) neighborhoods are more likely to use a currency exchange than White households, higher-income households, or households living in middle- and upper-income communities, respectively. If true, these characteristics are expected to have a positive influence on the likelihood of using currency-exchange financial services.

Several studies have stated that convenient location and lower transactions costs in terms of time are major features sought by currency exchange users. The value of one's time (*i.e.*, market opportunity cost) and the need for convenience is expected to be higher for consumers tied to the labor market. As such, working consumers

(EMPLOYED) may be more likely to patronize a currency exchange business than their unemployed counterparts. Conversely, if retired (RETIRED) individuals perceive themselves as having lower market opportunity cost, they may be less likely to patronize a currency exchange business; the omitted categories are households that are unemployed in the labor force or unemployed not in the labor force. To the extent that married households have greater time constraints than unmarried households, being married (MARRIED) also is expected to have a positive influence on the likelihood of currency exchange use, *ceteris paribus.*

Education is used as an indicator variable for a consumer's human capital in financial literacy. Less educated households may possess a weaker understanding than their more educated cohorts about the numerous financial advantages and consumer protections afforded to them from mainstream financial service providers. To determine if less educated households are more likely to use a currency exchange, having a high school degree or less (EDUCATION 12 YEARS OR LESS) is included. It also has been suggested that currency exchange use is greater during the consumer's earlier stages of the life cycle. To evaluate this possibility, the estimated model includes an indicator variable to determine if younger householders (AGE 18 TO 25) are more likely to use currency exchange services than older householders. Finally, the model includes an indicator variable to estimate whether gender (FEMALE) differences exist in the patronage of currency exchange businesses.

Equation 2: The Likelihood of Being Unbanked

Studies have consistently shown that unbanked consumers are more likely to have lower income and net worth, to reside in an LMI neighborhood, to be less educated and unemployed, and to be more heavily represented among Black, Hispanic, female, unmarried, and younger consumers. *A priori*, it is thought that unemployed individuals no longer active in the labor force (UNEMPLOYED, NOT IN LABOR FORCE) may be more likely to be unbanked due to their severed tie to the labor market than employed individuals or individuals who are unemployed but actively searching for a job. If true, UNEMPLOYED, NOT IN LABOR FORCE is expected to have a positive influence on the likelihood of being unbanked. Conversely, it is expected that retired (RETIRED) individuals who previously had a connection to the labor market are less likely to be unbanked.

Generally, a household's net worth is comprised of the dollar value of financial assets held such as savings and other deposit accounts, stocks, bonds, certificates of deposit, and retirement accounts. For the data analyzed in this study, we can ascertain household ownership of many aspects of net worth (*e.g.*, presence of savings accounts, money market funds, IRAs), but we are unable to determine the dollar value of many. However, information provided by the Survey of Consumer Finances (Kennickell *et al*, 1997) suggests that there is a strong, positive correlation between a household's net worth and being a homeowner. As such, homeownership (OWN HOME) is used as an indicator variable for the household's net worth and is expected to be negatively related to being unbanked.

In an earlier study, Hogarth and O'Donnell (1997) find that Black and Hispanic consumers tended not to have a checking account because of perceived unfavorable checking account characteristics (*e.g.*, minimum balance or monthly fees too high) and a distaste for an account (*e.g.*, don't trust banks). Accordingly, indicator variables are included to determine whether perceived unfavorable product characteristics (PRODUCT HAS UNFAVORABLE CHARACTERISTICS) and having a distaste for a checking account (DISTASTE FOR A CHECKING ACCOUNT) have a positive influence on the likelihood of being unbanked. To determine whether these factors play a significant role in the likelihood of being unbanked by racial/ethnic group, interaction terms are included in the empirical model. For example, the interaction term, BLACK X PRODUCT, measures the influence that being Black and perceived unfavorable checking account characteristics have on the probability of being unbanked, relative to being Black and not perceiving checking accounts as having unfavorable characteristics. Similarly, the term, BLACK X DISTASTE, denotes the influence that being Black and having a distaste for a checking account have on the likelihood of being unbanked, relative to being Black and not having a distaste for an account. Comparable interaction terms for HISPANICS and OTHER (*i.e.*, Asian, Native American, and Other) also are included.

Marginal Effects of the Model[6]

The results from the bivariate probit model suggest that being unbanked is jointly determined with using a currency exchange to obtain financial services.[7] Table 7 reports the direct, indirect and total marginal effects on the use of a currency exchange for obtaining financial services by unbanked households. Turning to the total effects, we find that being unbanked increases the likelihood of using a currency exchange by 14.6 percentage points; unbanked households residing in an LMI neighborhood are 7.6 percentage points more likely to use a currency exchange than unbanked households residing elsewhere.

Unbanked Black households are 17.8 percentage points more likely than unbanked White households to patronize a currency exchange. Similarly, unbanked Hispanic households are 7.5 percentage points more likely to use a currency exchange than their unbanked White counterparts. The lack of significance for the OTHER race variable suggests that no differences exist in the likelihood of using a currency exchange between minorities in the Other racial/ethnic category and Whites.

Unbanked Black households with a distaste for a checking account are roughly 14 percentage points more likely to patronize a currency exchange than unbanked Black households without this distaste. Moreover, unbanked Black households with an unfavorable perception about checking account characteristics are 8.7 percentage points more likely to use a currency exchange than unbanked Black households without this unfavorable perception. For unbanked Hispanic households, having an unfavorable perception about checking accounts increases the likelihood of using a currency exchange by 1.1 percentage points, whereas having a distaste for a checking account does not significantly influence the likelihood of currency exchange use among unbanked Hispanics. Overall, these findings suggest that unfavorable product characteristics and distaste for a checking account are important influences on the probability that an unbanked Black household, and to a lesser degree, an unbanked Hispanic household, use currency exchanges. The results from the unbanked equation suggest that households that perceive checking accounts as having unfavorable characteristics are 15.2 percentage points more likely to be unbanked than households without this perception, and while households with a distaste for a checking account are 10.4 percentage points more likely to be unbanked than households without this distaste. These behavioral attributes offer important insights to help explain why households chose to be unbanked.

In this analysis, we have discussed the combined marginal effects of race and the taste and preference variables. We recognize that the standard errors reported are not associated with these combined effects. Furthermore, we acknowledge that further adjustments are needed to take into account the marginal effects when dummy variables are specified. This adjustment is not expected to substantially influence the results. Corrections to these points will be made in the next version of the paper. Although beyond the scope of this study, we plan to extend the present model to include an analysis of currency exchange use among banked households.

Potential Policy Implications

While the findings from this study are reflective of a unique urban experience in the Midwest, we believe that important insights can be drawn to help policymakers and community leaders bring LMI and other unbanked consumers into the mainstream financial arena. We find that currency exchanges play an active role in providing financial services to unbanked households, and in particular, to residents of LMI neighborhoods and specific minority households. The decision to forego an opportunity to establish a relationship with a formal financial institution may have long-term implications, potentially unknown to these consumers. As such, we believe that financial literacy and other educational programs could be very useful toward helping consumers gain a better understanding of the inherent tradeoff between mainstream and alternative financial service providers. Moreover, educational initiatives, potentially in partnership with financial institutions, may go a long way to help consumers overcome negative attitudes toward mainstream financial services institutions. We find that households, especially Black and Hispanic households, were less likely to have a checking account with a formal financial institution because of specific account characteristics, such as the cost of account maintenance (minimum balance), affordability (high fees), and lack of funds needed to open an account. These findings suggest that, at least in the Chicago metropolitan area, specific opportunities exist to help bring Blacks and Hispanics into the mainstream financial service arena by making low-cost transaction accounts available. In addition, programs aimed at educating consumers about effective deposit account management, including the avoidance of unnecessary fees and charges, would be quite useful for first-time deposit holders.

To the extent that financial institutions are unable or unwilling to offer products and services that address the concerns of the consumers in our study, and if there is general agreement that access to a basic financial account is important to help families conduct transactions and provide a safe way to accumulate a needed emergency cushion, then there may be a market failure for this segment of the marketplace. The question then becomes: are basic banking accounts a “public good” and thus, should the government provide these? The development of Electronic Transfer Accounts (ETAs) as part of the EFT 1999 initiative and the enabling legislation for First Accounts are, in part, testimony to Congress' intention to help more households become banked, while still trying to work with the market system to provide these accounts. After about 18 months of availability, 611 financial institutions with 13,000 branches offer ETAs and 8,700 consumers have signed up. The Bush administration recently announced that it has discontinued the $10 million First Accounts initiative and will rely on other programs to accomplish this goal (Goldstein and Kessler, 2001). Hence, the policy answer may be found in the combination of education, cooperation between the public and private sectors, and a policy environment that fosters a variety of targeted responses from the private and nonprofit sectors.

Sherrie L.W. Rhine is Senior Economist and Manager of Consumer Issues Research at the Federal Reserve Bank of Chicago. She has been a research manager at the Federal Reserve Bank of Chicago since 1996. Her research interests include consumer use of financial services, small business financing and access to credit, consumer lending, community economic development, and financial literacy. Prior to joining the Fed, Rhine worked in academia for 10 years and in international tax consulting at a major accounting firm for several years. She has published in academic journals, including The American Economic Review Papers and Proceedings, The Review of Economics and Statistics, Journal of Human Resources, Health Economics, Applied Economics, Journal of Risk and Insurance, and Economics of Education Review. Rhine earned her B.S. from the University of South Florida and her Ph.D. from the University of South Carolina.

Maude Toussaint-Comeau is an Economist at the Federal Reserve Bank of Chicago. Her current research interests include consumer use of alternative financial services, housing tenure choice and spatial concentration, and community and economic development. Prior to joining the Fed in 1998, Toussaint-Comeau taught consumer economics and microeconomics as an adjunct assistant professor at the University of Illinois at Chicago and worked as an assistant economist intern at the U.S. Department of Agriculture. She is currently a member of the Board of Trustees of the Illinois Economic Association. She received a B.A. from the University of Illinois at Urbana-Champaign and a Ph.D. from the University of Illinois at Chicago.

Jeanne Hogarth is Program Manager for the Consumer Policies Section of the Division of Consumer and Community Affairs at the Federal Reserve Board. Her experience includes seven years of high school teaching and 14 years working on consumer economics faculties at the University of Illinois and at Cornell University. During her tenure at Cornell, she was responsible for community education programs related to family financial management and consumer economics. She joined the Federal Reserve Board in 1995, and her recent projects include research and outreach initiatives on consumers' use of banking services, consumer protection strategies, and consumer complaint behaviors. She received her B.S. from Bowling Green State University and her M.S. and Ph.D. from Ohio State University.

William H. Greene is Professor of Economics and Chair, Department of Economics, at the Stern School of Business, New York University. He has a Ph.D. and M.A. from the University of Wisconsin, Madison, B.S.B.A. from The Ohio State University. He has been Professor of Economics at the Stern School since 1982 and Chair of the department of economics since 1996. Research interests center on econometric methods and applications, particularly nonlinear optimization, panel data, discrete choice modeling and limited dependent variables. Applications have been in modeling productivity, credit scoring, attrition in medical clinical trials, and labor supply models. Other employment has included teaching at Cornell University and S.U.N.Y. Binghamton and consulting with National Economic Research Associates, American Express Corp, Ortho Biotech, LRChristensen Associates, and the United States Postal Service. Published research has appeared in Econometrica, Journal of Political Economy, Journal of Econometrics, Journal of Economic Perspectives, Journal of Economic Education, Applied Economics, Review of Economics and Statistics, and the American Economic Review. Other publications include the textbook Econometric Analysis and the econometric software packages LIMDEP and NLOGIT.

Table 1
Definitions of Variables

Variable	Definition
WHITE	Dichotomous variable =1 if White, =0 otherwise.
BLACK	Dichotomous variable =1 if Black, =0 otherwise.
HISPANIC	Dichotomous variable =1 if Hispanic, =0 otherwise.
OTHER	Dichotomous variable =1 if Asian, Native American or Other, =0 otherwi
AGE 18 TO 25	Dichotomous variable =1 if 18<=age<25, =0 otherwise.
AGE 26 TO 45	Dichotomous variable =1 if 26<=age<45, =0 otherwise.
AGE 46 TO 65	Dichotomous variable =1 if 46<=age<66, =0 otherwise.
AGE 66 AND OVER	Dichotomous variable =1 if age>=66, =0 otherwise.
AGE	Age of the head of household (continuous).
MALE	Dichotomous variable =1 if male, =0 otherwise.
FEMALE	Dichotomous variable =1 if female, =0 otherwise.
MARRIED	Dichotomous variable =1 if married or married-like relationship, =0 otherwise.
SINGLE MALE	Dichotomous variable =1 if widowed or divorced, =0 otherwise.
SINGLE FEMALE	Dichotomous variable =1 if widowed or divorced, =0 otherwise.
SINGLE, FEMALE HH w/CHILDREN	Dichotomous variable =1 if single female head of household with children < 18 years of age, =0 otherwise.
LESS THAN HIGH SCHOOL	Dichotomous variable =1 if education <= 11 years, =0 otherwise.
HIGH SCHOOL OR EQUIVALENT	Dichotomous variable =1 if high school or equivalent completed, =0 otherwise.
EDUCATION 12 YEARS OR LESS	Dichotomous variable =1 if number of years of schooling completed <= 12 years, =0 otherwise.
SOME COLLEGE	Dichotomous variable =1 if some college completed, =0 otherwise.
BACHELOR'S DEGREE OR MORE	Dichotomous variable =1 if Bachelor's degree or above completed, =0 otherwise.
HOUSEHOLD SIZE	Number of related persons residing in the household (continuous).
HOUSEHOLD w/DEPENDENTS (<18 YEARS OF AGE)	Dichotomous variable =1 if household with dependent children < 18 years of age, =0 otherwise.
INCOME < $30,000	Dichotomous variable =1 if income<$30,000, =0 otherwise.
INCOME $30,000 TO $49,999	Dichotomous variable =1 if $30,000 <=income<$50,000, =0 otherwise.
INCOME $50,000 to $69,999	Dichotomous variable =1 if $50,000 <=income<$70,000, =0 otherwise.
INCOME $70,000 OR OVER	Dichotomous variable =1 if income>=$70,000, =0 otherwise.
EMPLOYED	Dichotomous variable =1 if employed, =0 otherwise.
UNEMPLOYED, IN LABOR FORCE	Dichotomous variable =1 if unemployed in labor force, =0 otherwise.
UNEMPLOYED, NOT IN LABOR FORCE	Dichotomous variable =1 if not in labor force, =0 otherwise.
RETIRED	Dichotomous variable =1 if retired, =0 otherwise.
BANKED	Dichotomous variable =1 if have checking and/or savings account, =0 otherwise.
UNBANKED	Dichotomous variable =1 if do not have checking and/or savings account, =0 otherwise.
LMI (LOWMOD) NEIGHBORHOOD	Dichotomous variable =1 for low-to-moderate income geographies define by census tracts with 80% or less of the median family income for the Chicago MSA, =0 otherwise.
MIDDLE NEIGHBORHOOD	Dichotomous variable =1 for middle-income geographies defined as censu tracts with 80% or greater but less than 120% of the median family income for the Chicago MSA, =0 otherwise.
UPPER NEIGHBORHOOD	Dichotomous variable =1for upper-income geographies defined as census tracts with 120% or greater of the median family income for the Chicago MSA =0 otherwise.
OWN HOME	Dichotomous variable =1 if homeowner, =0 otherwise.
CREDIT CARD	Dichotomous variable =1 if respondent has a credit card, =0 otherwise.
MONEY MARKET	Dichotomous variable =1 if respondent has a money market account, =0 otherwise.
IRA	Dichotomous variable =1 if respondent has an IRA account, =0 otherwise.
SAVINGS ACCOUNT	Dichotomous variable =1if respondent has a savings account, =0 otherwise
CURRENCY EXCHANGE - FINANCIAL SERVICES	Dichotomous variable =1 if respondent obtained financial services from a currency exchange within the last year, =0 otherwise.
DISTASTE FOR CHECKING ACCOUNT	Dichotomous variable =1 if reason for not having/closing a checking account was 'do not like to deal with banks', 'prefer to keep records privat or 'do not trust banks', =0 otherwise.
PRODUCT HAS UNFAVORABLE CHARACTERISTICS	Dichotomous variable =1 if reason for not having/closing a checking acco was 'do not have enough money to open an account', 'do not write enough checks', 'minimum balance/fee too high' or 'bank hours/location inconver

Table 2
Description of Socioeconomic and Demographic Characteristics

	Chicago MSA		Nation	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
RACE				
WHITE	0.63	0.48	0.78	0.42
BLACK	0.21	0.41	0.12	0.32
HISPANIC	0.09	0.29	0.07	0.26
OTHER	0.06	0.23	0.04	0.18
AGE				
AGE 18 TO 25	0.07	0.26	0.07	0.25
AGE 26 TO 45	0.48	0.50	0.42	0.49
AGE 46 TO 65	0.31	0.46	0.31	0.46
AGE 66 AND OVER	0.14	0.34	0.20	0.40
AVERAGE AGE	44.61	15.79	48.73	17.3
GENDER[1]				
MALE	0.40	0.49	-	-
FEMALE	0.60	0.49	-	-
MARITAL STATUS				
MARRIED	0.54	0.50	0.59	0.49
SINGLE MALE	0.17	0.37	0.14	0.35
SINGLE FEMALE	0.29	0.45	0.27	0.44
SINGLE, FEMALE HH w/CHILDREN	0.10	0.30	0.07	0.26
EDUCATION				
LESS THAN HIGH SCHOOL	0.11	0.31	0.16	0.37
HIGH SCHOOL OR EQUIVALENT	0.15	0.36	0.28	0.45
SOME COLLEGE	0.34	0.47	0.18	0.39
BACHELOR'S DEGREE OR MORE	0.40	0.49	0.33	0.47
HOUSEHOLD SIZE	3.00	1.68	2.59	1.46
HOUSEHOLDS WITH DEPENDENTS (<18 YEARS OF AGE)	0.42	0.49	0.37	0.48
HOUSEHOLD INCOME				
INCOME < $30,000	0.22	0.42	0.44	0.50
INCOME $30,000 to $49,999	0.28	0.45	0.22	0.41
INCOME $50,000 to $69,999	0.18	0.38	0.14	0.35
INCOME $70,000 OR OVER	0.31	0.46	0.20	0.40
WORK STATUS				
EMPLOYED	0.71	0.45	0.70	0.46
UNEMPLOYED, IN LABOR FORCE	0.05	0.23	0.03	0.18
UNEMPLOYED, NOT IN LABOR FORCE	0.09	0.28	0.07	0.26
RETIRED	0.14	0.35	0.19	0.39
SELECTED ASSETS				
OWN HOME	0.62	0.49	0.66	0.33
CREDIT CARD	0.79	0.40	0.72	0.31
MONEY MARKET	0.35	0.48	0.11	0.22
IRA	0.47	0.50	0.28	0.31
N	2483		4309	

[1]As a tool for organizing the data in the 1998 Survey of Consumer Finances (SCF), the head of the household is taken to be the central individual (male or female) in a household without a core couple , the male in a mixed-sex couple or the older person in a same-sex couple.

Note: Sum of mean proportions may not add up to 1.00 due to rounding.

Table 3
A Comparison of Mean Attributes

	LMI		NON-LMI		BANKED		UNBANKED	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev
RACE								
WHITE	0.24	0.43	0.78	0.41	0.69	0.46	0.15	0.36
BLACK	0.52	0.50	0.10	0.30	0.17	0.37	0.59	0.49
HISPANIC	0.18	0.38	0.06	0.24	0.08	0.27	0.22	0.42
OTHER	0.06	0.23	0.06	0.23	0.06	0.24	0.03	0.17
AGE								
AGE 18 TO 25	0.12	0.33	0.05	0.23	0.06	0.24	0.17	0.37
AGE 26 TO 45	0.51	0.50	0.47	0.50	0.47	0.5	0.50	0.50
AGE 46 TO 65	0.26	0.44	0.33	0.47	0.32	0.47	0.24	0.43
AGE 66 AND OVER	0.11	0.31	0.15	0.35	0.14	0.35	0.09	0.29
AVERAGE AGE	41.59	16.08	45.70	15.50	45.17	15.76	39.80	15.29
GENDER								
MALE	0.36	0.48	0.42	0.488	0.41	0.50	0.34	0.48
FEMALE	0.64	0.48	0.58	0.488	0.59	0.50	0.66	0.48
MARITAL STATUS								
MARRIED	0.39	0.49	0.60	0.492	0.57	0.50	0.29	0.45
SINGLE MALE	0.20	0.4	0.16	0.36	0.16	0.37	0.25	0.43
SINGLE FEMALE	0.41	0.49	0.24	0.43	0.27	0.44	0.46	0.50
SINGLE, FEMALE HH w/CHILDREN	0.21	0.41	0.06	0.23	0.08	0.27	0.25	0.44
EDUCATION								
LESS THAN HIGH SCHOOL	0.25	0.43	0.06	0.24	0.07	0.26	0.44	0.50
HIGH SCHOOL OR EQUIVALENT	0.18	0.39	0.14	0.35	0.14	0.35	0.23	0.42
SOME COLLEGE	0.33	0.47	0.34	0.47	0.35	0.48	0.27	0.44
BACHELOR'S DEGREE OR MORE	0.24	0.43	0.46	0.50	0.44	0.50	0.05	0.23
HOUSEHOLD SIZE	3.38	2.03	2.86	1.51	2.93	1.61	3.61	2.08
HOUSEHOLD INCOME								
INCOME < $30,000	0.45	0.50	0.14	0.34	0.17	0.37	0.70	0.46
INCOME $30,000 to $49,999	0.26	0.44	0.28	0.45	0.29	0.45	0.20	0.40
INCOME $50,000 to $69,999	0.13	0.34	0.19	0.40	0.19	0.40	0.04	0.19
INCOME $70,000 OR OVER	0.14	0.35	0.38	0.48	0.34	0.48	0.05	0.21
WORK STATUS								
EMPLOYED	0.62	0.49	0.74	0.44	0.74	0.44	0.47	0.50
UNEMPLOYED, IN LABOR FORCE	0.12	0.32	0.03	0.17	0.04	0.20	0.17	0.40
UNEMPLOYED, NOT IN LABOR FORCE	0.12	0.33	0.08	0.27	0.07	0.26	0.24	0.43
RETIRED	0.13	0.33	0.14	0.35	0.15	0.35	0.08	0.30
SELECTED ASSETS								
OWN HOME	0.35	0.48	0.72	0.45	0.67	0.47	0.15	0.35
CREDIT CARD	0.57	0.50	0.88	0.33	0.87	0.33	0.12	0.32
MONEY MARKET	0.16	0.37	0.42	0.49	0.39	0.49	0.00	0.00
IRA	0.23	0.42	0.56	0.50	0.53	0.50	0.02	0.14
INCOME GEOGRAPHY								
LMI (LOWMOD) NEIGHBORHOOD	_	_	_	_	0.22	0.41	0.74	0.44
MIDDLE NEIGHBORHOOD	_	_	_	_	0.43	0.50	0.16	0.37
UPPER NEIGHBORHOOD	_	_	_	_	0.35	0.48	0.10	0.30
N	673		1810		2224		259	

Note: Sum of mean proportions may not add up to 1.00 due to rounding.

Table 4
Reasons for No Checking Account
Households Residing in LMI Neighborhoods

	Total Households Without a Checking Account		LMI	
	N	Percent	N	Percent
UNFAVORABLE CHECKING ACCOUNT CHARACTERISTICS	204	54.0	161	62.4
Minimum balance/fees too high				
Not enough money to open an account				
Do not write enough checks				
DISTASTE FOR CHECKING ACCOUNT	111	29.4	67	26.0
Do not like dealing with banks				
Do not trust banks				
Want to keep records private				
CHECKING ACCOUNT TOO DIFFICULT TO MANAGE	20	5.3	7	2.7
CREDIT HISTORY IS TOO BAD OR TURNED ME DOWN	8	2.1	3	1.2
REASON UNREPORTED BY RESPONDENT	35	9.2	20	7.7
Sample Size	378	100	258	100

Source: The Metro Chicago Information Center Year 2000 Annual Survey.

Table 5
Check Cashing Sources*
By Bank Relationship Status

	Total Sample				LMI			
	Unbanked		Banked		Unbanked		Banked	
	Frequency of Response	%	Frequency of Response	%	Frequency of Response	%	Frequency of Response	%
FINANCIAL INSTIUTIONS	35	15.0	1789	89.0	23	13.1	368	87.0
CURRENCY EXCHANGES	168	71.8	83	4.10	131	74.9	56	13.2
FOOD STORES	22	9.40	224	11.1	14	8.0	33	7.8
OTHER	15	6.40	18	0.90	11	6.3	2	0.5
Sample Size	234		2011		175		423	
Percent of Total		10.4		89.6		29.3		70.7

*Multiple respondent response possible.

Source: The Metro Chicago Information Center Year 2000 Annual Survey.

Table 6
Currency Exchange Patronage
By Bank Relationship Status

	Total Sample				LMI			
	Unbanked		Banked		Unbanked		Banked	
	N	%	N	%	N	%	N	%
OBTAIN FINANCIAL SERVICE ONLY	165	63.7	421	19.0	118	61.5	192	40.0
OBTAIN NONFINANCIAL SERVICE ONLY	5	2.0	329	14.8	3	1.6	42	8.7
OBTAIN FINANCIAL PLUS NONFINANCIAL SERVICE	49	18.9	83	3.7	44	22.9	43	8.9
NO PATRONAGE	40	15.4	1391	62.5	27	14.0	204	42.4
Sample Size	259		2224		192		481	
Percent of Total Sample		10.4		89.6		7.7		19.4

Source: The Metro Chicago Information Center Year 2000 Annual Survey.

Table 7
Estimated Marginal Effects
Currency Exchange - Financial Services
Conditioned on Unbanked =1

Variable	Direct Effect	Indirect Effect	Total Effect	Standard Error (absolute value)
UNBANKED	0.146		0.146*	0.054
CREDIT CARD	-0.077		-0.077**	0.040
BLACK	0.152	0.026	0.178**	0.074
HISPANIC	0.074	0.001	0.075***	0.043
OTHER	0.032	0.014	0.046	0.029
INCOME < $30,000	0.032	0.019	0.051**	0.022
LMI (LOWMOD) NEIGHBORHOOD	0.068	0.008	0.076**	0.035
EMPLOYED	0.037		0.037***	0.022
RETIRED	-0.046	-0.009	-0.055***	0.032
MARRIED	0.004		0.004	0.012
EDUCATION 12 YEARS OR LESS	0.018	0.014	0.032**	0.016
AGE 18 TO 25	0.070	0.001	0.071***	0.039
FEMALE	-0.010	0.002	-0.008	0.013
UNBANKED Equation				
OWN HOME	-0.020		-0.020*	0.005
UNEMPLOYED, NOT IN LABOR FORCE	0.018		-0.018*	0.008
BLACK x DISTASTE FOR CHECKING ACCOUNT	-0.039		-0.039*	0.015
BLACK x PRODUCT HAS UNFAVORABLE CHARACTERISTICS	-0.091		-0.091*	0.026
HISPANIC x DISTASTE FOR CHECKING ACCOUNT	-0.002		-0.002	0.020
HISPANIC x PRODUCT HAS UNFAVORABLE CHARACTERISTICS	-0.064		-0.064**	0.029
OTHER x DISTASTE FOR CHECKING ACCOUNT	-0.016		-0.016	0.026
OTHER x PRODUCT HAS UNFAVORABLE CHARACTERISTICS	-0.073		-0.073	0.059
DISTASTE FOR CHECKING ACCOUNT	0.104		0.104*	0.012
PRODUCT HAS UNFAVORABLE CHARACTERISTICS	0.152		0.152*	0.026

* significant at the 0.01 level.
** significant at the 0.05 level
*** significant at the 0.10 level

Notes

[1] See "Fiscal Facts: The Check-Cashing Industry" in the web site of Financial Service Centers of America Inc., (FiSCA), formally National Check Cashers Association Inc., www.nacca.org/q&a.htm.

[2] See "Fiscal Facts: The Check-Cashing Industry" in the web site of Financial Service Centers of America Inc., (FiSCA), www.nacca.org/q&a.htm. Some states have set limits on the fees that may be charged.

[3] The Chicago metropolitan area (PMSA) covered in this survey includes Cook, DuPage, Lake, Kane, McHenry, and Will counties.

[4] More information about MCIC, a nonprofit organization located in Chicago IL, can be found by going to www.mcic.org.

[5] See Prescott, Edward S. and Daniel D. Tatar (1999) for a note of caution regarding Caskey's findings (1994) that currency exchanges are infrequently used to cash checks among the unbanked. One important reason they cite is that cities analyzed in Caskey's study have smaller markets than Chicago and New York.

[6] Due to space constraints, we do not present the coefficients from the bivariate probit model for unbanked and currency exchange financial services; these are available from the senior author.

[7] LIMDEP (1998) software was used to estimate the bivariate probit model.

References

Booz-Allen and Hamilton Shugoll Research, "Mandatory EFT Demographic Study," *OMB #1510-00-68*, Washington: U.S. Department of the Treasury, September 15, 1997.

Caskey, John P., *Fringe Banking: Check-Cashing Outlets, Pawnshops, and the Poor.* New York: Russell Sage Foundation, 1994.

Dove Associates, Inc., "ETA Conjoint Research: Final Report and Market Model, Unbanked Federal Check Recipients," *OMB #1510-00-71*, Washington: U.S. Department of the Treasury, May 26, 1999.

Doyle, Joseph J., Jose A. Lopez, and Marc R. Saidenberg, "How Effective Is Lifeline Banking in Assisting the 'Unbanked'?" *Current Issues in Economics and Finance*, Federal Reserve Bank of New York, Vol. 4, June 1998.

Financial Service Centers of America Inc., (FiSCA), formally National Check Cashers Association Inc., “FiSCA Facts: The Check-Cashing Industry,” web site, www.nacca.org/q&a.htm.

Goldstein, Amy and Glenn Kessler, “Budget Trims Take Parts of Clinton Vision: Bush’s Spending Plan Shows a Shift in Priorities, Preparing the Way for Tax Cut,” *Washington Post*, April 1, 2001, page A6.

Greene, William H., *Econometric Analysis*, Fourth Edition, Macmillian Publishing Company, 2000.

Hogarth, Jeanne M. and Kevin H. O’Donnell, “Being Accountable: A Descriptive Study of Unbanked Households in the U.S.,” *Proceedings of Association for Financial Counseling and Planning Education*, 1997.

Kennickell, Arthur B., Martha Starr-McCluer, and Annika E. Sunden, “Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances,” *Federal Reserve Bulletin*, Vol. 83, January 1997, pp. 1-24.

Kooce-Lewis, Joan, Roger Swagler, and John R. Burton, “Low Income Consumers’ Use of the Alternative Financial Service Sector,” *Consumer Interest Annual*, Vol. 42, 1996, pp. 271-74.

LIMDEP, Plainview, N.Y.: Econometric Software, 1998.

Organization for a New Equality, *Cash, Credit & EFT ’99: Reducing the Cost of Credit and Capital for the Urban Poor*, Washington DC: Organization for a New Equality, 1998.

Prescott, Edward S. and Daniel D. Tatar, “Means of Payment, the Unbanked, and the EFT ’99,” *Economic Quarterly*, Federal Reserve Bank of Richmond, Vol. 85/4, Fall 1999.

Reaching Out to the Unbanked

John P. Caskey
Swarthmore College

Introduction

This paper presents a strategy that banks can use to help "unbanked" households, those who do not have accounts at deposit institutions, to join the mainstream financial system. The strategy seeks to help these households build savings and improve their credit-risk profiles in order to lower their cost of payment services, eliminate a common source of personal stress, and gain access to lower-cost sources of credit. The strategy calls on participating banks to open special branch offices, called "outlets," that are conveniently located for lower-income households. In addition to traditional consumer banking products, the outlets should offer five non-traditional services:

- Fee-based check-cashing services
- Basic savings accounts that include access to low-cost money orders for making long-distance payments
- Deposit accounts, similar to traditional "Christmas Club" accounts, designed to help people accumulate savings
- Deposit-secured loans to individuals whose credit histories would make them ineligible for mainstream credit
- Formation of partnerships with appropriate community based organizations to create social bridges with the community and to offer budget-management and credit repair seminars

The paper argues that such an outreach strategy is likely to be superior to traditional bank outreach efforts. Under the traditional approach,

This is an executive summary of my article,"Reaching Out to the Unbanked" which is forthcoming in the book, *Inclusion in Asset Building:Research and Policy*, edited by Lisa Morris and Michael Sherraden.

mainly to obtain an acceptable rating under the Community Reinvestment Act, some banks maintain branches in lower-income areas even when these branches do not meet standard profitability thresholds. In addition, some banks offer low-cost “basic” checking accounts intended to meet the needs of lower-income households. The outreach strategy that I advocate in this paper is likely to be superior to the traditional approach in four regards. First, it will draw more of the unbanked into bank branches. Second, it will offer them a set of services better designed to meet their needs. Third, it is better structured to help the unbanked become traditional bank customers. Fourth, it is also likely to be more profitable for banks than is the traditional approach, so banks should be more willing to implement it.

A Brief Description of the Unbanked

Several surveys have examined the socioeconomic characteristics of the approximately ten million households that do not have bank accounts. The surveys find that that the unbanked are disproportionately represented among lower-income households, among households headed by African-Americans and Hispanics, among households headed by young adults, and among households that rent their homes (Kennickell *et al*).

Household surveys have also asked people why they do not have deposit accounts (Booz-Allen, 1997, and Caskey, 1997a). The surveyed families most frequently report that they do not have deposit accounts because they have almost no month-to-month financial savings to keep in the accounts. Other common responses include: “bank fees are too high,” “bank minimum balance requirements are too high,” “we want to keep our financial records private,” and “we are not comfortable dealing with a bank.”

Many of the unbanked report that they encounter few problems from their status (Prescott and Tatar). They have no financial savings so there is no hardship from not having access to a financial institution to safeguard such savings. They have no immediate need for credit or do not find that their unbanked status excludes them from the credit that they do need. Payment services are also not problematic for a variety of reasons. Many receive and make few non-cash payments. Others cash paychecks for free at an accommodating deposit institution, grocery store, or other business. Those making long-distance payments do so by purchasing money orders from the post office or convenience stores.

Such a sanguine outlook is not, however, true for a significant fraction of the unbanked. In large urban areas, surveys indicate that somewhere between 20 and 40 percent of the unbanked pay fees to cash their paychecks, and many of these patronize commercial check-cashing outlets (CCOs). This is not surprising since check-cashing outlets provide a range of convenient payment services in one location. They cash paychecks, they sell money orders with stamped envelopes for making long-distance payments, and they serve as agents for utility bill payments and for electronic money transfer services, such as Western Union. The problem created by the regular use of a CCO is that CCOs are an expensive source for payment services. Outside of a small number of states with strictly binding fee ceilings, most CCOs charge between 2 and 3 percent of the face value of a check to cash it. A family with $18,000 in take-home pay that uses such CCOs regularly can easily spend $400 or more of its limited annual income just to obtain basic payment services.

Nevertheless, it is understandable why CCO customers do not go to a bank. Most banks in urban areas won't cash paychecks for people who do not have an account at the bank or who do not have an account with sufficient funds in the account to cover the check. It can be quite costly for someone living from paycheck to paycheck to open a checking account, even one with a low minimum-balance requirement. It is very easy for a person who runs his account balance down to near zero at the end of each pay period to “bounce” checks on the account. Each bounced check can cost the account holder $25 to $35. It is also expensive and inconvenient for bank customers without checking accounts to make long-distance payments. Almost all banks charge at least $1 for money orders, and many charge as much as $3. Moreover, they do not sell stamps and envelopes in which to mail the money orders so the customer must go elsewhere to meet this need. Finally, banks generally do not transmit payments to utility companies nor do they serve as agents for electronic money transfer services.

The relatively high fees that many of the unbanked incur for basic payment services, although cause for concern, may not be the major problem associated with their status. Ethnographic studies find that the unbanked rarely complain about the expense or inconvenience of obtaining payment services (Caskey, 1997b). Rather, they complain mainly about the insecurity and stress associated with living from paycheck to paycheck. This is also true of lower-income individuals with bank accounts who consistently run down their account balances to near zero at the end of each pay period. In both cases, the individuals commonly speak of feeling physically and emotionally drained from facing frequent personal financial crises and worrying about the ones to come.

Finally, because so many of the unbanked live from paycheck to paycheck with no financial margin of safety, many have been forced by past personal financial crises to miss scheduled payment obligations, such as rental, debt-service, or utility-bill payments. Problems in their credit histories and debt-service burdens leave a large share of the unbanked, and a significant share of lower-income households generally, cut off from mainstream credit. When these households need short-term loans to meet emergencies, they find informal sources of credit or turn to high-cost formal-sector lenders such as pawnshops, car-title lenders, payday lenders, and small loan companies. Interest rates from these lenders are generally over 100 percent APR and often as high as 300 percent.

The Proposed Outreach Strategy

As noted in the introduction, I argue that the most effective and cost-efficient means to bring the unbanked into the banking system should involve five measures. Here I explain each of those measures and their rationales.

Participating Banks Should Open Specialized Bank Branches That Provide CCO Services

The first step in the proposed strategy calls on participating banks to open specialized branches that offer the full range of commercial check-cashing services as well as standard consumer banking services. To distinguish them from other bank branches, I call these specialized bank branches "outlets." These outlets should cash low-risk paychecks and government checks without placing a hold on the checks even for individuals who lack deposits to cover the checks. Since people without checking accounts who cash their paychecks will need a means to pay bills, these outlets should sell money orders and stamped envelopes in which to mail the money orders and they should serve as an in-person payment point for utility bills, cable TV bills, *etc.* They should also offer a service for transferring funds by wire, especially when the outlets are located in areas with large numbers of recent immigrants.

If the outlets are to be successful, banks must locate them at points likely to be convenient for large numbers of low- and moderate-income households. The outlets will need to maintain hours similar to those of check-cashing outlets, meaning that they should be open early evenings and on Saturdays. Banks should also post prominent signage indicating that the outlets offer check-cashing services. In many cases, giving the outlets a CCO-type name, such as “Cash Express Center of Bank X,” will serve this purpose.

Opening such outlets serves three purposes:

- By offering CCO services in a bank branch, the bank establishes direct contact with CCO customers. This should help make the unbanked comfortable dealing with banks. Over time, banks can develop relationships with unbanked individuals that the banks can use to encourage them to take steps to build savings and address problems in their credit records. Simply put, banks cannot help the unbanked if they do not get them in the door.

- The establishment of the outlets recognizes that many CCO customers are likely to be slow to open deposit accounts. As noted earlier, many do not have month-to-month savings and see little advantage to a deposit account. Others do not want deposit accounts for fear that their savings might be seized by creditors or might make them ineligible for welfare. By offering check-cashing services, banks can provide high quality, relatively low-cost, payment services to such individuals who remain outside of the deposit system.

- Banks with branches in lower-income areas often report that it is difficult to cover the costs of these branches with traditional services since deposit mobilization is low, transaction levels are high, and loan opportunities are limited. If these branches were able to find new sources of revenue, such as check-cashing fees, this could contribute toward making these branches profitable and encourage banks to open branches likely to attract large percentages of lower-income households.

Banks opening such outlets should be able to set fees for check-cashing services that are somewhat lower than those of most check-cashing outlets and yet sufficiently high to be profitable for the banks. This is true for two reasons. First, the bank outlets, which offer traditional consumer banking services as well as check-cashing services, should benefit from economies of scope. Earnings from both services can cover many of the same fixed overhead expenses. Second, banks, unlike commercial check-cashing outlets, have direct access to check-clearing systems and a relatively low cost of financial capital. This will eliminate some of the costs that check cashers incur from the need to clear checks through the banking system and obtain working capital.

The Outlets Should Offer "Starter" Deposit Accounts that have Low Minimum-balance Requirements, Cannot be Overdrawn, and Include Access to Low-Cost Money Orders for Making Long-distance Payments

In addition to check-cashing services, the outlets should provide the full range of consumer banking services offered at the traditional branches of the banks that own them. This recognizes that, even in very low-income communities, there will be significant numbers of people who desire traditional deposit and credit services and can qualify for them. To the extent that an outlet can attract such customers, it makes banking services more convenient for some community members and helps to cover the costs of the outlet.

In addition to their traditional deposit accounts, the outlets should offer a low-cost, low-minimum-balance savings account that gives account holders the option to purchase as many as ten money orders per month for no more than $0.75 each. The outlets should also offer to sell account holders stamped envelopes and convenient processing of utility bill payments. For qualifying households, the savings account should include ATM and debit-card access.

The rationale is simple. Many lower-income individuals have a history of writing checks that bounce or fear that they will write such checks in the future. This is understandable for someone who draws down his or her account balance to near zero each month, but it can result in large "NSF" fees. Such individuals need deposit accounts that cannot be overdrawn, and yet that offer an affordable and convenient means for making long-distance payments. A simple means to meet this need is to offer a non-checkable transactions account and sell low-cost money orders for long-distance payments. A bank offering this product could automate the dispensing of money orders to speed the process.

The Outlets Should Offer Accounts Specifically Designed to Help People Build Savings

In addition to the savings account described above, the outlets should offer a “savings-building” account. Although there can be many variations in the details of savings-building accounts, research on consumers' savings behavior indicates that these accounts should have several key features. First, in opening such an account, an individual should pledge to make regular fixed-value contributions to the account over a specified time period, usually a year. The timing of these contributions should closely coincide with the individual's receipts of income. Second, the bank should permit the required periodic contributions to be small, perhaps as little as $20 a month. Third, if possible, contributions to the account should be automatic. The contributions, for example, could be linked to a member's direct deposit of her salary, or a check-cashing customer might agree to deposit $10 each time he cashes his biweekly paychecks. Fourth, a savings-building account should be a separate from other accounts that the individual might own. This helps separate the funds psychologically from savings for short-term transaction purposes. Finally, there should be some financial penalty if the account owner closes the account early or if she fails to keep her commitment to make specified deposits at regular intervals. In imposing this penalty, such as loss of accumulated interest, the bank should probably show some flexibility. It might, for example, permit one or two missed deposits before the penalty takes effect.

The psychological basis of these rules is obvious. People have a hard time saving on a discretionary basis, so they save most effectively when the act of savings is relatively unconscious and the savings are viewed as “locked away.”

The Outlets Should Offer Deposit-Secured Emergency Loans to Individuals Whose Credit Histories Make Them Ineligible for Traditional Mainstream Credit

Although the outlets can compete with commercial check-cashers, in most cases they will not be able to provide traditional loans to people currently borrowing in the alternative financial sector (AFS). These people generally have far higher risk profiles than would be prudent for depository institutions to underwrite. AFS firms can provide credit to this population group by adopting labor-intensive risk-control procedures, such as prompt and persistent in-person debt collection. The outlets could try to follow a similar path, but collecting unsecured subprime debts requires specialized skills that bank outlet employees are unlikely to possess or develop quickly. More importantly, in many cases it is doubtful that a bank outlet would be providing a beneficial service if it were to make short-term high-cost loans to financially hard-pressed individuals. This could simply worsen the borrowers' financial distress and the costs of the resulting consequences.

In some cases, however, bank outlets should be able to use creative means to meet customers'legitimate credit needs. Banks with branches in lower-income communities frequently report that many of their customers with good credit records occasionally seek unsecured non-revolving loans of under $1,500. Commonly, banks do not offer such loans because the processing and monitoring costs are high relative to the size of the loan. But with credit scoring and other cost-saving technologies, the outlets may be able to make fast-disbursing small-value loans with fees that are attractive to both the customers and the banks.

Customers with impaired credit histories will also have legitimate needs for credit. To help meet this need, the outlets should offer deposit-secured loans to customers unable to pass standard credit-risk assessments. An outlet could, for example, issue a deposit-secured credit card to a customer. Or it could make a nonrevolving loan against the balance that a member has accumulated in a savings-building account. When the customer repays the loan, his or her savings are still in place. Moreover, if outlets offer such loans, customers may be more likely to agree to lock away their savings in savings-building accounts.

The outlets might also consider partnering with a philanthropic foundation or community-based organization to arrange collateral for high-risk emergency loans to individuals without savings. As noted earlier, many lower-income households without financial savings face periodic financial crises caused by unexpected expenses or interruptions in their incomes. When such a disruption occurs, the family may not be able to pay the rent or fix a car needed to get to work. This can lead to compounding crises, such as eviction or job loss. Sympathetic as a bank might be, it cannot prudently make unsecured loans to high-risk applicants in such situations. But working with a third party, such as a not-for-profit community-based organization (CBO), the bank can help. The CBO, for example, could raise funds from philanthropic foundations and place these funds on deposit at the bank. A family with a poor credit record needing an emergency loan could apply to the CBO. If the CBO approved the loan application, the bank could book the loan using the CBO's deposit as collateral. Using such a process, the bank outlet could help meet some families' legitimate needs for emergency loans. By working with a bank, a CBO can leverage the funds that it raises for such emergency loans and benefit from a bank's expertise and efficiency in administering loans.

The Outlets Should Seek Community-Based Partners and Offer Financial Literacy Programs

As the previous example makes clear, in launching outlets to serve the unbanked, banks can benefit by forming partnerships with not-for-profit community-based organizations. A partnership with an appropriate CBO can bring a number of benefits to the bank and the CBO. Most importantly, if the CBO is well respected and well connected in the community, it can help overcome any distrust that the community might have of the bank's motives in opening the outlet. The CBO can also benefit from the partnership because it enables the CBO to bring sophisticated financial services to the targeted neighborhood in a short time period. Some CBOs have tried, as an alternative strategy, to start their own credit unions. Most of these credit unions, however, remain very small with limited management capacity and can offer only a very restricted range of consumer financial products.

In addition to forming a partnership with a CBO to launch outlets to serve the unbanked, banks should use the outlets as bases to promote appropriate financial literacy initiatives. This is not to say that the outlets should conduct such financial counseling programs themselves. Not only are such programs costly to offer, but banks may not be the appropriate institutions to deliver the information. Community-based organizations are likely to be more effective. Well-run CBOs understand the particular financial literacy needs of their communities and have staff who can communicate comfortably with members of their communities. In addition, as not-for-profit organizations, CBOs can apply to philanthropic foundations and government agencies to fund their financial counseling programs.

Why it is Realistic to Expect Banks to Implement the Proposed Outreach Strategy

The paper argues that banks may well be interested in implementing the proposed outreach strategy. Currently, many banks maintain traditional branches in lower-income areas. In many cases, these branches book few loans and mobilize little in the way of deposits. Banks maintain such branches even when they do not meet standard profitability thresholds because they hope to obtain an acceptable rating under the Community Reinvestment Act (CRA).

The outreach strategy advocated above is not only likely to better meet the needs of many lower income households, but it is also likely to offer a better return to banks than does the traditional approach while continuing to count towards a favorable CRArating. There are a number of measures that banks can take to ensure that they earn a relatively favorable rate of return from the outlets. The outlets should be small, perhaps taking no more than 1,000 square feet, as do many check-cashing outlets. The outlets should have flexible staffing and banks should consider using "souped-up" ATMs to cash paychecks, dispense money orders, and initiate utility bill payments within the outlets. If the ATMs are successful, they could reduce significantly staffing costs.

Well-located outlets should have strong revenues. Assuming that they attract a moderately high volume of check-cashing business and levy check-cashing fees in the neighborhood of 1.0 to 1.5 percent, the outlets should earn about $100,000 a year from check-cashing and other payment service fees. In addition to this income, the outlets will earn income from their traditional banking services. If these two businesses can be combined in one outlet with substantial economies of scope (the same teller can serve check-cashing and banking customers from the same facility), the outlets should be moderately profitable.

There is already some evidence that the outreach strategy that I advocate can be successful. In 1993, Union Bank of California began to open "Cash & Save" outlets that offer check-cashing services and banking services in the same location. As of early 2000, it had twelve such outlets located in areas convenient for low- and moderate-income households. In addition to cashing paychecks for nondepositors for a fee that ranges from 1.0 to 1.5 percent, the outlets offer the full range of traditional CCO and consumer banking services. They also offer a savings-building account that includes access to low-cost money orders and partner with CBOs to provide seminars on basic financial management. The only service that I advocate that the outlets have not provided is deposit-secured emergency loans for individuals unable to pass traditional credit screening criteria.

Union Bank evaluates the success of the Cash & Save outlets by two criteria. First, the point of opening the outlets was to test the bank's ability to serve check-cashing customers and to help the customers become regular banking customers. By this criterion, Union Bank calls its Cash & Save outlets a success. The outlets, especially those located in the heavily trafficked discount stores, serve large numbers of check-cashing customers. Moreover, the bank reports that about 40 percent of its regular check-cashing customers will use at least one traditional bank product (deposit account, credit card, *etc.*) within a few years. Unfortunately, the bank does not report more detailed information about its ability to help check-cashing customers make the transition into regular bank customers.

The second criterion that Union Bank uses to judge the success of the outlets is their profitability. Bank managers report that the outlets are profitable, but have not provided detailed financial information on their operations. The most profitable of their Cash & Save outlets have very high volumes of check-cashing business. These same outlets, however, have generated only very modest levels of deposits; customers have opened relatively few deposit accounts at these outlets and the accounts tend to have very small balances. In fact, in these outlets almost 90 percent of the revenue comes from check-cashing fees.

Conclusion

Even if this strategy were widely implemented, it would not reach all of the unbanked. Nor would it succeed in helping every customer to build savings, improve credit history, and lower the cost of financial services. Nevertheless, with almost ten million unbanked households in the U.S., even a modest rate of success could mean significant improvements in the quality of life for hundreds of thousands lower-income families.

John P. Caskey is a Professor of Economics at Swarthmore College. Over the past decade, his research has focused on financial institutions serving lower-income households and on community development financial institutions. His publications include Fringe Banking: Check-Cashing Outlets, Pawnshops, and the Poor (Russell Sage Foundation, 1994), Lower-Income Americans, Higher-Cost Financial Services (Filene Research Institute, 1997), and Credit Unions and Asset Accumulation by Lower-Income Households (Filene Research Institute, 1999), coauthored with David Humphrey. In addition to his academic work, Caskey works as a volunteer for the Chester Community Improvement Project, a nonprofit, low-income housing development agency, and he serves on the board of directors of the Franklin Mint Federal Credit Union. He received his B.A. from Harvard College and his Ph.D. from Stanford University.

References

Booz-Allen & Hamilton Shugoll Research, "Mandatory EFT Demographic Study," A report prepared for the U.S. Department of Treasury, September 15, 1997.

Caskey, John P., *Lower Income American, Higher Cost Financial Services*, (Madison, WI: Filene Research Institute) 1997a.

_____________, "Beyond Cash-and-Carry: Financial Savings, Financial Services, and Low-Income Households in Two Communities," A report for the Consumer Federation of America, December 1997b.

Kennickell, Arthur *et al*, "Recent Changes in U.S. Family Finances: Results from the Survey of Consumer Finances," *Federal Reserve Bulletin*, Vol. 86, No. 1, January 2000, pp. 1-29.

Prescott, Edward S. and Daniel D. Tatar, "Means of Payment, the Unbanked, and EFT '99," Federal Reserve Bank of Richmond, *Economic Quarterly*, Vol. 85, No. 4, Fall 1999, pp. 49-70.

The Unbanked and the Alternative Financial Sector

Discussion Comments
Anne Kim
Progressive Policy Institute

> Management believes the Company's core customer group is composed primarily of individuals whose average age is 29. They rent their house or apartment and hold a wide variety of jobs in the service sector or are clerical workers, craftsmen, and laborers. These customers tend to change jobs and residences more often than average, have annual family income under $30,000, often pay their bills with money orders, and prefer the availability of immediate cash provided by cashing checks at the Company's stores.[1]
>
> — Ace Cash Express, Inc.

> The Company believes that many of its customers are workers or independent contractors who receive payment on an irregular basis and generally in the form of a check. The Company's core customer group lacks sufficient income to accumulate assets or to build savings. These customers rely on their current income to cover immediate living expenses and cannot afford the delays inherent in waiting for checks to clear through the commercial banking system.[2]
>
> — Dollar Financial Group, Inc.

The preceding quotations were taken from the most recent publicly filed annual reports of the two largest check-cashing companies in America today. These two companies are Ace Cash Express Inc. (ACE) and Dollar Financial Group, Inc; (Dollar). Together, they control about one-fifth of the check-cashing stores in the country.[3]

It is not a coincidence that the customer profiles described above match quite closely in many respects to the findings of **Dunham** and **Rhine**. The statements by Ace and Dollar illustrate very well what

Dunham and **Rhine** confirm in their research: that check cashers have become impressively effective at targeting, catering to, and profiting from, a potentially very vulnerable population of young, disproportionately minority, working-poor, and near-poor individuals.

The research by **Dunham** and **Rhine** also confirm an emerging bifurcation of financial services, with one system for low-income individuals and another for the middle and upper class. This emerging stratification is very troubling because it signals this potential end-result: banks for the middle class and check cashers for the poor. Access to savings tools for the middle class but barriers to savings for the poor. Low-cost financial services for the middle class and high fee-based services for the poor. Because it is the equitable thing to do, and also because ultimately it is good business, policymakers, banks, and government should work together to reverse this trend toward stratification. **Caskey** has demonstrated one excellent way that this can be done.

Researchers have known for quite some time that a significant percentage of low-income individuals are either disconnected from mainstream banks or don't have the same level of banking relationships as the middle class. What research has not discovered, however, is exactly why. One common assumption has been that banks don't put branches in low-income neighborhoods. But as **Rhine** notes, this is not necessarily the case. Most of the neighborhoods studied by **Rhine** either had equal numbers of banks and check cashers, or just banks.

Another common assumption made has been that bank fees are too high. And this, in part, is true, as discussed below. But **Dunham** and **Rhine** have found a much more significant reason why so many low-income people are either unbanked or underbanked. And the reason is this: mainstream banking institutions simply do not offer, at least in any affordable way, the types of financial services that match the spending and saving behaviors of low-income workers.

One example is the finding by both **Dunham** and **Rhine** that many check cashing customers also hold bank accounts. This finding runs counter to the conventional assumption that if a person becomes banked, he no longer needs to use check cashers. But **Dunham** and **Rhine** have found that that is not the case. As the management of Ace Cash Express also knows, low-income workers both want and are willing to pay for immediate access to their paychecks. This is something banks will not do, especially for low-deposit customers.

Another example of this mismatch between needs and services is illustrated by **Dunham's** somewhat surprising finding that for many people, check cashers are cheaper than banks, although this comparison is relative. Because this finding also runs counter to conventional assumptions, a real-life illustration will prove this point.

In one of the neighborhoods located southeast of Capitol Hill, there are two financial service providers on a single block — one is Ace Cash Express, and the other is a branch office for one of the three largest banks in America, which for purposes of this illustration will be called "Mainstream Bank."

Ace charges its customers 89 cents per money order, and check-cashing fees run a sliding scale that depends on the size of the check. For checks over $250, for example, the fee is 2 percent of the face amount of the check plus $.99. A $700 check, therefore, costs $15 to cash.

Mainstream Bank, by contrast, charges $7.50 a month for a basic checking account, or $90 a year, and $5.00 a month for a basic savings account, or $60 a year. Together, the annual cost of the two accounts is $150.

If an individual can avoid all check-cashing fees, as **Dunham** says many do, and his only expense is for money orders, then a check casher is the cheaper choice. For example, four money orders a month (which is more than **Dunham's** average) will cost four times 89 cents times 12, or $42.72 a year — about half the cost of a checking account at Mainstream Bank, and a third of the cost of holding both checking and savings accounts.

Moreover, maintenance fees are probably not going to be the only fees that the typical low-income customer will pay. If a customer bounces a check, which he is very likely to do given his low income, the likelihood of low balances in his account, and the uncertainty over when exactly checks will clear, Mainstream Bank will charge this customer $30 for each bounced check. One bounced check all year will increase a customer's annual costs to $175. And there is yet one more barrier to opening an account, which is the $100 opening balance.

The cost picture does change if an individual uses check-cashing services. For example, a very low-wage worker who takes home $700 a month will spend $180 a year just to cash those checks. Add in fees for money orders and costs begin to pile up rapidly.

In both cases, however, the fees are high, especially since wealthier people can often avoid charges by maintaining minimum balances. (As an aside, Mainstream Bank is not a particularly expensive bank in terms of fees.) According to the Federal Reserve, the average maintenance fee charged by big banks for a simple checking account is even higher than the fee used in this example. In fact, the average fee charged by large banks is $8.20 a month.[4]

But again, fees are not the principal barrier to becoming banked. As **Caskey** notes, the federal government has initiated a couple of programs to encourage the creation of very low-cost accounts. But also as **Caskey** notes, these programs have not taken off in popularity. The lack of appropriate services offered by mainstream banks is as significant a barrier as high fees. Because of these combined deficiencies, it should come as no surprise that check cashers are thriving.

Thriving is precisely what check-cashing institutions are doing. **Dunham** contends that fewer people than expected use check cashers and that the fees paid by most people do not reach exorbitant heights. The size and profitability of the check-cashing industry, however, seem to belie that conclusion. Again, some real-life examples.

As mentioned before, the top two check cashers in the country are Ace and Dollar. There are only about five other large companies in the industry, and the rest of the nation's check-cashing stores are small-time, corner store operations. Ace and Dollar, however, are emblematic of both the growth and consolidation that's currently going on in this industry. For example, in 1993, Ace owned 276 stores in 10 cities. By last summer, Ace owned more than three times as many stores in 272 cities. Similarly, Dollar now owns six times as many stores as it did only five years ago.

Why such growth? It's because of the potential for big profits. In the last fiscal year, total revenues for Ace equaled about $140 million, and its net income (about $9 million) was more than double what it was five years ago.[5] Dollar, which was in the red two years ago, made profits last year of about $5.5 million, off revenues of $166 million.[6] This is a great deal of money stripped from the pockets of minority low-income workers. Ace and Dollar also represent only about one-fifth of the total check-cashing market. Data on the profitability of check cashers generally does not appear to be available, but it is possible to extrapolate to some extent. **Rhine** notes that, according to the industry's trade association, check cashers nationwide cash $55 billion in checks a year. If average fees total three percent of the face value of this amount, revenues for the industry would total $1.65 billion dollars a year.

One of the reasons check cashers are so profitable is that the fees they charge are far in excess of actual risk. Check cashers say they charge the fees because they are assuming the risk that the check being cashed could eventually bounce. Most of the checks cashed by these institutions, however, are issued by governments and employers, and not, for example, by a customer's next-door neighbor. In fact, many check cashers have policies not to cash those kinds of personal checks. In other words, the risk is small, and the profits are big.

Here's an illustration: Last year, Ace and Dollar together cashed about $6.5 billion in checks. The value of the bad checks among these checks, that is, the checks these companies could not collect upon at all, totaled less than one-fourth of one percent of this amount. Meanwhile, Ace was collecting an average fee of 2.2 percent of face value, and Dollar was collecting an average fee of 3.5 percent of face value.[7]

Payday lending is an even bigger money maker. At Ace, for example, the amount of the average payday loan is $220, and the average fee is $31.80.[8] For a two-week loan, which is the usual term, the interest rate works out to about 14 percent. But if this rate annualizes, the true interest rate turns out to be about 360 percent a year.

The bifurcation in financial services discussed at the beginning of these comments is perhaps the most significant reason why check cashers and payday lenders have made so much money. In other words, half the players are sitting on the bench. Mainstream banks are not competing effectively or perhaps even willingly to provide the services low-income people both want and need.

First, a threshold question: Why does this matter? What's wrong with a dual market? After all, if Neiman Marcus and Target can co-exist to serve different segments of the market, why should banking services be any different? There are several answers to this question.

First of all, society should strive to lower the high costs of being poor. Compared to the vast majority of the attendees at this conference, low-income people pay a lot more for financial services, both in absolute dollars and relative to their income, regardless of whether they use check cashers or banks. Second, this second-tier market developing for low-income people does not provide access to the same tools for asset creation that middle-class people take for granted. Check cashers do not offer savings accounts and in fact encourage their customers to spend as much money as possible, if not on check-cashing services, then on lottery tickets, prepaid phone cards, cellphones, and other "extras" provided by these institutions. Third, the research by **Dunham** and **Rhine** supports the contention that the need for hybrid financial institutions exists. As they document, many people use a combination of banks and currency exchanges to meet their financial service needs. Why not be efficient and create "one-stop shops?"

And one-stop shops are exactly what **Caskey** recommends. Because competition is always a better option than regulation, the best way to get lower prices and better service is to encourage more players to enter the market. **Caskey** has outlined an excellent strategy for how mainstream banks can effectively serve low-income communities while at the same time, as the saying goes, well by doing good.

But perhaps the financial-services industry can go even farther. The growth of the check-cashing industry has been portrayed so far as a wholly negative phenomenon. With the right encouragement, however, check cashers could potentially become part of the solution, rather than part of the problem. To make this possible requires the creation of the right kinds of partnerships with banks. If banks and currency exchanges can reach across the aisle toward each other, they can, together, create hybrid institutions that offer a full menu of financial services, including low-cost savings products.

This strategy could work for the following reasons:

First, check cashers already have the infrastructure to reach low-income communities, with 6,000 outlets nationwide and counting. Second, as they have abundantly demonstrated, they have refined their ability to market products effectively. There is no reason why banks cannot and should not leverage that. Third, the ongoing consolidation in the check-cashing industry has created the big players necessary to enter large-scale partnerships with mainstream banks. Finally, some of this hybridization is already beginning to happen, and now is the time to shape the direction this hybridization is taking.

As happens to all maturing industries, check cashers have "gone corporate." In recent years, the industry has attempted to downplay the neon signs and bulletproof glass and put more emphasis on buffing up its image. For example, what was once the National Check Cashers Association is now the Financial Service Centers of America.

The industry has also become more creative and more diverse, but not necessarily in ways that are beneficial to low-income people. In New York, New Jersey, and Connecticut, for example, check cashers have created something called PAYNET. PAYNET permits employers to send paychecks straight to check cashers, and employees can pay a slightly "discounted" fee to access their wages.[9]

Check cashers have also partnered with banks to create a special "debit" card that allows customers to make withdrawals from either electronically transferred federal benefits or from employer paychecks. This program, however, only provides for spending, not savings, and there is no savings feature attached to this product. But there could be.

And there should be. Products such as these are where the potential for hybridization lies. In fact, in one pilot project in the Bronx, two check cashers have teamed up with a credit union to offer a full menu of financial services, from check cashing to simple savings products.[10] If check cashers are really trying to become more mainstream, banks, policymakers, and government can help make sure this happens.

In conclusion, mainstream banks need to see what check cashers already know: that low-income communities can be a profitable market. But to tap into this market, banks will need the courage to venture outside their traditional business. This risk, however, is one that banks should find worth taking.

Anne Kim is Director of the Work, Family and Community Project at the Progressive Policy Institute in Washington, D.C., a think tank affiliated with the Democratic Leadership Council. Prior to joining PPI, she practiced law in the private sector for firms in New York and Washington, D.C. She holds a bachelor's degree in journalism from the University of Missouri-Columbia and a J.D. with honors from Duke University, where she served as the research editor for the Duke Law Journal.

References

1 Ace Cash Express, Inc., Annual Report on Form 10-K for the fiscal year ended June 30, 2000, filed with the Securities and Exchange Commission.

2 Dollar Financial Group, Inc., Annual Report on Form 10-K for the fiscal year ended June 30, 2000, filed with the Securities and Exchange Commission.

3 Coopers & Lybrand, LLP, *Non-Bank Financial Institutions:A Study of Five Sectors*, February 28, 1997, pp. 31-32.

4 Board of Governors of the Federal Reserve System, *Annual Report to the Congress on Retail Fees and Services of Depository Institutions*, July 2000, p. 12.

5 Ace Cash Express Inc., Annual Report on Form 10-K for the fiscal year ended June 30, 2000.

6 Dollar Financial Group, Inc. Annual Report on Form 10-K for the fiscal year ended June 30, 2000.

7 Ace Cash Express Inc., Annual Report on Form 10-K for the fiscal year ended June 30, 2000; Dollar Financial Group, Inc., Annual Report on Form 10-K for the fiscal year ended June 30, 2000.

[8] *Ibid.*

[9] See the website for the Financial Service Centers of America at www.nacca.org.

[10] *Ibid.*

II. New Industry Developments

THE INFLUENCE OF BUREAU SCORES, CUSTOMIZED SCORES, AND JUDGMENTAL REVIEW ON THE BANK UNDERWRITING DECISION-MAKING PROCESS

M. Cary Collins
University of Tennessee

Keith D. Harvey
Boise State University

Peter J. Nigro
The Office of the Comptroller of the Currency

In recent years, commercial banks have moved toward automated forms of underwriting and away from the judgmental review of loan applications. This paper employs unique bank loan-level data from a scoring lender to assess the impact of different underwriting approaches on applicant outcomes. To determine whether automated underwriting exhibits a potential "disparate impact" across income strata [high-income versus low- to moderate-income (LMI)], we compare outcomes created under two scoring approaches relative to a "judgmental" underwriting approach. We find that strict application of this custom scoring model leads to higher denial rates for LMI borrowers when compared with both a naive judgmental system and a bureau-scoring approach. We also identify the custom scorecard variables that produce the disparities in applicant denial rates. These results suggest that financial regulators should focus more resources on the evaluation and study of customized scoring models. Future research should exam-

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ine additional ways to reduce or minimize these denial differentials. For example, in testing alternative scoring approaches, the institution or agency should include an assessment of the impact of employing non-traditional creditworthiness variables (e.g., rent or utility payments) on the approval/denial decision for LMI applicants relative to upper-income applicants.

Introduction

Statistically based credit decision-making systems were pioneered during the late 1950s but only saw mainstream use during the 1990s as the depth and breadth of electronic credit information increased.[1] These statistically based techniques are commonly referred to as "credit scoring" models. Initially, scoring models were employed in the consumer-credit portfolios of most major banks and credit card issuers to increase the speed of the credit decision, enhance the uniformity of the decision process, and reduce the overall costs of decision making. The relative homogeneity of this type of credit and the wide availability of performance data on applicants made the initial implementation of scoring models by these lenders successful and profitable.

In recent years, scoring models have migrated to other areas of the lending portfolio, including mortgage and small business loans. In fact, the use of credit scoring models has become widespread in the mortgage-lending industry over the past 10 to 15 years. In addition to its use in the underwriting process, credit scoring is also employed by secondary market purchasers of mortgage loans as a means of pricing credit or default risk, including development and use of such models by the government-sponsored enterprises (GSEs) and by providers of private mortgage insurance.

The growing importance of credit scoring in the allocation of mortgage credit led to the current debate about scoring's impact on the flow of credit to certain segments of the applicant population. Proponents of credit scoring and of the "automated underwriting" process that benefits from its use, argue that it lowers the overall cost of making credit available to consumers, while simultaneously increasing the speed and objectivity of the underwriting decisions.[2] For example, Calem and Wachter (1999) argue that scoring benefits lenders and borrowers alike by increasing the efficiency of the credit review process and reducing the likelihood of delinquency. Detractors of credit scoring models argue, however, that the underwriting variables employed and the weights assigned to each variable are based on the payment performance of traditional consumers.[3] As such, scores generated by these models may not accurately portray the creditworthiness of underrepresented groups in the applicant pool, such as low-income and minority applicants — groups that constitute a larger fraction of first-time home buyers. In particular, scoring models typically omit certain nontraditional indicators of credit performance, such as rent and utility payment histories, which are important components of credit performance for many low-income applicants.[4] A primary conjecture of this paper is that custom credit scoring systems that employ application-level information in addition to credit report data yield a disparity in low-income denials relative to upper income denials, since these scoring systems neglect compensating factors, or additional creditworthiness-related attributes, that are more common for low-income applicants.[5] To test this hypothesis, we employ unique data on unsecured, home improvement loans from a large lender using an overlay system of both custom and credit bureau scores in the underwriting process.[6]

Credit Scoring and Potential Disparate Impact

What are credit scores? Credit scores are statistically derived measures of creditworthiness that rank credit applicants according to their degree of credit or default risk.[7] A score is typically associated with an odds ratio, addressing the question: How many applicants are likely to exhibit payment streams that become delinquent (or default) at the corresponding score? Although the models do not predict the absolute level of risk or which borrowers within a score range are likely to perform poorly, the literature has shown them to be effective tools for rank-ordering the risk of applicants (See Avery, Bostic, Calem, and Canner, 1996; Freddie Mac, 1996; and Pierzchalski, 1996).

Previous literature assessing the influence of credit scoring in the underwriting process is sparse and focuses solely on the role of bureau scores in that process. For example, Avery, Bostic, Calem, and Canner (2000) examine several statistical issues related to credit scoring using aggregate data. They find significant variation in bureau scores across a number of economic, geographic, and demographic groups, suggesting that the omitted variables and under-representation issues warrant further attention.

This paper extends the Avery *et al* research by examining loan-level data and underwriting decisions of a bank employing a custom scoring model. To our knowledge, this is the first paper to evaluate the underwriting decisions derived from customized, credit bureau and judgmental approaches and to demonstrate how these outcomes vary by income group.[8] We find that the custom-scorecard decisions lead to even larger disparities in high income versus low- to moderate-income denial rates than those disparities created using either the credit bureau score or the "judgmental" model approach. These results suggest that the issues of both omitted variable bias and the under-representation of certain subpopulations (*e.g.*, LMI) in model development may be even greater for some customized models.

Data Description and Empirical Methods

This paper analyzes 1996 data on 2,266 unsecured, home improvement loan applications drawn from a large regional lender's activities in a single Metropolitan Statistical Area (MSA). As such, the pool of credits is relatively homogeneous and the underwriting standards relatively stable across time. The application-level data also include information on the income from the application, the bureau and custom credit scores, and the score attributes, or individual score loadings, for all applicants. LMI individuals are defined as those with incomes below the U.S. Department of Housing and Urban Development's 1996 MSA median income for this geography, while upper-income applicants are defined as those with incomes at or above the MSA median income.[9]

Descriptive Statistics

Table 1 contains the breakdown of the 2,266 applications by income group. There are 1,698 applications from LMI applicants, accounting for 74.9 percent of the sample and 568 applications from upper-income applicants, accounting for 25.1 percent of the sample. As such, the sample has a reasonable balance and sufficient representation for both groups to perform hypothesis testing. Table 2 describes the data overall and then bifurcated by income group. From the mean difference test on application income, we see that LMI applicants have significantly lower incomes than upper-income applicants ($23,176 vs. $81,267), as expected. The mean difference tests for credit bureau scores and for custom credit scores are more revealing, however, as LMI applicants overall have significantly lower credit scores relative to upper-income applicants for both the custom (189 vs. 218) and bureau (661 vs. 678) score measures.[10]

Table 2 also provides the difference of means tests and distributional comparisons for the individual attributes, or factor loadings, of the custom scorecard. These attributes include: Time at current address, Number of bank trade lines, Finance company credit inquiries, Overall credit inquiries, Number of times 30 to 60 days late, Applicant income, Trade lines opened in less than 1 year, Highest revolving credit limit, Number of satisfactory credits, and Age of the credit bureau trade file in months. The two groups, LMI and upper income, reveal significant statistical differences across each of these attributes except Finance company credit inquiries and Overall credit inquiries. The only scorecard attribute on which LMI applicants fare better is Time at current address. This longer stay in residence may indicate a lack of upward mobility by these applicants, providing some evidence that risk characteristics may not be the same across income strata.

Table 3 contains the frequencies of application outcomes shown three different ways: Actual outcomes, Credit bureau-scored outcomes, and Custom-scored outcomes. Panel A reveals the breakdown of actual outcomes into approvals and denials, by income group as rendered by the lender. Of 1,698 LMI applicants, 890 were approved representing an approval rate of 52.41 percent. Of 568 upper income applicants, 431 were approved, resulting in an approval rate of 75.88 percent. The difference between these two approval rates, representing a disparity of 23.47 percentage points in favor of upper-income applicants, is statistically significant at the 99 percent level (Chi square statistic of 96.40).

Panel B of Table 3 details the approval and denial breakdown scenario should the applicants have been judged solely on the merits of the credit bureau score, using the cutoff score of 651 to create a denial rate for the group, which is identical to the overall actual denial rate for the sample, 41.7 percent. In this instance, the disparity in denial rates narrows from the original case of 23.47 percentage points to a disparity of 11.4 percentage points (44.52 percent LMI denials vs. 33.10 percent upper-income denials). The final panel of Table 3, Panel C, contains the approval and denial breakdown scenario should the applicants have been judged solely on the merits of the custom credit score, using the cutoff score of 191 to recreate the overall actual denial rate of 41.7 percent in the sample. In this instance, the difference in denial rates between LMI and upper-income applicants widens relative to the other two instances studied, to more than 30 percentage points, and represents the largest disparity among these three possible underwriting scenarios.

To recap, the results from Table 3 show that the actual bank decisions strike a middle ground between those dictated by the strict application of a custom credit score and the strict application of a credit bureau score. The most noticeable result, however, is the lower disparity that emerges through the strict application of the credit bureau score. This result may reflect the fact that credit bureaus do not have similar information sets relative to the banks (e.g., income, time at address) or alternatively, credit bureaus may be more concerned with disparate impact issues.[11]

Empirical Methods

To assess the benefit of adding non-traditional credit information either to the credit bureau score approach or to the custom credit score approach, we use a three-step process for hypothesis testing. First, using the entire dataset, we create two separate logistic regression models — a judgmental model and a custom score model. The "judgmental" underwriting model employs the factors that a typical judgmental underwriter considers in making a credit determination, including the bureau score, the number of major derogatories, the number of minor derogatories, and whether a prior relationship existed with this lender. As a result, this judgmental model compliments the generic credit bureau score with a typical list of bank-specific factors an underwriter may employ in gauging the likelihood of loan repayment for a particular applicant. The resulting applicant-level probabilities of approval are used to "score" the applications based on the *prima facie* probability of denial of 41.7 percent. We classify the outcomes from the judgmental system in the same manner as we do for the custom score model. The custom score approach solely uses the attributes of the custom score model. We compare the denial disparity rates across these two underwriting models for LMI versus upper-income individuals to determine which of these approaches offers the lower disparity.

Second, since scholars and practitioners alike have shown underwriting models to perform differently for the overall population when compared with "marginal" credit applicants, we examine a similar set of tests for a group of marginal applicants. These marginal applicants represent those that have either characteristics or scores that are closer to the cutoff than the scores of the general applicant population. We define marginal applicants as applicants receiving an aggregate custom score of between 195 and 210. This group includes 444 applicants, or 20 percent of the overall sample.

Finally, after comparing the disparities across the two underwriting approaches, we identify three factors (the number of finance company inquiries, length of credit history, and applicant income) in the custom score model that drive the denial rate disparity between LMI and upper-income applicants in a custom scoring approach. We remove these three factors to determine the effect on the probabilities of approval across the two groups.[12]

Results

Overall Sample

Table 4 contains the outcomes for the judgmental underwriting model for the full sample. Using the weights derived from the logistic regression, the probability of approval derived from the judgmental model for each applicant, and the *prima facie* cutoff of 41.7 percent, we classify each of the applicants as either an approval or a denial in Panel A of Table 4. The resulting disparity in denial rates for the two groups is 13.0 percentage points, substantially smaller than the 30.8 percentage points disparity presented in the final panel of Table 3, where the custom score was used as the sole underwriting criteria.

Panel B of Table 4 contains the outcomes from the logistic regression using the 10 factors from the custom score underwriting model. Using the same classification approach, we separate the applicants into two groups based on income, as either approvals or denials, in Panel C of Table 4. The resulting denial of 24.7 percentage points disparity between these two groups is roughly double the judgmental model disparity reported in Panel A.

In sum, both approaches – judgmental and scorecard – result in significant disparities between LMI and upper-income applicants. On further review, however, the results show that the smaller of the two disparities is for the judgmental credit underwriting approach, affirming the null hypothesis that judgmental systems reduce the denial disparity between LMI and upper-income applicants over a custom credit scoring system, *ceteris paribus*.

Marginal Applicant Focus

As previously discussed, the benefit or disbenefit of credit scoring tends to be illustrated best when reviewing marginal applicants. Marginal applicants are those with credit scores that are at or near the cutoff for denial. For our tests on the marginal sample, we show the breakdown across income groups in Panel A of Table 5. For the LMI group, the actual denial percentage from the decision file is 23.7 percent and for the upper income group, the denial percentage is 22.05 percent. As expected for the marginal sample, these two proportions across income groups are not statistically different at the weakest permissible statistical level of 90 percent.

Panel B of Table 5 employs the same judgmental underwriting model constructed for the overall sample in Table 4 and applies it to the subpopulation of marginal applicants. Using the *prima facie* cutoff of 23.4 percent for the entire marginal sample, we classify each of the applicants as either an approval or a denial in Panel B of Table 5. Of the 317 LMI applicants, 63 are denied using this rule, resulting in a denial rate of 19.9 percent. Forty-one of the 127 upper-income applicants are denied using this rule, resulting in a denial rate of 32.3 percent. The stated disparity is 12.4 percent in favor of LMI applicants and is statistically significant.

Panel C of Table 5 shows the outcomes for the 10-factor custom score model for the marginal sample. Here the disparity remains in favor of LMI applicants, but the size of the disparity is reduced by more than 60 percent to 4.7 percent versus the disparity from the judgmental system. This result provides further support for the null hypothesis that judgmental systems result in lower denial disparity between low-income and upper-income applicants compared with custom systems.

In our final test, we re-estimate the custom factor model after omitting the three variables argued by credit scoring detractors as likely to result in disparate impact. These variables include Applicant income, the Number of finance company inquiries, and the Highest revolving credit limit. Detractors have argued that income and credit limits are not robust predictors of creditworthiness and, therefore, should be scaled in a manner that better reflects the borrower's ability to pay, such as the debt-to-income ratio and the current debt-to-credit limit. Finally, given that low-income and minority borrowers are more likely to use nontraditional financial providers (e.g., finance companies), the inclusion of the Number of finance company inquiries has also been attacked as having the potential to disparately impact these groups by creating abnormally high rates of incidence.

For both samples, the full and the marginal, the seven-factor model results in significantly lower disparities than those derived from the full 10-factor custom model, confirming the hypothesis that use of these three variables increases the likelihood of denial for LMI applicants. For example, the full sample denial disparity in the seven-factor model is 14.4 percentage points, compared with a disparity of 24.7 percentage points from application of the 10-factor model (results are not shown due to space constraints). Similarly, the marginal group disparity is

10.5 percentage points in favor of LMI applicants in the seven-factor model, which is more than twice the 4.7 percent favorable disparity of the 10-factor model. When comparing these custom model disparities with the outcomes of the judgmental model in both the full sample and the marginal sample, however, the judgmental results are still more favorable to LMI applicants.

Conclusions

As a result of the underwriting evolution toward the use of credit scoring in mortgage lending, scoring is at the forefront of the policy debate surrounding fair lending and potential disparate impact. Using 1996 loan application data on home improvement loans from a large commercial bank, we develop a framework for examining whether this system of credit scoring leads to more significant denial disparities between LMI applicants versus upper-income applicants when compared with disparities observed from a judgmental underwriting approach. We hypothesize that custom credit scoring systems result in larger disparities for LMI applicants, since these models neglect compensating or nontraditional credit factors that are more common for LMI applicants. Our findings confirm this hypothesis.

These findings are important for the current policy debate over the effect of credit scoring on LMI applicants. Proponents of credit scoring technology point out that scoring improves the objectivity of the loan decision and lowers the overall cost and time required to underwrite loans. Scoring detractors, however, are concerned that these models lack sufficient flexibility and often omit information important to the credit profile of LMI and minority applicants. Our findings lend support to the latter argument. In sum, we show that use of a custom credit score as the sole criteria in underwriting home improvement loan applications results in larger denial disparities between LMI versus upper-income applicants, *ceteris paribus*.

Finally, the results have important implications for bank supervision. Currently, bank supervisors, financial regulators, and researchers focus their fair lending concern on dealing with disparate treatment. The next generation of fair lending research, however, should begin to tackle issues related to the potential disparate impact of credit scoring. This need is especially high for internally-developed scoring models that have not been subject to much external scrutiny.

Although this paper focuses on the implementation of a single credit scoring model and the resulting underwriting disparities, future research must extend these results with loan performance data. Such research would determine if the inclusion of potentially discriminatory variables resulted from business necessity, in that these variables significantly influence the likelihood of default or default loss. If the potentially discriminatory variable(s) shows a strong relation to delinquency or default, research should assess the adequacy of alternative credit scoring variables that have a smaller adverse impact on certain segments of the population while maintaining or improving the predictiveness of delinquency or default.

M. Cary Collins is Associate Professor of Finance and Director of the Financial Institutions Center at the University of Tennessee. His research focuses primarily on financial institutions and financial markets. As an author of over 20 publications and research papers, his work has appeared in numerous academic and professional journals, including Financial Management, The Financial Review, Journal of Economics & Finance, Journal of Real Estate Finance and Economics, Journal of Financial Research, Journal of Financial Services Research, and Journal of Real Estate Research. His research and opinions have appeared in The Wall Street Journal, The Atlanta Journal Constitution, and numerous other periodicals. Collins received his undergraduate degree from Concord College, West Virginia, his M.B.A. from Virginia Tech, and his Ph.D. from the University of Georgia.

Keith D. Harvey is Assistant Professor of Finance at Boise State University in Idaho. He received his doctorate from the University of Tennessee. Prior to pursuing his doctorate, he worked for a regional bank in Texas. His research focuses on financial institutions and corporate finance.

Peter J. Nigro is Senior Financial Economist in the Policy Analysis Division at the Office of the Comptroller of the Currency. His research interests include fair lending issues, credit-scoring models, mutual funds, and the economics of small business. He has published articles in numerous academic and professional journals, including Business Economics, Journal of Financial Services Research, and Managerial and Decision Economics. He received a bachelor's degree from the College of the Holy Cross, an M.A. in economics from the University of Southern California, and a Ph.D. in economics from Boston College.

Table 1

Description of the unsecured, home improvement application sample for 1996. The table contains both the overall sample description across income groups and the break out of the sample by low- to moderate-income and upper income applicants. The 1996 HUD median income for the applicants MSA was used to create the bifurcation.

Classification	No. of Applications	Fraction of Sample (%)
All income groups	2266	100%
Low- to moderate-income group	1698	74.9
Upper-income group	568	25.1

Table 2

Panel statistics for differences between low- to moderate-income and upper-income groups in 1996. The table contains the averages for the LMI group and the upper-income group, plus the Wilcoxon 2-sample test for differences across income groups and the Kolmogorov-Smirnov (KSa) test for distributional differences across income groups. The 1996 HUD median income was used to create the bifurcation.

Variables	**LMI group**	**Upper income group**	**Wilcoxon (Z statistic)**	**Kolmogorov Smirnov (Ksa)**
Applicant income	$23,176	$81,267	34.1***	20.6***
Credit bureau score	661.3	678.1	4.4***	2.6***
Custom credit score	189.8	218.7	14.3***	6.7***
<u>Custom Score Factors</u>				
Time at current address (months)	175.2	98.8	-8.5***	4.7***
No. of Bank trade lines	1.5	1.8	4.1***	1.8***
No. of Finance company inquiries	1.3	1.1	-0.0	0.4
No. of Overall inquiries	2.9	2.9	-0.5	0.5
No. times 30-60 days late	1.5	1.0	-5.6***	2.5***
Applicant income (monthly)	$1,931	$6,772	35.7***	20.6***
No. of Trade lines opened in <1 year	2.1	2.6	4.8***	1.9***
Revolving credit limit	$14,208	$31,855	17.5***	7.8***
No. of satisfactory trade lines	10.7	18.8	18.6***	8.0***
Age of trade file in months	184.3	186.1	2.7***	3.1***

* Indicates significance at the 0.10 level.
**Indicates significance at the 0.05 level.
***Indicates significance at the 0.01 level.

Table 3

2x2 matrix of outcomes for all 2,266 applications. Panel A contains the actual outcomes by income class for the population of 2,266 applications. Panel B contains the matrix of outcomes by income class, using the credit bureau cutoff score of 651 and a prima facie denial rate of 41.70 percent as the sole criteria for determining approval or denial. Panel C contains the matrix of outcomes by income class, using the custom credit score of 191 and a prima facie denial rate of 41.70 percent as the sole criteria for determining approval or denial. The row percentages appear to the right of each cell. The cumulative counts for each row appear as the right-most figures, while the cumulative counts for each column appear in the bottom row.

Panel A: Actual Outcomes

Income class	Approved	% Approved	Denied	% Denied	Total
Low- to moderate-income	890	52.41 [a]	808	47.59 [a]	1698
Upper income	431	75.88 [a]	137	24.12 [a]	568
Total	1321	58.30	945	41.70	2266

Denial Rate Disparity (Low vs. high) 23.47%

Panel B: Credit Bureau Score Outcomes

Income class	Approved	% Approved	Denied	% Denied	Total
Low- to moderate-income	942	55.48 [b]	756	44.52 [b]	1698
Upper income	380	66.90 [b]	188	33.10 [b]	568
Total	1322	58.34	944	41.66	2266

Denial Rate Disparity (LMI vs. high) 11.42%

Panel C: Custom Score Outcomes

Income class	Approved	% Approved	Denied	% Denied	Total
Low- to moderate-income	856	50.41 [c]	842	49.59 [c]	1698
Upper income	461	81.16 [c]	107	18.84 [c]	568
Total	1317	58.12	949	41.88	2266

Denial Rate Disparity (LMI vs. high) 30.75%

a The Chi-square statistics for the difference in the two proportions across groups is 96.40 and significant at the 0.01 level.
b The Chi-square statistic for the difference in the two proportions across groups is 22.86 and significant at the 0.01 level.
c The Chi-square statistic for the difference in the two proportions across groups is 165.34 and significant at the 0.01 level.

Table 4

2x2 matrix of outcomes for all 2,266 applications using weights from logistic regression for the various types of underwriting. Panel A contains outcomes by income class for the population of 2,266 applications using the judgmental model. Panel B contains the matrix of outcomes by income class using the custom scoring regression model weights. The row percentages appear to the right of each cell. The cumulative counts for each row appear as the right-most figures, while the cumulative counts for each column appear in the bottom row.

Panel A. Judgmental Model Outcomes

Income class	**Approved**	**% Approved**	**Denied**	**% Denied**	**Total**
Low- to moderate-income	934	55.01 *	764	44.99 *	1698
Upper income	386	67.96 *	182	32.04 *	568
Total	1320	58.25	946	41.75	2266

Denial Rate Disparity (LMI vs. high) 12.95%

Panel B. Custom Score Model Outcomes

Income class	**Approved**	**% Approved**	**Denied**	**% Denied**	**Total**
Low- to moderate-income	884	52.06*	814	47.94 *	1698
Upper income	436	76.76 *	132	23.24 *	568
Total	1320	58.25	946	41.75	2266

Denial Rate disparity 24.70%

* The Chi-square statistic for the difference in the two proportions across groups is 123.129 and significant at the 0.01 level.

Table 5

Panel A contains actual outcomes by income class for 444 marginal applicants. Panel B and Panel C contain 2x2 matrix of outcomes for all 444 marginal applications weights from the judgmental and custom logistic regression models. Panel B contains the matrix of outcomes by income class using the custom scoring regression model weights. The row percentages appear to the right of each cell. The cumulative counts for each row appear as the right-most figures, while the cumulative counts for each column appear in the bottom row.

Panel A. Actual outcomes by income class for those 444 applicants in the marginal region.

Income class	**Approved**	**% Approved**	**Denied**	**% Denied**	**Total**
Low- to moderate-income	242	76.34	75	23.66	317
Upper income	99	77.95	28	22.05	127
Total	341	76.80	103	23.20	444
Denial Rate disparity 1.61%					

Panel B. Judgmental Model Outcomes for Marginal Applicants

Income class	**Approved**	**% Approved**	**Denied**	**% Denied**	**Total**
Low- to moderate-income	254	80.13%	63	19.87%	317
Upper income	86	67.72	41	32.28	127
Total	340	76.58	104	23.42	444
Denial Rate Disparity (LMI vs. High) 12.41%					

Panel C. Custom Score Model Outcomes for Marginal Applicants

Income class	**Approved**	**% Approved**	**Denied**	**% Denied**	**Total**
Low- to moderate-income	247	77.92	70	22.08 *	317
Upper income	93	73.23 *	34	26.77 *	568
Total	340	76.58	104	23.42	444
Denial Rate disparity 4.69%					

* The Chi-square statistic for the difference in the two proportions across groups is 123.129 and significant at the 0.01 level.

Notes

[1] See Edward M. Lewis (1994), *An Introduction to Credit Scoring* for a history of credit scoring models.

[2] Fair Isaac, one of the primary developers of scoring models employed by banks, estimates that when a bank changes from a judgmental to a scoring system they have a 20 to 30 percent increase in the number of applicants accepted with no increase in the loss rate. This is in addition to the reduction in processing costs and faster turnaround time.

[3] Traditional consumers include upper-income individuals with fairly extensive and long lasting credit histories.

[4] Banks and the credit bureaus do not collect or employ nontraditional forms of creditworthiness, such as information on payment history of utility bills and rent payments in their scoring models. Thus, it is argued by detractors of credit scoring that these models may not gauge adequately the true risk of this segment of the population.

[5] In recent years, these issues have been compounded by the fact that some subprime lenders, those that typically serve nontraditional groups, have neglected to report positive information on payment histories to credit bureaus to keep these profitable, but "high risk," customers captive. This omitted information further reduces the strength of scores for lower-income applicants. See "Credit Bureaus Move Against Lenders that Withhold Information," *American Banker,* December 30, 1999.

[6] Lending discrimination can take one of three forms: overt discrimination, disparate treatment, and disparate impact. Given the nature of how scoring models are developed, the first two forms of discrimination generally are moot when fully implementing a scoring model. Thus, disparate impact is the primary concern. However, the best way to determine whether scoring models have a potential disparate impact is to employ performance data. Unfortunately, we have been unable to obtain this information.

[7] This paper is concerned solely with the influence of scoring on the approval/denial decision. Scoring type models are used by banks for various other functions, including increasing or decreasing credit lines or loan rates and in the loan monitoring process.

[8] Van Order and Zorn (2000) examine mortgage loan default and loss rates by income levels and find that lower-income neighborhoods experience somewhat higher loss and default rates. Mills and Lubuele (1994), using a limited data set, conclude that LMI mortgages perform better than their high-income counterparts. Neither of these studies, however, controls for applicant credit history.

[9] The median MSAincome is not reported to protect the identity of the lender.

[10] Bureau scores can range anywhere from 400 to more than 800, while the custom card under investigation is scaled in a different manner and ranges from 50 to 276.

[11] The focus of fair lending exams at commercial banks typically analyzes disparate treatment issues with very little focus on disparate impact.

[12] Detractors of scoring models have argued against using debt to income, rather than income as a measure of ability to pay. Separately, other detractors have argued that both the use of finance company inquiries and income should not be used in models because of their high correlation with applicant race.

References

"Automated Underwriting: Making Mortgage Lending Simpler and Fairer for America's Families", *Freddie Mac Report*, September 1996.

Avery, Robert, Raphael W. Bostic, Paul Calem, and Glenn Canner, "Credit Risk, Credit Scoring, and the Performance of Home Mortgages," *Federal Reserve Bulletin*, 82 (7), 1996, pp. 621-648.

_______. "Credit Scoring: Statistical Issues and Evidence," *Real Estate Economics*, 28 (1), pp. 105-134.

Calem, Paul and Susan M. Wachter, "Community Reinvestment and Credit Risk: Evidence from an Affordable-Home-Loan Program," *Real Estate Economics*, 27 (1), 1999, pp. 105-134.

"Credit Bureaus Move Against Lenders That Withhold Information," *American Banker*, December 30,1999.

"Giving No Credit Where Credit is Due," *ACORN Report*, December 1998.

Lewis, Edward M., An Introduction to Credit Scoring, *The Athena Press* (1994).

"Measuring Credit Risk: Borrower Credit Scores and Lender Profiles," *Fannie Mae Letter*, 1995, LL09-95.

Mills, E.S. and L.S. Lubuele, "The Performance of Residential Mortgages in Low- and Moderate-Income Neighborhoods," *Journal of Real Estate Finance and Economics*, 9(3), 1994, pp. 245-260.

Pierzchalski, L, “Guarding Against Risk,” *Mortgage Banker* (June), 1996, pp. 38-45.

“The Predictive Power of Selected Credit Scores,” *Freddie Mac Letter*, 1995, (Freddie Mac: McLean Virginia).

Van Order, Robert and Peter Zorn, “Income, Location and Default: Some Implications for Community Lending,” *Real Estate Economics*, Vol. 28 (3), 2000, pp. 385-404.

Community Development Venture Capital: A Double-Bottom Line Approach to Poverty Alleviation

Julia Sass Rubin
Harvard University and Harvard Business School

The community development venture capital (CDVC) industry consists of domestic and international organizations that use the investment tools of venture capital to create jobs, entrepreneurial capacity, and wealth that benefit low-income people and distressed communities. CDVC providers make equity and near-equity investments in small businesses with the intention of producing a "double bottom line" of financial and social returns, including livable wage jobs and healthy communities. This paper describes and analyzes the domestic CDVC industry, compares CDVC to other forms of venture capital, and provides an overview of recent CDVC industry trends.

Credit alone is not the answer. Businesses must have equity capital before they are considered viable candidates for debt financing. Equity acts as a buffer against the vagaries of the marketplace and is a sign of the creditworthiness of a business enterprise. The more opaque the business operations, or the newer the firm, the greater the importance of the equity base.

Alan Greenspan
Federal Reserve Conference, March 1999

Access to equity capital is critical for business success, especially for young companies, which lack the cash flows necessary for debt repayment. The creation and growth of such companies is the path to revitalization for many depressed regions and a means to economic opportunity for low-income populations (Eisinger, 1988).

Fostering such economic revitalization is the goal of the community development venture capital (CDVC) industry, a group of domestic and international organizations that use the tools of venture capital to create jobs, entrepreneurial capacity, and wealth to benefit low-income people and distressed communities. CDVC providers make equity and near-equity investments in small businesses with the intention of producing a "double-bottom line" of financial and social benefits, including livable wage jobs and stronger communities.

Equity investments consist of preferred and common stock. Near-equity investments consist of debt that is convertible to equity and debt with warrants, royalties, or participation payments. Near-equity can be structured to act like equity, with deferred payments that give young firms the patient capital they need in their early years.

This paper will describe and analyze the domestic CDVC industry, compare CDVC to other forms of venture capital, and review recent CDVC industry trends. The data for this paper come from a multi-year, ongoing research project that is the first comprehensive examination of community development venture capital. It includes three years of open-ended interviews, case studies, and interactive surveys of all existing domestic CDVC providers. This paper updates earlier findings by including data through December 31, 2000.

The paper is organized as follows: The first section discusses community development venture capital in the context of other alternative forms of venture capital. The second section provides a history of the domestic CDVC industry. The third section describes the industry's composition and capitalization. The fourth section analyzes CDVC investments. The fifth section examines fund-level issues, such as legal structures, boards of directors, investment committees, and operating costs. The sixth section discusses the domestic industry's financial and social performance to date. The paper concludes with a review of recent industry trends.

Alternative Forms of Venture Capital

Community development venture capital has arisen in response to the limitations of the private venture capital industry. The most significant of these limitations is the fact that most regions of the U.S. have little access to private venture capital because the venture capital industry is geographically concentrated in only a handful of states. In 1999, just five states accounted for more than 67 percent of the total dollars invested in the U.S. (NVCA, 2000). Forty-three percent of all the investments made by private venture capital firms went to the state of California alone, with 80 percent of that total invested solely in the northern California/Silicon Valley region (PricewaterhouseCoopers, 2000).

Even in those states where equity capital is more readily available, it is increasingly concentrated by industry and deal size. More than 90 percent of all private venture capital investments made during 1999 was in technology-related businesses (PricewaterhouseCoopers, 2000), and the average venture capital investment was $13.2 million (NVCA, 2000). As a result, companies seeking investments of $1 million or less, in non-technology related industries, have a very difficult time attracting patient capital. This difficulty is only exacerbated if those companies are located in low-income areas, which are often underserved by traditional financial institutions.

Federal and state governments have tried to address the limitations of the traditional venture capital industry. Both small business investment companies (SBICs) and state-sponsored venture capital programs were created for that purpose. Unlike community development venture capital, however, these approaches do not specifically target low- and moderate-income communities.

SBIC Programs

Congress created the Small Business Investment Companies program in 1958. At that time, the domestic venture capital industry was small and lacked a visible institutional structure (Fenn & Liang, 1995). SBICs were designed to provide early-stage business finance and thereby increase the supply of venture capital (Gompers, 1994). SBICs are privately owned and operated companies that make equity and debt investments in small businesses, with the intention of maximizing profits for SBIC investors. They are licensed by the U.S. Small Business Administration, which also provides them with access to matching investment capital. As of September 30, 2000, 336 SBICs were in operation with more than $10 billion in private capital under management (SBA, 2001c).

In 1972, Congress expanded the SBIC program by creating Minority Enterprise Small Business Investment Companies (MESBICs) to provide access to equity and debt to minority entrepreneurs (Bates, 1997). MESBICs were subsequently renamed Specialized Small Business Investment Companies (SSBICs), and their mission was broadened to serve “the needs of entrepreneurs who have been denied the opportunity to own and operate a business because of social or economic disadvantage" (SBA, 2001e).

In 1996, Congress ended the issuance of new SSBIC licenses but allowed existing SSBICs to continue operations (SBA, 2001e). As of September 30, 2000, only 59 of the 286 SSBICs licensed over the life of the program were still active. The 59 funds had a combined total of $143 million in private capital under management (SBA, 2001d).

State-Sponsored Venture Capital

State-sponsored venture capital programs emerged in the early 1970s, at a time when the venture capital industry was underfunded and actually appeared to be in decline. Until that time, traditional state approaches to economic development had consisted almost entirely of "smokestack chasing" — the use of tax breaks, public subsidies, and relatively low wages to lure existing businesses from elsewhere in the country (Eisinger, 1988; Osborne, 1990).

The first state-sponsored programs were created in Connecticut and Massachusetts in the hope of addressing imperfections in the financial markets. In the late 1970s and early 1980s, a small group of former Massachusetts development officials helped diffuse the idea of state-sponsored venture capital funds to the rest of the nation (Osborne, 1990).

By capitalizing funds that invested only in specific geographies, states hoped to encourage local small business formation and growth in order to create jobs and enhance their tax base (Eisinger, 1991). As of 2000, more than 30 states were operating one or more such funds, with an additional 19 states offering tax credits or other incentives for individuals or businesses that made local equity investments (Barkley, *et al*, 2000).

Poverty Alleviation versus Growth: The Need for CDVC

Although both SBICs and state-sponsored venture capital were intended to spur economic growth and job creation, only SSBICs were created specifically to serve disadvantaged populations. SSBICs do so by investing in minority-owned businesses. For the most part, they do not take into consideration the economic standing of the entrepreneur or her employees. Furthermore, the majority of the 59 SSBICs that still operate are very small, with a median $1.7 million of private capital under management (SBA, 2001d). The program's small size significantly limits its impact, especially since the SBA can no longer grant licenses to new SSBICs.

More generally, the broader economic growth objectives of the SBIC and state venture capital programs overlook the fact that such economic growth does not necessarily benefit all residents of the areas in question. This is illustrated by the recent experience of the Silicon Valley region.

From 1991 to 1997, the region underwent an unprecedented economic boom. Incomes for the richest fifth of the Valley's residents rose by nearly 20 percent, more than double the statewide rate. At the same time, real income for the poorest 20 percent of all Silicon Valley households fell by eight percent (Friedman, 1999).

Furthermore, employment in Silicon Valley's blue-collar industries fell by 20 percent, compared with a 24 percent rise in California as a whole, as the Valley's economy shifted away from its traditional manufacturing base toward high-end professional and lower-end service jobs. Manufacturing jobs have historically provided opportunities for the working poor to advance, and their decline helps explain some of the Valley's growing income inequality (Friedman, 1999).

In contrast to the SBIC and state-sponsored venture capital programs, the community development venture capital industry's primary purpose is to create high-quality jobs for low- and moderate-income individuals. The industry's mission is to alleviate poverty by making equity and near-equity investments in companies that create such jobs. This emphasis on poverty alleviation has been the focus of the CDVC industry since its beginnings.

History of the CDVC Industry

The current community development venture capital industry dates back to the 1960s and the origins of community development corporations (CDCs). CDCs were created in response to inner-city and rural poverty. The early CDCs received federal assistance under the Title VII program, in the form of grants for administrative overhead and program investment funds, which supported a broad range of activities. These activities included business and economic development, workforce training, and housing and community development (NCEA, 1981).

As a part of their business and economic development missions, a number of the CDCs used the federal funds they received to begin their own business ventures. Given the limited business experience of those running the CDCs, and the generally high rate of new business failures, this proved an expensive and ineffective way to create community jobs (Miller, 1994).

In 1972, frustrated with the failure of this approach, one of the Title VII CDCs, the Job Start Corporation of London, Kentucky, began investing capital in outside entrepreneurs in exchange for an equity stake in their enterprises. In 1978, the CDC, renamed as the more business-friendly Kentucky Highlands Investment Corporation (KHIC), formed a venture-specific subsidiary, Mountain Ventures, to more aggressively pursue outside equity investments (Miller, 1994).

Kentucky Highlands felt that part of its mission was to "spread the word" about this new approach to community economic development (Miller, 1998). It was so successful in this effort that articles about KHIC began appearing in national periodicals such as *The National Journal, The Washington Post,* and *The Wall Street Journal* (Pierce & Hagstrom, 1979; Berry, 1979; Gigot, 1981).

At approximately the same time that Kentucky Highlands was experimenting with equity investments in private enterprises, a number of states were exploring the creation of venture capital funds. The Massachusetts Community Development Finance Corporation was signed into law in 1975 (Osborne, 1990). It was unique among state-sponsored venture capital funds because of its explicit focus on low- and moderate-income populations.

Community development loan funds (CDLFs) also have contributed to the evolution of the CDVC industry. CDLFs raise capital from socially-conscious individuals and religious institutions, which agree to a below-market rate of return on their investments if those funds are used for community economic development purposes. The loan funds then lend this capital to organizations, individuals, and businesses involved in such purposes, which have been unable to qualify for funding from more conventional sources (Stevens & Tholin, 1991). Several of the current CDVCs are subsidiaries of community development loan funds.

One of the oldest and best-known CDVC funds was created without the assistance of a parent organization or a state government. Northeast Ventures Development Fund of Duluth, Minnesota was launched in 1987 at the initiative of community leaders. The fund looked to local and national foundations for part of its capitalization and was able to convince both the Ford and the John D. and Catherine T. MacArthur foundations to make their first investments in a CDVC provider.

By securing funding from national foundations, Northeast Ventures also increased awareness of community development venture capital. This proved to be crucial in 1992, when several CDVC providers approached these foundations to ask for financial assistance with setting up a trade association.

With the backing of the Ford and MacArthur foundations, community development venture capital funds began meeting twice a year, comparing best practices and formulating plans for the future of the industry (Tesdell, 1998). In 1994, the Community Development Venture Capital Alliance, the industry's trade association, was officially incorporated. Since that time, the industry has grown both in size and in public awareness, culminating with the December 2000 passage and signing of the federal New Markets Venture Capital legislation, designed to provide $150 million in grants and matching capital to CDVC providers.

CDVC Composition and Capitalization

Current State of the Industry

There are more than 50 CDVC providers, actively investing or in formation, across the United States. Nineteen of them are dedicated specifically to making equity and near-equity investments. The term equity-focused will be used to describe these 19 funds through the rest of the paper.[1] An additional 13 make occasional equity and near-equity investments but primarily provide other types of financial products and services.[2] There are also more than 20 providers that are at various stages of fundraising but have not yet begun investing. In addition, several banks have subsidiaries that make CDVC investments, and various other organizations occasionally co-invest with CDVC funds.

Industry Capitalization

The domestic CDVC industry is capitalized at more than $300 million. As of the end of 2000, the 19 equity-focused CDVC providers had a total capitalization of just over $190 million (Table 1). Co-investment funds, bank community development corporations, organizations that made only occasional equity investments, and funds in formation accounted for an additional $110 million.[3]

The average equity-focused fund is capitalized at approximately $10 million. However, the median fund size is $5.5 million, reflecting the disparity between the sizes of the largest and smallest funds. Newer

CDVC providers, which are not yet fully capitalized, account for four out of the six smallest funds.

The CDVC industry's total capitalization is dwarfed by that of traditional venture capital. As of 1999, traditional venture funds had over $134 billion under management, and 20 percent of traditional funds had individual capitalizations of $300 million or more (NVCA, 2000).

Although the CDVC industry is relatively small, it is growing rapidly. Only six of the 19 equity-focused funds are more than five years old. Furthermore, the industry's total capital under management increased by almost 60 percent between 1999 and 2000 (Figure 1).

Geographic Distribution

Most domestic CDVC providers invest in and are located on the East and West coasts of the United States and in the states of Minnesota and Ohio. At present, there are 26 states with no access to community development venture capital, including the majority of the states located in the Midwest, the mountain region, and the South (Figure 2).

Unlike the traditional venture capital industry, however, which consciously chooses to invest the majority of its resources in the technology corridors of California and Massachusetts, the absence of CDVC capital in so many states is primarily the result of the relative youth of the industry. Even in states such as California and Massachusetts, which have access to both traditional and community development venture capital, the geographic distribution of the investments is very different. Traditional venture capital is concentrated in high-technology regions, such as California's Silicon Valley and along Route 128 in Massachusetts. Conversely, CDVC investments are found primarily in low- and moderate-income areas, such as West Oakland, California and Roxbury, Massachusetts.

The CDVC industry is almost evenly divided between funds that focus on urban and on rural areas. Seven of the equity-focused funds have a rural focus, four have an urban focus, and five cover regions that include both rural and urban areas.

Sources of Capital

By far the largest share of total domestic CDVC dollars, approximately 31 percent, has come from banks and financial institutions. Moreover, banks and financial institutions are playing an increasingly important role in financing the CDVC industry. They accounted for 56 percent of the capital for the newer equity-focused funds that raised their capital and began investing between 1998 and 2000. This trend reflects the greater overall awareness of the CDVC industry and the increasingly favorable view that bank regulators have of CDVC investments as a way of meeting a bank's Community Reinvestment Act obligations (Figure 3).

Even as their share of total dollars is growing, banks continue to provide a relatively small percentage of the capital for rural CDVC providers. Through the end of 2000, less than 15 percent of all bank dollars invested in community development venture capital was invested in the seven rural funds. Furthermore, the two largest rural funds, Kentucky Highlands and Northeast Ventures, have received no bank capital at all.

There are several reasons for this. First, rural areas are served primarily by smaller banks, which are under less pressure to comply with the Community Reinvestment Act. Second, the smaller banks have fewer dollars to invest. Third, banks are generally more likely to invest in CDVC providers that promise a more market-like rate of return. This is an obstacle for rural funds, which face fewer investment opportunities and thus a lower quality of deal flow. Rural companies also can be difficult or time consuming to reach, increasing the time involved in overseeing an investment and raising a fund's cost of overhead.

The federal government is the second most important source of CDVC investment capital, providing 25 percent of all CDVC dollars. However, more than three-quarters of this capital was invested in just one fund — the Kentucky Highlands Investment Corporation (KHIC). KHIC received its initial capitalization during the 1970s from the Title VII program of the Office of Economic Opportunity. KHIC is also the lead entity for a rural empowerment zone, capitalized by the U.S. Department of Agriculture. Ninety-four percent of all the federal dollars invested in the other CDVC funds comes from the U.S. Treasury Department's Community Development Financial Institutions (CDFI) Fund.

Foundations and state and local governments were the third and fourth most important sources of CDVC capital. They provided 17 percent and 11 percent, respectively, of total CDVC dollars.

Capital Structure

The 19 equity-focused CDVC providers are capitalized primarily with capital grants and equity investments, which together account for more than 80 percent of all their capital. In fact, more than half of the equity-focused funds are capitalized entirely with equity. Only three CDVC providers draw more than half of their investment capital from debt.

Program-related investments (PRIs) by foundations are the primary source of CDVC debt, accounting for 35 percent of all debt dollars invested in CDVCs. Almost 40 percent of foundation dollars invested was invested in the form of PRI debt.

The federal government and banks and financial institutions are also significant sources of debt, representing 26 and 21 percent respectively, of the total debt dollars invested in CDVCs. However, both provide significantly more equity than debt. Debt accounted for only 18 percent of the total dollars invested in CDVCs by the federal government and only 14 percent of the total dollars invested by banks and financial institutions (Figure 4).

CDVC Investments[2]

Dollars Invested

As of the end of 2000, CDVC providers had invested a total of $129 million of equity and near-equity in their portfolio companies. The 19 equity-focused funds accounted for 90 percent of this total. The dollars invested annually have been increasing as new and larger CDVC funds have begun investing.

Stage and Industry Focus

A majority of all CDVC funds (90 percent) invest in companies at all stages of development, from seed to expansion stage, and in all industries. This strategy enables CDVC funds to consider the largest possible number of high-quality investments within their geographic regions.

CDVC funds that serve larger geographic regions are able to apply some sectoral screens to their investments. For example, the Sustainable Jobs Fund (SJF) invests, in part, in businesses in the recycling, manufacturing, and environmental industries. SJF focuses on the eastern United States, an area large enough to allow SJF to apply such screens and still identify sufficient high-quality deal flow.

Although few CDVC providers have a specific sectoral investment strategy, the majority of them do target companies that will create manufacturing jobs. They do so because the quality of manufacturing jobs is high, in terms of both wages and benefits. Manufacturing jobs can also employ individuals with lower education and skill levels, making such jobs an important path to economic opportunity (Mayer, 1998; Phillips-Fein, 1998).

Fifty percent of all investments made by equity-focused funds through the end of 1999 were in manufacturing companies. Only 26 percent of the investments were in service-related businesses, the fastest growing segment of the U.S. economy, but one that tends to provide lower pay and fewer benefits to its workers (Figure 5).

Thirty percent of all investments made by equity-focused CDVC providers have been in technology-related companies. This is in sharp contrast with private venture capital funds, which made more than 90 percent of their 1999 investments in technology-related companies (PricewaterhouseCoopers, 2000).

Because of their rapid growth rates and profitable exits, technology investments have yielded large payouts for their investors. However, many of the jobs technology companies create require advanced degrees and are not available to individuals with less education and fewer skills. Technology investments are also concentrated in specific regions, such as Silicon Valley and Route 128, versus the low- and moderate-income communities that CDVC providers serve.

Co-Investments

Fifty-five percent of the investments made by the 19 equity-focused CDVC providers included another investor who was not part of the portfolio company's ownership or management. Forty-two percent of all CDVC co-investments were made by traditional and developmental venture capitalists. Angel investors were the source of an additional 38 percent of all co-investments. The remaining 20 percent were made by foundations, banks, community organizations, and local and state governments.

Deal Structures

Forty-three percent of the investments made through December 31, 2000, were structured as pure equity. This consisted of either preferred stock (26 percent), common stock (15 percent), or, in a few cases, membership shares in a limited liability company (two percent). Near-equity — debt with equity features, such as warrants, royalties, or participation agreements — made up another 10 percent of investments. Debt that is convertible to equity accounted for an additional seven percent.

The remaining 40 percent of investments were in the form of straight debt, primarily made in conjunction with equity or near-equity investments (Figure 6).

Fifty-eight percent of the straight debt investments were made by the two largest rural funds. This reflects the difficulty rural businesses have in accessing both debt and equity capital from traditional sources. The problem is particularly severe for young companies, which often lack the significant cash flows and collateral that bank lenders require.

Deal Sizes

CDVC investments range in size from $10,000 to more than $1 million per company. The average CDVC investment is $186,000 per round and $393,000 per company.

These figures are significantly smaller than the traditional venture capital industry's $13.2 million average per round investment (NCEA, 2000). They are also smaller than the investments made by SBICs. As of the end of the 2000 fiscal year, average per round investments were approximately $903,933 for participating security SBICs and $432,571 for debenture SBICs (SBA, 2001a).

Investment Exits

Given the youth of the CDVC industry, any analysis of exits is based on limited information and is weighted towards the older funds. As of December 31, 2000, the 19 equity-focused funds had invested in 237 companies and had exited 63 of them. Thirty-seven of those exits were profitable.

The primary form of exit for CDVC providers has been through sale to an external buyer, which accounted for more than half of the successful exits to date. The second most frequent form of exit has been management buy-back, including the repayment of near-equity investments. Approximately half of the equity buy-backs were negotiated into the original contracts via a "put," which stipulated when and under what terms the stock would be repurchased by the company's owners (Figure 7).

Both external sales and management buy-backs are delicate undertakings for CDVC providers. When an outside company acquires a CDVC portfolio company, the portfolio company may be moved to another location or closed down entirely. On the other hand, new owners may also bring additional capital and expansion opportunities. In contrast, management buy-backs usually ensure that a portfolio company will not relocate, but they may be less profitable than other forms of exit.

Because most CDVC investments are in early stage companies, it can take as long as seven to 10 years for these companies to have the cash flow needed to buy out their investors. The long holding period limits a CDVC provider's liquidity and cuts into an investment's internal rate of return.

Initial Public Offerings (IPOs) are generally the most lucrative means of exit for venture capitalists. But IPOs are still relatively rare for CDVC portfolio companies. To date, there have been five IPOs, including two whose stocks are still being held by their CDVC investors because of the stocks' low trading prices. As with the vast majority of recent initial public offerings, all five of the companies are in technology-related industries. Only 30 percent of all equity-focused CDVC investments are in the technology sector, versus more than 90 percent of traditional venture capital investments (Pricewaterhouse-Coopers, 2000). Additionally, only a few CDVC portfolio companies can demonstrate the significant growth potential that IPOs require. As a result, IPOs are unlikely to become the primary exit option for CDVC funds.

From the standpoint of social returns, employee stock ownership plans (ESOPs) appear to be the ideal exit option for CDVC-funded companies: they empower workers while ensuring that the company stays local. In practice, however, ESOPs can be costly to implement in the smaller companies in which most CDVC providers invest. As a result, as of December 31, 2000, there had been only one exit from a CDVC portfolio company via an employee stock ownership plan.

Twenty-six of the 63 CDVC exits to date have resulted in a partial or complete loss of capital. The loss rates for CDVC funds vary, as they do for traditional venture capital funds. Since the 26 failed CDVC investments are cumulative and represent a group of funds at various stages of development, evaluating these 26 investments as a percentage of total CDVC investments does not provide useful information.

It is still too early to determine whether CDVC loss rates will be greater or less than those of traditional venture capital funds. According to Venture Economics, over a sixteen-year period, more than one-third of 383 investments made by a group of traditional venture capital funds resulted in an absolute loss, and more than two-thirds resulted in capital returns of less than double the original amount invested (1988).

CDVC Structure and Practice

CDVC Fund Structures

Unlike traditional venture capital funds, which are for-profit and usually structured as either limited liability companies or limited partnerships, community development venture capital providers use a multitude of both nonprofit and for-profit legal structures. Seven of the equity-focused providers make investments through a nonprofit structure, nine others through a for-profit structure, and one through a quasi-public structure. Two of the funds make investments through both a nonprofit and a for-profit structure (Figure 8).

All but one of the nonprofit providers are structured as a 501(c)(3). The for-profit funds are more evenly divided by legal form, including five limited-liability companies, three limited partnerships, and three other corporate forms (C and S corporations).

The C and S structures are used primarily for subsidiaries of existing organizations. The advantage of these forms — their unlimited life span — can also make it more difficult for C and S corporations to attract investments. While it can be easier to raise capital for a CDVC with a limited life span, these structures force the general partners to raise money for a new fund every five to 10 years.

It is very common for a for-profit domestic CDVC fund to be affiliated with a nonprofit organization, which enables it to raise grant funds, helps it provide more extensive support to its portfolio companies, and supports other charitable activities. Ten of the equity-focused funds have used this “hybrid” approach.

At least two of the CDVC providers that are currently structured as nonprofits may subsequently convert to a for-profit structure. Both were set up by existing nonprofit organizations. Using a nonprofit legal structure to make their initial investments has enabled these organizations to move into this type of investing more gradually, without having to create a new organizational form.

Social Screens

Social screens are inherent in the idea of community development venture capital since CDVC providers focus on serving low-income populations and distressed communities. Beyond geographic targeting and job creation objectives, however, the CDVC industry is very diverse in the type and number of social screens that individual funds apply to their investments. This diversity reflects the fact that social screens can restrict deal flow and thus may be difficult to use in many of the regions in which CDVC providers operate.

For example, the Kentucky Highlands Investment Corporation (KHIC) looks for investments that create jobs for low- and moderate-income individuals in its nine-county Appalachian area. The fund does little additional social screening since KHIC's deal flow is very limited, and the fund is concerned that the application of extensive additional social screens might leave it with few viable investment options. KHIC also believes that, in regions with very high unemployment and a large unskilled population, any job creation is beneficial.

Unlike KHIC, Coastal Ventures, LP (CVLP) uses a number of social screens in identifying its portfolio companies. CVLP is located in Portland, Maine and can invest anywhere in the state, as well as in neighboring states. Maine attracts many entrepreneurs, who move to the state for lifestyle reasons. Thus, CVLP's larger geographic area and higher quality deal flow enable it to impose additional social screens on its investments. For example, CVLP requires its portfolio companies to make the best effort possible to hire specific populations of workers and to provide them with health care and other benefits. CVLP also is able to give preference to companies with environmentally friendly products and socially progressive management practices.

Many CDVC providers give preference to companies owned by women or ethnic minorities. A subset of the traditional venture capital industry also focuses on these populations but does not screen its investments for their positive impact on low- and moderate-income individuals. There are traditional venture capital funds, however, that combine a focus on women- and minority-owned businesses with a limited geographic target area. By doing so, they restrict their deal flow and may encounter many of the challenges faced by CDVC funds.

Technical Assistance

One of the unique aspects of community development venture capital is the intensive technical assistance that most CDVC funds provide to their portfolio companies. Because the majority of CDVC funds are geographically restricted, they are faced with relatively few potential investment opportunities. This restricted deal flow may require the funds to invest in companies with limited management experience. As a result, the funds must find ways to bring in outside expertise to increase the companies' level of knowledge and market readiness. Outside consultants can be expensive for young companies, so most

CDVC providers use their own staff to provide that expertise. However, the extra time that staff invests in each deal increases the cost of operations for the funds and reduces the time that fund staff has available for other investments.

The high costs associated with providing technical assistance to their portfolio companies has led some CDVC funds to experiment with alternative ways of paying for such services. One innovative approach was piloted by Silicon Valley Community Ventures (SVCV), a two-year-old CDVC fund focusing on Northern California's Bay Area. SVCV created a Business Advisory Program, which recruits experienced business professionals to provide expertise to entrepreneurs on an ongoing, volunteer basis. SVCV only invests in companies that have gone through the Business Advisory Program, saving SVCV staff the time and resources needed to prepare potential portfolio companies for investment.

Another means of offsetting the cost of technical assistance is via a nonprofit affiliate that can raise grant revenues specifically for that purpose. The Sustainable Jobs Fund (SJF) has used this approach. SJF has partnered with the National Recycling Coalition (NCR), a 20-year-old nonprofit trade association that has been able to raise grants to help pay for some of SJF's ongoing technical assistance costs.

The Enterprise Corporation of the Delta (ECD), which serves the Delta regions of Mississippi, Arkansas, and Louisiana, has reduced the cost of technical assistance by relying on the services of alt.Consulting, a nonprofit consulting firm that specializes in serving smaller and less experienced businesses. Unlike for-profit consulting firms, alt. consulting has been able to raise grants to offset some of its cost of operations.

Boards of Directors

Bankers comprise the largest group of board members for the 19 equity-focused CDVC providers, holding 18 percent of all board seats. This reflects the significant portion of CDVC capital that comes from banks and financial institutions, as well as bankers' financial expertise and resulting desirability as board members. The overall percentage of bankers is also somewhat inflated by one CDVC fund, whose board accounts for 37 percent of all the bankers serving on CDVC boards. Representatives of community organizations (15 percent), entrepreneurs (13 percent), and government employees (10 percent) all account for a significant number of CDVC board seats. Twenty-eight percent of all CDVC board members are women (Figure 9).

Investment Committees

Bankers also comprise the largest group of investment committee members for equity-focused CDVC funds, holding 24 percent of all investment committee seats. As with boards, one CDVC fund accounts for 22 percent of all the bankers that serve on CDVC investment committees (Figure 10).

Venture capitalists play a greater role on CDVC investment committees (12 percent) than they do on CDVC boards of directors. Conversely, community organizations play a major role in setting CDVC board direction, yet account for only nine percent of all investment committee seats. With 14 percent of all investment committee seats, entrepreneurs have a significant presence on both CDVC investment committees and boards of directors.

Three CDVC funds do not have a separate investment committee. Instead, their entire board of directors makes investment decisions. Seventeen percent of all CDVC investment committee members are women.

Cost of Operations

For fiscal year 2000, CDVC funds had operating budgets ranging from $116,000 to more than $2 million, with a $600,000 median operating budget for a $10 to $15 million fund. Staff salaries made up approximately 70 percent of funds'operating expenses. These figures exclude all interest payments.

Traditional venture capital funds cover their operating expenses by charging their investors an annual fee, based on a percentage of invested capital. This fee is usually between two and three percent of the total committed capital. A number of CDVC funds have adopted this practice because it is familiar to banks and financial institutions, which invest in both traditional and community development venture capital funds. These CDVC funds charge their investors an annual fee of approximately three percent of total capital. However, this fee rarely covers a CDVC fund's true cost of operations.

There are several reasons why management fees do not fully cover operating expenses for most CDVC funds. First, all venture funds must cover the fixed costs of staff and facilities. Because CDVC funds are significantly smaller in capitalization than traditional venture capital funds, three percent of their total capitalization is usually not enough to cover these fixed costs. The average equity-focused CDVC fund was capitalized at approximately $10 million as of December 31, 2000, substantially less than the $217 million average size for a traditional venture capital fund (Venture Economics, 2000).

CDVC funds also have higher operating costs than traditional venture capital funds because of the much smaller size of their investments and the need to provide extensive technical assistance to many of their portfolio companies. Smaller deals require as much oversight as larger ones, forcing CDVC providers to hire more staff than a comparably sized traditional venture capital fund. The need to provide technical assistance also requires additional staff, further increasing CDVC funds'costs of operations.

Because CDVC providers have higher operating costs and smaller fund sizes than traditional venture capital funds, looking at CDVC operating expenses as a percentage of total capital is not an effective way to evaluate operating efficiency. Many CDVC providers also receive operating subsidies from their parent or partner nonprofit organizations, a fact that further complicates any analysis of operating costs as a percentage of total capital.

Staff Composition and Compensation

The typical CDVC fund staff consists of one senior fund manager and one or two junior fund managers. Three funds have two or more senior fund managers, and four funds do not have any junior investment staff.

Senior managers generally are responsible for fundraising as well as some due diligence. Most senior fund managers are also involved post-investment, with oversight and the provision of technical assistance to their portfolio companies.

The typical senior fund manager has at least 10 years of traditional or developmental finance experience. However, only 22 percent of the senior fund managers running equity-focused funds had any direct venture capital experience prior to assuming their current positions.

Junior fund managers are responsible for due diligence, deal oversight, and the provision of technical assistance. Junior fund managers are likely to have an MBA or another advanced degree and two to five years of traditional or developmental finance experience.

CDVC fund managers are compensated at a lower level than their traditional venture capital counterparts. Traditional venture capital funds structure their managers'salaries to consist of a base salary and a much larger bonus paid out of carried interest.[4] Management base salaries are in the hundreds of thousands of dollars, and carried interest in a successful fund will usually be in the millions of dollars (Sahlman, 1990). In this way, the funds are able to attract experienced and proven talent in an industry where the talent pool is relatively small.

In contrast, the salary range for senior CDVC fund managers is $50,000 to $350,000, with a mean salary of $122,000 and a median salary of $92,500. Junior CDVC fund managers earn between $60,000 and $130,000, with a mean salary of $85,500 and a median salary of $81,500.

Fifty percent of all CDVC funds offer a performance incentive of either a bonus or carried interest. Twenty-nine percent of all CDVC funds provide fund managers with a bonus, based on individual and fund performance. The bonuses range from eight to 30 percent of salary. Twenty-one percent of all funds offer a carried interest of 10 to 25 percent of net fund profits. To date, only one fund has distributed any carried interest payments. An additional 29 percent of CDVC funds are considering adding such incentives.

Community development venture capital providers face a number of obstacles that prevent them from offering salaries comparable to those received by traditional venture capital fund managers. First, many CDVC providers have nonprofit legal structures or are for-profit subsidiaries of nonprofit organizations. The pay levels of nonprofit organizations are generally lower than those in the for-profit sector. Even the purely for-profit CDVC funds are limited by their relatively low levels of capitalization, which translate into fewer dollars available for salaries. CDVC compensation is also constrained by the fact that CDVC profits are lower and operating expenses are higher than those faced by traditional venture capital funds.

Social and Financial Performance

Any attempt to measure the exact social and financial performance of domestic community development venture capital providers is limited by the relative youth of the industry. Most CDVC funds are less than five years old and have exited only a small portion of their investments.

Only four of the 19 equity-focused funds in existence through December 31, 2000, were created ten or more years ago: the Development Corporation of Austin (Austin, MN); the Kentucky Highlands Investment Corporation (London, KY); the Massachusetts Community Development Finance Corporation (Boston, MA); and Northeast Ventures (Duluth, MN). Of these four funds, only Northeast

Ventures is a freestanding fund that has not received an ongoing operating subsidy. The overwhelming majority of Northeast Ventures' investments, however, have been in early-stage companies, which has extended the average investment holding time for the fund.

As of the end of 2000, Northeast Ventures had exited from approximately half of its portfolio companies and was still holding the majority of its most financially promising investments. As a result, an evaluation of the financial performance of Northeast Ventures is still premature.

The other three older funds have received ongoing operating subsidies from their parent entities, making it difficult to estimate their true overhead expenses. They have also used a combination of debt and equity investments that is often difficult to disaggregate.

Despite the difficulty in evaluating CDVC funds financially, the older funds do provide some indication of the industry's social impact. The Development Corporation of Austin, Kentucky Highlands, and Northeast Ventures together have created more than 4,000 jobs at an average cost of less than $10,000 per job.[5] This compares very well to the average cost of $35,000 per job created by SBICs (Christensen, 2000). These figures are even more impressive in light of the fact that the jobs created were primarily in manufacturing, with livable wages and benefits, and located in economically depressed rural regions.

Recent Trends

Three of the oldest for-profit, limited-life CDVC providers recently began raising their second funds. Two of the three have already held their first closings. This is an impressive feat, especially since both of these CDVC providers took two years to raise most of the capital for their first funds.

These three follow-on funds will invest in larger geographic areas, be capitalized at higher levels, and make larger investments than did their predecessors. In short, while they will maintain their primary focus on job creation for low-income individuals, they also will look and act more like traditional venture capital funds.

This trend towards larger funds, bigger deals, and larger geographic target areas is also evident among some of the newer CDVC funds, which raised their capital and began investing between 1998 and 2000. Interestingly, most of the investment capital for both of these groups has come from banks and financial institutions, which provided 74 percent of the dollars raised by the follow-on funds and 85 percent of the capital raised by this group of newer funds.

The newer funds also include a group of nonprofit CDVC providers that target rural geographies, make small, generally near-equity investments, and offer intensive technical assistance. Only one of them has attracted bank investments, in the form of low-interest loans. In general, this group of providers has found raising capital to be slow and very difficult.

It is not surprising that banks choose to invest in those CDVC funds that project the highest rates of return. Such funds, in turn, must cover broader geographies to maximize deal flow and make larger investments to decrease overhead costs. The challenge for the industry is to identify alternative funding streams that will provide a comparable source of capital for those CDVC providers that focus on harder-to-serve, primarily rural areas. Many CDVC providers are hoping that the federal New Markets Tax Credit program, enacted in December 2000 and designed to stimulate $15 billion in equity investments for community economic development, will do just that.

The next few years will be critical ones for the community development venture capital industry. As more CDVC funds exit their investments, the industry's financial performance will become more apparent. This, in turn, will help determine how easy it will be for future CDVC funds to raise capital and where that capital will come from. While preliminary data indicates that CDVC providers are creating high-quality jobs at a low cost, more research is also needed to fully understand the industry's social impact.

Julia Sass Rubin is completing a Ph.D. in organizational behavior at Harvard University and Harvard Business School. Her dissertation focuses on the community development venture capital industry. For the past two years she has been advising the U.S. Small Business Administration on the New Markets Venture Capital program and the Appalachian Regional Commission on increasing the supply of developmental venture capital in the ARC region. Rubin's research interests include developmental finance, economic development, and social enterprise. She has written on rural and state-sponsored venture capital funds (forthcoming in Economic Development Quarterly), and on the Los Angeles Community Development Bank (Journal of Urban Affairs, 2001, vol. 23, iss. 2.) She received her M.B.A. with distinction from Harvard Business School, her M.A. in sociology from Harvard University, and her A.B. with honors from Harvard-Radcliffe College.

Table 1
Distribution of CDVC Capital Under Management by The 19 Equity-Focused Funds

FUND SIZE	NUMBER OF CDVC FUNDS	TOTAL $ UNDER MANAGEMENT (In Millions)
$0 - $5,000,000	6	$15.7
$5 - $10,000,000	5	$33.5
$10 - $15,000,000	4	$51.5
$15,000,000 +	4	$90.3

Figure 1
CDVC Dollars Available by State - As of 12/31/2000
(excludes organizations in fund-raising stage)

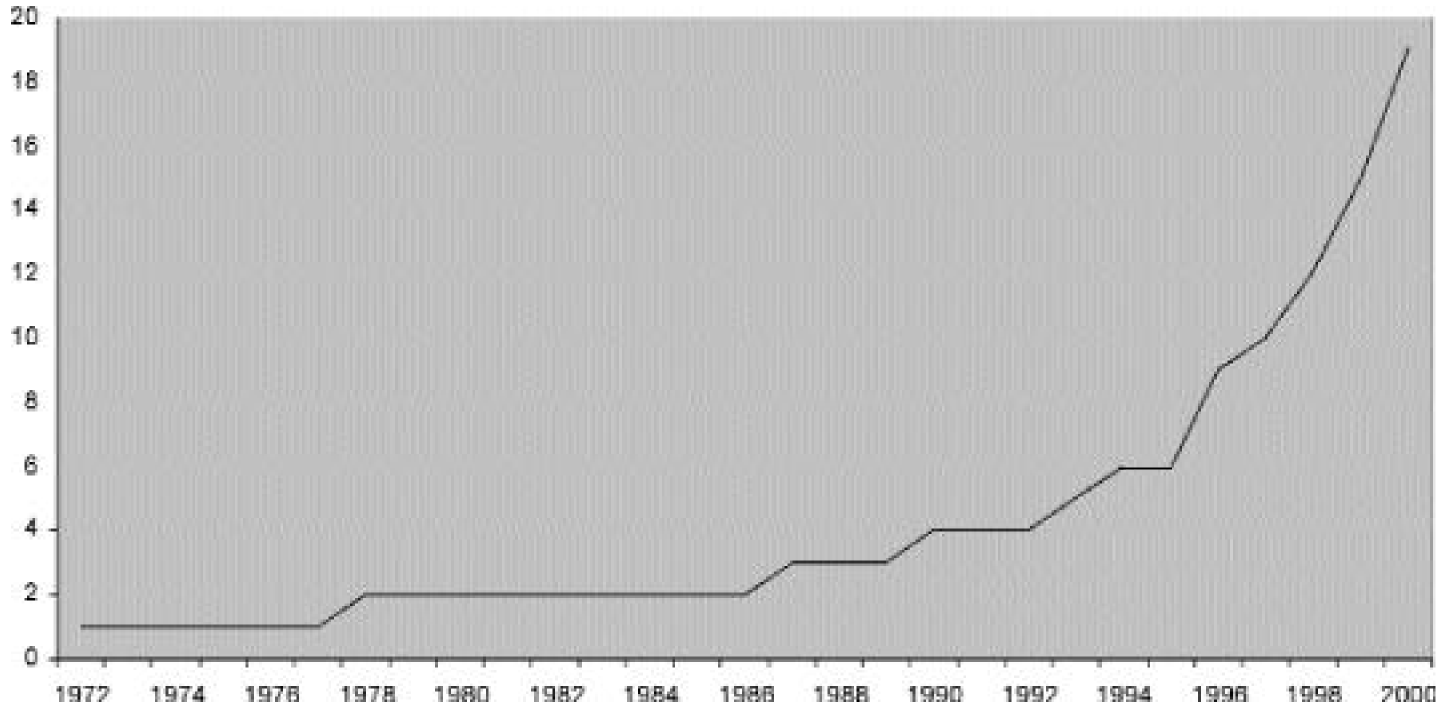


Figure 2

Figure 3
SOURCES OF EQUITY-FOCUSED CDVC CAPITAL UNDER MANAGEMENT
(cumulative as of 12/31/2000)

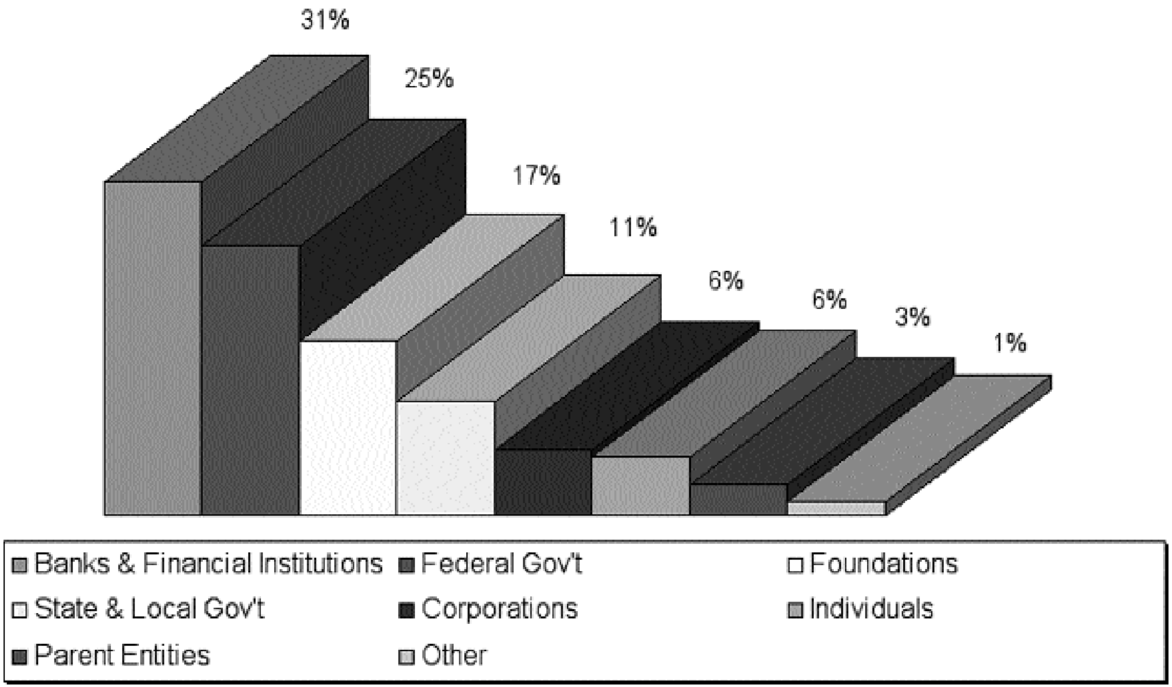


Figure 4
SOURCES OF EQUITY-FOCUSED CDVC CAPITAL - EQUITY vs. DEBT
(cumulative as of 12/31/00 - in millions of dollars)

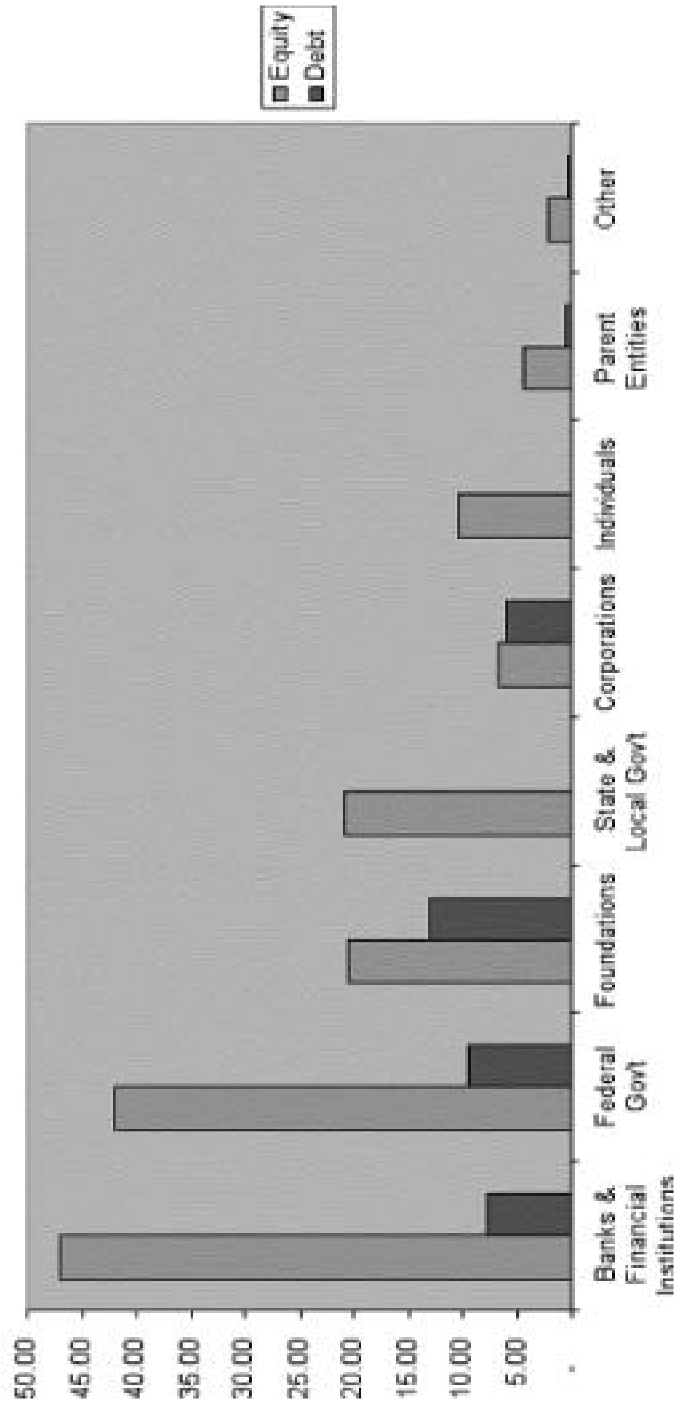


Figure 5
INVESTMENTS BY INDUSTRY
(equity-focused CDVC providers - cumulative as of 12/31/00)

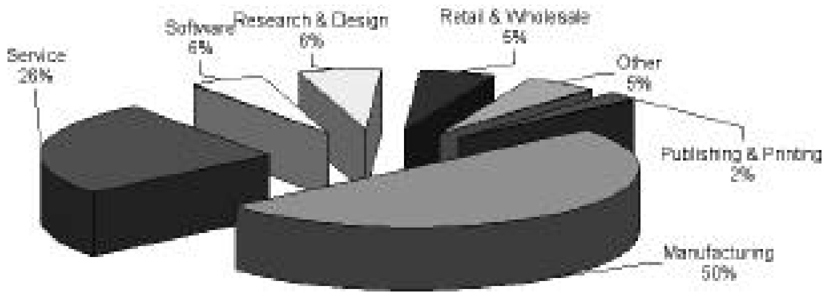


Figure 6
INVESTMENTS BY TYPE
(equity-focused CDVC providers - cumulative as of 12/31/00)

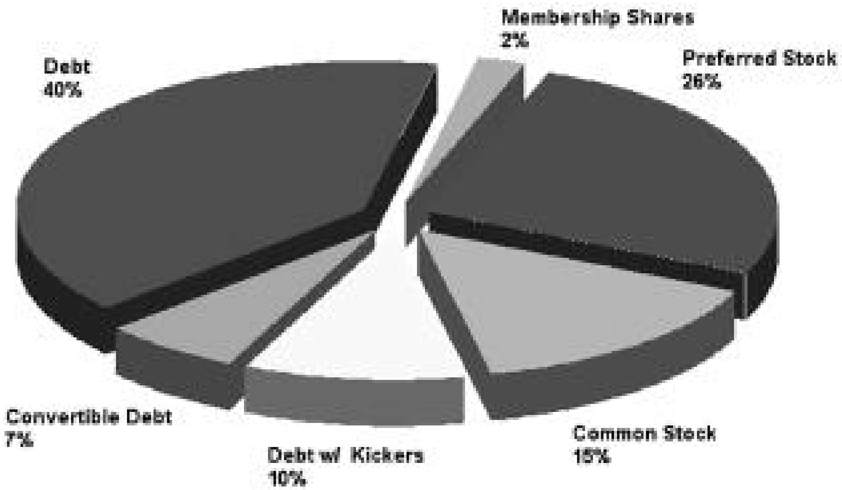


Figure 7
SUCCESSFUL EXITS
(equity-focused CDVC providers - cumulative as of 12/31/00)

Figure 8
LEGAL STRUCTURES OF EQUITY-FOCUSED CDVC PROVIDERS
(as of 12/31/00)

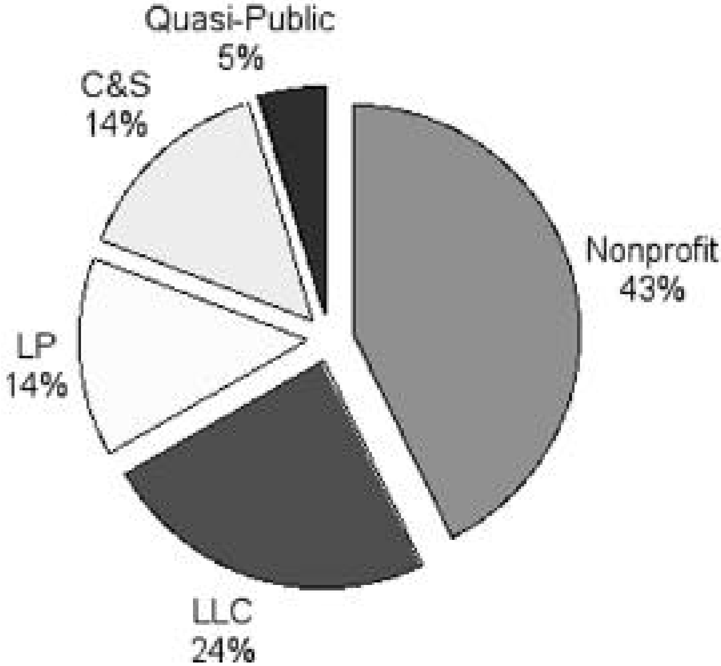
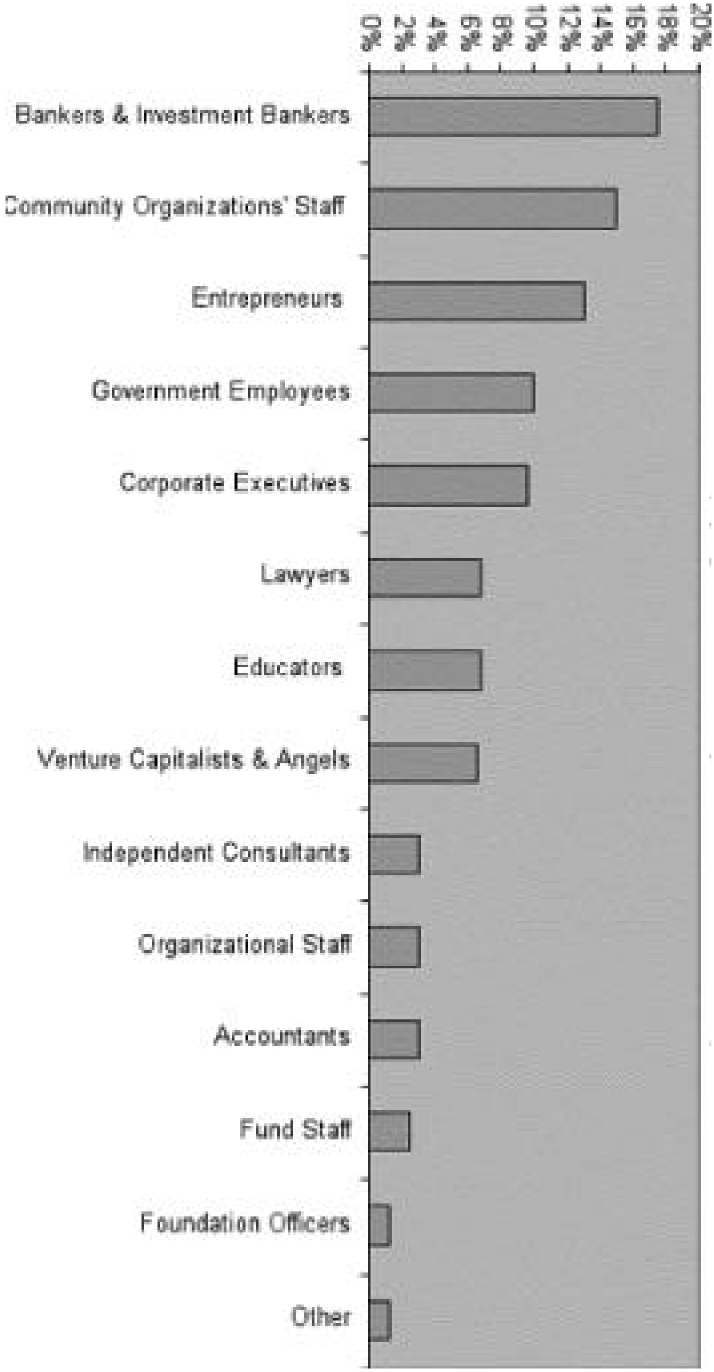


Figure 9
BOARDS OF DIRECTORS' COMPOSITION
(equity-focused CDVC providers - as of 12/31/00)



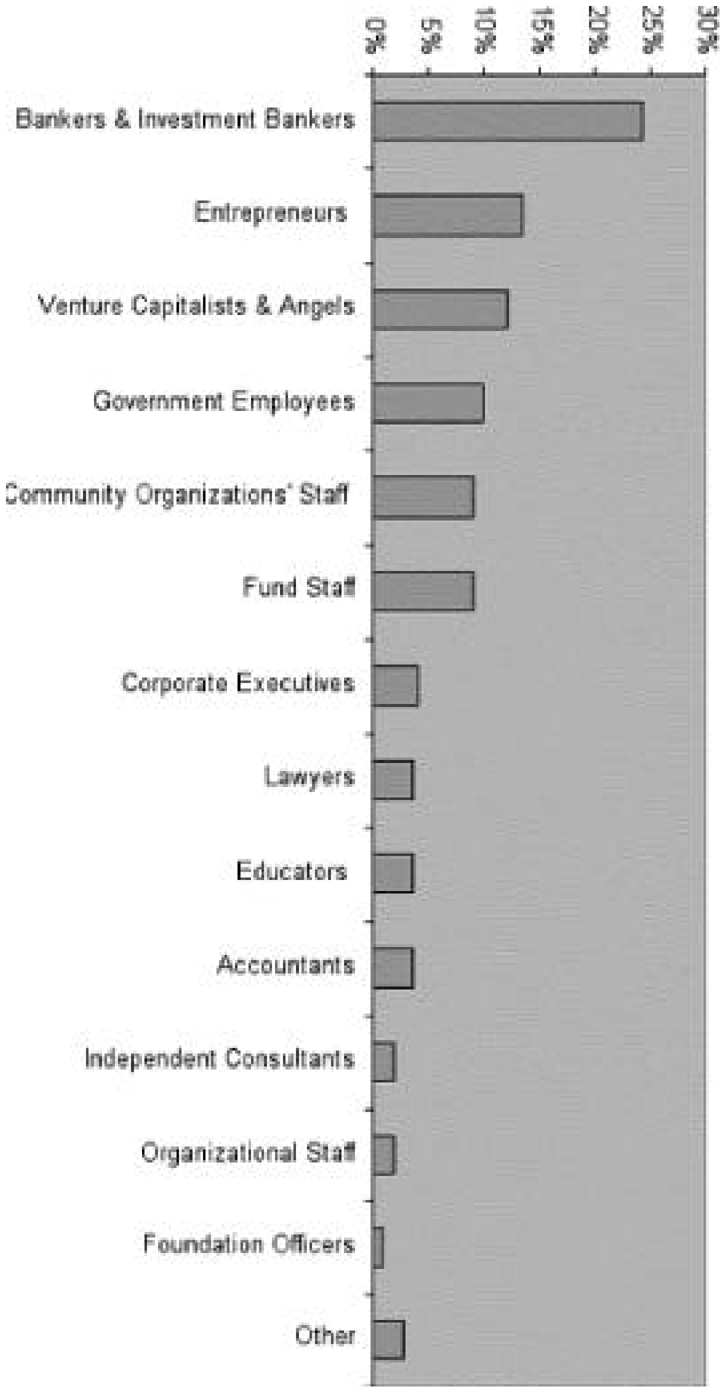


Figure 10
Investment Committees' Composition
(equity-focused CDVC providers - as of 12/31/00)

Notes

[1] Except where noted, the fund-level information in this report is as of December 31, 2000 and is based solely on the 19 equity-focused funds.

[2] Funds that make only occasional equity and near-equity investments do not segregate the capital they use for these investments. Thus, it is difficult to determine exactly how much capital is available for such investments. The figures in this report are estimates, based on conversations with fund staffs.

[3] The analysis of investments excludes DVCRF's 2000 investments, Kentucky Highlands'investments prior to 1985, and Massachusetts Community Development Finance Corporation's deal-level data.

[4] Carried interest consists of the share of profits that are allocated to the general partners of a venture capital partnership. It usually equals 20 percent of the total profits. See Gompers, P. and Lerner, J. (1999) "The Venture Capital Cycle," Cambridge, Massachusetts: MIT Press, pp. 57-94.

[5] Comparable information is not available for the Massachusetts Community Development Finance Corporation.

References

Barkley, David, Christopher Ferland, Ferdinand DiFurio, David Freshwater, Deborah Markley, Julia Sass Rubin, Ron Shaffer, *Directory of State-Assisted Venture Capital Programs*, 2000, Columbia, MO: Rural Policy Research Institute, 2000.

Bates, Tim, "The Minority Enterprise Small Business Investment Company Program," *Urban Affairs Review*, Vol. 32, No. 5, May, 1997, pp. 683-703.

Berry, John, "U.S. Is Financing Purchase of Stock in Private Firms," *The Washington Post*, August 29, 1979.

Christensen, Don, Associate Administrator for Investment, U. S. Small Business Administration, Investment Division, Interview with author, various dates, 2000.

Eisinger, Peter, *The Rise of the Entrepreneurial State*, Madison, WI: The University of Wisconsin Press, 1988.

Eisinger, Peter, “The State of State Venture Capitalism,” *Economic Development Quarterly*, Vol. 5, No. 1, February, 1991, pp. 64-76.

Fenn, George and Nellie Liang, *The Economics of the Private Equity Market*, Washington, D.C.: Board of Governors of the Federal Reserve System, December, 1995.

Friedman, David, “Silicon Valley: The Dark Side of the High-Tech Religion,” *Los Angeles Times*, January 31, 1999, p. 1M.

Gigot, Paul, “Development Group in Appalachia Finds It Needs More Capital to Foster Capitalism,” *The Wall Street Journal*, August 31, 1981.

Gompers, Paul, “The Rise and Fall of Venture Capital,”. *Business and Economic History*, Vol. 23, No. 2, Winter, 1994, pp. 1-26.

Gompers, Paul and Josh Lerner, *The Venture Capital Cycle*. Cambridge, MA: MIT Press, 1999.

Mayer, Neil, *Saving and Creating Good Jobs*, Washington, D.C.: Center for Community Change, December, 1998.

Miller, Tom, *Of These Hills: A Review of Kentucky Highlands Investment Corporation*, Unpublished manuscript, 1994.

Miller, Tom, Former President, Kentucky Highlands Investment Corporation and former Director of Program Related Investments, Ford Foundation. Interview with author, April 1998.

NCEA, *Federal Assistance to Community Development Corporations: An Evaluation of Title VII of the Community Services Act of 1974*, Washington, D.C.: National Center for Economic Alternatives, 1981.

Osborne, David, *Laboratories of Democracy: A New Breed of Governor Creates Models for National Growth*, Boston, MA: Harvard Business School Press, 1990.

Phillips-Fein, Kim, “The Still-Industrial City: Why Cities Shouldn’t Just let Manufacturing Go,” *The American Prospect*, September-October, 1998, pp. 28-37.

Pierce, Neal & Hagstrom, Jerry, “Aiding Entrepreneurs — A New Approach To The Old War On Poverty,” *National Journal*, August 25, 1979.

PricewaterhouseCoopers MoneyTree Survey, Available: http://www.pwcmoneytree.com/region.asp?year=2000&qtr=2 [June 7, 2000].

Rubin, Julia Sass, *Community Development Venture Capital: A Report On The Industry*, New York, NY: Community Development Venture Capital Association, 2001.

Sahlman, William, “The Structure and Governance of Venture-Capital Organizations,” *Journal of Financial Economics*, 27, 1990, pp. 473-521.

Small Business Administration, Table 8: Licensees Outstanding and SBIC Program Committed Capital Resources, Available: http://www.sba.gov/INV/stat/2001.html [March 15, 2001a].

Small Business Administration, Table 39: Licensees Outstanding and SBIC Program Committed Capital Resources, Available: http://www.sba.gov/INV/stat/2001.html [March 15, 2001b].

Small Business Administration, Table 45: Historical Licensing Totals for Regular SBICs as of September 30, 2000, Available: http://www.sba.gov/INV/stat/2001.html [March 15, 2001c].

Small Business Administration, Table 46: Historical Licensing Totals for Specialized SBICs as of September 30, 2000, Available: http://www.sba.gov/INV/stat/2001.html [March 15, 2001d].

Small Business Administration, Overview: The SBIC Program, Available:http://www.sba.gov/INV/textonly/overview.html [March 15, 2001e].

Staebler, Michael, *An Overview of the Small Business Investment Program*, Washington, D.C.: Pepper Hamilton LLP, October 1,1999.

Stevens, Judy & Kathryn Tholin, *Lenders of First Resort: Community Development Loan Funds*, Chicago, IL: Woodstock Institute, 1991.

Tesdell, Kerwin, President, Community Development Venture Capital Alliance, Interview with author, December 1997.

Venture Economics, ”Venture Capital Performance: Review of The Financial Performance of Venture Capital Partnerships,” *Venture Economics, Inc.*, Needham, MA, 1988.

Venture Economics, *National Venture Capital Association 2000 Yearbook*, Arlington, VA: NVCA, 2000.

The Law and Economics of Remedies for Predatory Lending

Kathleen C. Engel+
Cleveland State University

Patricia A. McCoy++
Cleveland State University

Introduction

Over the past decade, there has been a significant increase in the phenomenon known as "predatory lending." In a forthcoming paper,[1] we argue that predatory lending emerged when market incentives that historically led lenders to engage in credit rationing gave way to a market where lenders could easily exploit unsophisticated borrowers. Our specific focus is on the home loan market, *i.e.*, closed-end mortgages secured by first or subordinate liens on borrowers' homes.

This executive summary of the paper proceeds in three parts. In the first section, we identify six problems associated with various lending practices that have been characterized as predatory. We define predatory lending as a syndrome of abusive loan terms or practices that involve one or more of these six problems.

In the second part, we describe information asymmetries that formerly led to credit rationing. We then identify how changes in the financial services market have altered the conventional home mortgage market. In particular, we argue that an increase in the amount of capital available for mortgages, increased incentives for lenders to specialize in lending to low-and moderate-income borrowers, and opportunities for deception — a result, in part, of securitization — have enabled predatory lenders to thrive.

Our thanks to the conference participants, as well as participants at the Cleveland-Marshall Faculty Colloquium, for their invaluable suggestions and comments. This project received generous support from the Cleveland-Marshall Fund. Any errors are ours alone.
+ Assistant Professor of Law, Cleveland-Marshall College of Law, Cleveland State University.
++ Professor of Law, Cleveland-Marshall College of Law, Cleveland State University.

In the final part, we evaluate remedies for predatory lending, including the effect of proposed and extant remedies on the availability of capital for home mortgages. In conclusion, we propose that the federal government draw on the suitability requirement that applies to the sale of securities and impose a similar obligation on lenders and brokers. We argue that suitability achieves the balance between the need to curb predatory lending and the need to encourage beneficial market activity.

"Predatory Lending" Defined

Predatory lending is a direct outgrowth of the emergence of the subprime loan market in recent years. In an overwhelming number of cases, predatory loans form a subset of subprime loans, which are loans with higher interest rates and fees designed for borrowers with impaired credit, who cannot qualify for loans in the prime market.

To date, predatory lending has not been adequately defined. Arriving at a definition of predatory lending is important for two distinct reasons. First, legitimate subprime loans play a crucial role in expanding credit to low- and moderate-income borrowers. To avoid impinging on legitimate credit, the dividing line between legitimate subprime loans and predatory loans must be defined. Second, any serious attempt to formulate remedies for predatory lending must be able to describe the loans that require redress.

To date, predatory lending most often has been described as a catalogue of onerous lending practices, which are targeted at vulnerable populations and often result in devastating personal losses, including bankruptcy, foreclosure, and the loss of one's home. (*e.g.*, Sturdevant and Brennan). When these practices are examined, six basic problems emerge. We can thus define predatory lending as a syndrome of abusive loan terms or practices that involve one or more of the following six problems:

(1) loans that violate common loan underwriting norms to the detriment of borrowers;

(2) loans that result in no net benefit to the borrower;

(3) loan terms designed to earn supranormal profits;

(4) loans involving fraud or deceptive practices;

(5) loans involving other misleading nondisclosures that are nevertheless legal; and

(6) loans that require borrowers to waive meaningful legal redress.

Predatory loans involve at least one of the above six factors. In contrast, legitimate subprime loans do not display any of the six markers of predatory loans.

Market Segmentation and Predatory Lending

What explains the rapid growth in predatory lending? As we will now describe, changes in the financial services market and incentives for increased lending to low- and moderate-income (LMI) borrowers have altered the conventional home mortgage market. We argue that a surfeit of capital available for mortgages, new incentives for specialized LMI lending and opportunities for deception — resulting from a surge in securitization and a new class of naive borrowers — have made it possible for predatory lenders to thrive.

The Conventional Theory of the Market for Home Mortgages

In a market with full information, we would expect that the price of a loan would reflect the risk presented by the borrower. The reality, however, is that lenders do not have full information about the risk that borrowers will default, the costs of foreclosure if they do default, and the net amount recoverable in the event of foreclosure. As a result, lenders cannot accurately identify borrowers who present the greatest risk and cannot price loans accurately based on risk.

Twenty years ago, Stiglitz and Weiss (1981) recognized that this lack of information creates an adverse selection problem that prevents the market for mortgages from clearing. The key to this adverse selection problem is that high interest rates deter borrowers who are less risky and more risk-averse and attract the less risk-averse and riskier borrowers. Thus, if lenders raise interest rates, the proportion of loan applicants who present elevated risks of default will rise.

Given that lenders cannot identify less risky borrowers and that high interest rates will deter the very borrowers whom they seek to attract, lenders set the price of loans below the market-clearing rate. Lenders further reduce their risk by limiting the amount that borrowers can borrow; this has the effect of deterring risky borrowers. As a result of this credit rationing, the demand for loans exceeds the supply and not all creditworthy applicants can obtain loans (Brueckner 2000).

Changes in the Financial Services Market

Until the late 1980s, the home-mortgage market behaved as Stiglitz and Weiss predicted: there was essentially one market for home mortgage loans and demand exceeded supply. Beginning in the 1980s, several changes in the financial services market led to a significant increase in the supply of capital available for lending and spurred the emergence of lenders who were willing to lend to people who, historically, had been credit-constrained.

One of the most dramatic changes in the financial services market has been the advent of the securitization of home mortgages. Securitization is the process of converting packages of home mortgages into securities and selling the securities to investors. Widespread securitization began in the 1980s and by 1993, 60 percent of home mortgage loans were securitized. It is now routine for lenders to originate loans and sell them on the secondary market, which provides a steady stream of capital to lend.

In addition to generating additional capital for lending, securitization created opportunities for nonbank lenders to enter the home mortgage market. Lenders no longer need to be large financial institutions with significant deposits and capitalization. Rather, mortgage bankers, finance companies, and home improvement contractors with minimal assets can originate loans for sale on the secondary market.

Many of these new lenders specialize in subprime lending to low- and moderate-income borrowers. There are a number of reasons for this. First, prime lenders do not have a significant presence in LMI neighborhoods, so there is less competition. Second, LMI borrowers historically have had limited access to mortgage capital because of credit rationing. Hence, there is unmet demand in LMI neighborhoods. Third, many homeowners in LMI neighborhoods, just as in the rest of the country, experienced a rise in the value of their homes, and, therefore, their equity in the 1990s. Fourth, there has been an increase in homeownership among people with lower incomes.

Another factor that encouraged subprime lenders to focus on LMI lending was the 1992 Federal Housing Enterprise Financial Safety and Soundness Act, which authorized the Department of Housing and Urban Development to establish affordable housing lending goals for Freddie Mac and Fannie Mae. The 1996 to 1999 goals issued pursuant to the Act required that 42 percent of Freddie Mac's and Fannie Mae's loan purchases come from low- and moderate-income households. The goal for 2000 was 48 percent and for 2001, it was 50 percent.

Additional goals require that Fannie Mae and Freddie Mac significantly increase their purchases of loans from high minority and/or low-income census tracts.

Two other pieces of legislation — the Alternative Mortgage Transactions Parity Act (AMTPA) and the Community Reinvestment Act (CRA) — encouraged lending in LMI neighborhoods. AMTPA expanded the types of products that lenders could offer, thus making it possible for LMI borrowers to obtain loans with terms that meet their credit needs. The CRAprovides incentives for banks and thrifts to purchase subprime loans containing predatory terms in order to improve their CRA examination ratings and prospects for merger approval. In addition, the Federal Housing Administration (FHA) insurance creates incentives for lending in LMI neighborhoods by reducing the cost to lenders of default.

The changes in the financial services market, including the incentives for lending in low- and moderate-income communities, furthermore have created opportunities for deception by market participants. Securitization makes deception possible because the various entities involved in lending and securitization do not share the same knowledge about borrower's risk nor the same commitment to accurate risk assessment. This enables lenders and brokers to withhold information to the detriment of other participants.

Nonbank lenders who sell loans on the secondary market often use mortgage brokers to market and arrange loans. These brokers have little incentive to insure that borrowers are creditworthy because they do not bear the risk of loss in the event of default. Brokers do, however, have an incentive to deceive lenders regarding borrowers' ability to pay. This is because lenders typically compensate brokers only for loans that the lenders approve, based on the size or interest rate of the loans. When lenders do not have accurate information regarding borrowers' credit risk, they may agree to loan terms that borrowers cannot afford, which ultimately can result in default by the borrowers.

Principal-agent problems also arise because lenders have greater access than securitizers to information about borrowers' creditworthiness and securitizers rely on lenders' assurances about credit quality. Given that lenders' earnings are based on fees and not interest, their incentives to maintain credit quality are low relative to those of the securitizers. This information asymmetry and reduced commitment to creditworthiness creates incentives for lenders to approve loans and include loan terms that generate fees without regard to the risk that the borrowers will default.

Finally, separate information asymmetries occur between LMI borrowers and lenders and brokers. Lenders and brokers have extensive knowledge about mortgage products and loan terms. In contrast, LMI borrowers, many of whom have been excluded from the home mortgage market because of credit rationing, are relatively unsophisticated. Thus, LMI borrowers may not be aware of alternative sources of capital and may not be able to comprehend the information that brokers and lenders provide them regarding loan terms.

Disincentives for Legitimate Lenders and Brokers to Engage in Predatory Lending

The costs to banks and thrifts of predatory lending are significant and clearly exceed the costs that predatory lenders incur. Banks and thrifts are community institutions with valuable reputations that may not be worth sacrificing to pursue predatory lending. They may perceive that even legitimate subprime lending and the consequent increase in foreclosure rates could damage their reputations.[2] In contrast, predatory lenders are less concerned about their reputations because they can readily dissolve and reincorporate under different names.

Banks and thrifts, for the most part, do not have a significant presence in LMI neighborhoods. As a result, they have limited opportunities to develop relationships with LMI borrowers at retail sites or to obtain valuable information on the social capital in LMI communities. If banks wanted to target customers for predatory loans, they would need to establish or, in some cases, re-establish branch banks in LMI neighborhoods. The cost of establishing new offices likely would outweigh any profits they could realize from predatory lending. In contrast, predatory lenders do not have the same brick and mortar costs. They can operate out of storefronts or solicit borrowers door-to-door without the need for retail office space.

Banking regulations that mandate loan loss reserves and require adequate capitalization create further obstacles to banks that want to expand into predatory lending. If banks and thrifts begin charging LMI borrowers high interest rates, bank examiners likely will view the loans as a risk to safety and soundness and will require the banks to increase their loan loss reserves. In addition, federal banking regulators have tightened capital requirements for subprime loans and they are expected to tighten those requirements even further. Nonbank predatory lenders, in contrast, are not subject to federal loan loss reserve or capitalization requirements.

Banks are also less able to develop the special underwriting expertise that LMI lending requires. LMI borrowers often present elevated risks of default and are less likely than more affluent borrowers to have credit histories that fit neatly into banks' underwriting standards. As a result, lenders who want to serve LMI borrowers need special expertise in evaluating their creditworthiness. Banks and thrifts are ill equipped to develop this expertise because their function is to provide diverse services, from deposit taking to commercial and personal lending. This diversification makes it unlikely that banks and thrifts profitably could develop an expertise in predatory lending. In contrast, predatory lenders can afford to specialize. By focusing on one class of borrowers — higher-risk borrowers — predatory lenders can better develop methods for obtaining and evaluating credit information on this group of borrowers.

The racial composition of the neighborhoods that predatory lenders target is disproportionately people of color. To the extent that banks have an aversion to lending to people of color that outweighs any market incentives, they will refuse to lend in these areas. In contrast, predatory lenders target people of color precisely because discrimination, as well as credit rationing, have prevented these borrowers from having access to capital.

Finally, banks and thrifts are reluctant to lend in neighborhoods that are economically unstable. Predatory lenders are less concerned about economic stability because they are willing to pursue foreclosure aggressively, which enables them to recover their investments before prices drop too far.

Competition Among Predatory Lenders

Although credit risk explains the market segmentation that has given rise to the prime and subprime markets, it does not explain the segmentation of the subprime market into legitimate and predatory lending. Arguably, competition among predatory lenders should result in loans with the same terms that legitimate subprime lenders would offer. This has not happened. Our hypothesis is that predatory lenders target LMI borrowers who, for reasons discussed below, do not “shop” for alternative sources of mortgage capital and do not negotiate over terms. If this is true, then predatory lenders compete with each other solely for access to the borrowers whom they target. We thus posit that the market for predatory loans is characterized by spatial, monopolistic competition. (Frank 1991).

Many LMI borrowers may not be aware of the increased availability of mortgage capital for LMI lending. This lack of awareness, when coupled with pent-up demand because of credit rationing, makes them easy prey for predatory lenders who can readily convince them that their opportunity to borrow is fleeting. These borrowers, unaware of other options, desperate for money and fearful that the prospective loans will disappear, will not "shop" for other loans. Predatory lenders and brokers can take advantage of this false urgency and move quickly to commitment and closing on predatory loans.

Some LMI borrowers are simply unable to explore all their lending options. They may be infirm or feel that it is not safe to venture far from their homes. They may not have phones or, even if they have them, may find it difficult to understand people over the phone. Likewise, they often lack transportation to the offices of legitimate lenders. Predatory lenders, who solicit potential borrowers with phone calls and door-to-door solicitations, have ready customers among people who are isolated. They endear themselves to these borrowers with charm and solicitude that mask their guile and convince the borrowers that they can meet their lending needs.

LMI borrowers are further handicapped by their lack of experience with legitimate mortgage lenders. They may find it difficult to understand the terms of loans, especially predatory loans, which are notorious for lack of transparency. They may not know where to seek help in understanding loan documents and identifying the important questions to ask lenders. Predatory lenders can take advantage of their lack of sophistication and insert loan terms that would be unacceptable to more experienced borrowers. In the end, borrowers sign documents without a clear sense of the terms of the contracts, how much they borrowed, what they have purchased, or the repayment terms.

Predatory lenders identify potential borrowers by reviewing statistical data and public records and by familiarizing themselves with the neighborhoods that they intend to target. Predatory lenders can use Home Mortgage Disclosure Act (HMDA) data to identify areas in which there is minimal or no lending activity by prime lenders. They can also use census data to find neighborhoods with high percentages of people of color and LMI residents, who historically have been rationed out of the market and may desire to borrow money.

Municipal offices are sources of individual level information about residents. Predatory lenders can learn the names of homeowners from registries of deeds. Title records will also reveal any mortgages and the dates that they were recorded. From this information, predatory lenders can surmise how close homeowners are to paying off any outstanding mortgage debt and, therefore, the likelihood that there is equity in their property to tap. From the local tax office, predatory lenders can obtain information on the appraised value of properties and learn the identities of any homeowners who owe outstanding taxes and, therefore, may be in the market for loans. In communities that have ordinances requiring homeowners to maintain the exteriors of their homes, predatory lenders can learn who has been cited for violations and, thus, may be in need of money for home repair loans. They can drive through neighborhoods and identify homes with sagging porches, aged roofs and peeling paint. Armed with the names of homeowners, the amount of equity they have in their homes, any outstanding tax bills or housing code violations they have and the conditions of their homes, predatory lenders approach the borrowers and offer their services. The borrowers, eager to take advantage of what appears to be a "dream come true," look no further.

Remedies

Neither the states nor the federal government (with the exception of North Carolina and to a lesser extent Illinois, Massachusetts and New York) have comprehensive laws to redress predatory lending. Rather, victims of predatory lending currently must rely on a loose assortment of statutes and common law that were not designed to require predatory lenders to internalize the costs of the harm they cause. Under the current stable of remedies, predatory loan contracts are generally enforceable except in the case of discrimination or where fraud or nondisclosure has operated in some way that is inimical to free will. Barring discrimination, fraud or nondisclosure, however, the law normally does not question the substance of predatory loan terms.

Remedies Under Contract Law and the Uniform Commercial Code

Because predatory loans are contracts in the form of promissory notes and security agreements, contract law might be expected to provide recourse for victims of predatory loans. Various contract law doctrines, however, make it difficult for borrowers to challenge their loan agreements as void.

Most defenses to enforcement of contracts go to defects in the formation of assent, not to disparities in bargaining power or the fairness of substantive terms. The most important exception to that rule, for purposes of predatory lending, is the defense of unconscionability. In the seminal case of *Williams v. Walker-Thomas Furniture Co.*, the

United States Court of Appeals for the District of Columbia Circuit defined unconscionability to mean "an absence of meaningful choice on the part of one of the parties together with contract terms which are unreasonably favorable to the other party."

The doctrine of unconscionability has limited utility, however, for victims of predatory lending. Courts have been reluctant to condemn excessive price terms as unconscionable. Furthermore, most courts only recognize the doctrine as a defense to suits for contract enforcement. Consequently, borrowers may not sue lenders affirmatively for damages or other relief based on unconscionable provisions in their loan agreements. Finally, under the Uniform Commercial Code, secondary market purchasers of predatory loans can cut off the defense of unconscionability (and many other contract defenses) where they qualify as holders in due course. Thus, when applicable, the holder in due course doctrine permits secondary market purchasers to evade responsibility for most misconduct by loan originators and eliminates an important incentive for the secondary market to police loan originators.

Antifraud Laws

Numerous predatory loans are the result of some form of fraud. Nonetheless, the limited scope of common-law fraud often precludes redress, either civilly or through criminal prosecution. Common-law fraud requires proof of affirmative misrepresentations and thus does not protect against misleading omissions or manipulation. In addition, for victims who want to press charges, criminal fraud prosecutions depend on the district attorney's willingness to prosecute. For victims who seek civil redress, mandatory arbitration provisions and inadequate attorneys' fee provisions often raise insuperable barriers to suit. Finally, the need to prove individual reliance in fraud cases often makes it difficult to bring class actions.

In response to these inherent limitations in common-law fraud, Congress and the states passed unfair and deceptive acts and practices (UDAP) statutes. However, the federal counterpart, the Federal Trade Commission Act, does not afford a private right of action. State UDAP statutes do provide private rights of action, but some state UDAP statutes exclude credit transactions. Other state UDAP statutes have weak attorneys' fee provisions that discourage the private bar from bringing state UDAP claims.

Disclosure

Several federal statutes, including the Truth in Lending Act (TILA), the Real Estate Settlement Practices Act (RESPA) and the Home Ownership and Equity Protection Act (HOEPA), mandate the disclosure of standardized price information on loans. All three statutes, however, are flawed in what they require and the relief that they provide. TILA has not lived up to its goal of standardizing disclosures as to the total cost of credit. RESPA suffers from deficient private enforcement and poorly thought-out provisions on the timing of disclosures. HOEPA's advance disclosure provisions are better crafted, but HOEPA's narrow coverage makes it easy to evade.

Fine-tuning federal disclosure provisions is no panacea. Most victims of predatory lending already find the current set of disclosures complicated and confusing. For naïve borrowers, piling on more disclosures would not help. The high-pressure nature of loan closings only exacerbates this confusion, by discouraging borrowers from reading loan documents at closing or asking questions when they do. Thus, more disclosure is not the answer.

Consumer Education and Consumer Counseling

Consumer education and/or counseling are another proposed response to the problem of exploitative loan terms. Currently, however, government-sponsored credit counseling is virtually non-existent and consumer education programs are in their infancy. There are serious questions about the efficacy of counseling, particularly for consumers with educational or cognitive deficiencies. There is a more basic problem with relying on education and counseling: education and counseling mistakenly put the onus of avoiding predatory loans on potential victims, rather than on the perpetrators.

Price Regulation

Usury limits for residential mortgages in the United States were largely deregulated through federal legislation in the 1980s. More recently, predatory lending has fueled calls to reimpose usury limits on interest rates and points and fees. Numerous studies, however, including studies by Bowsher (1974), Jaffee and Russell (1976), McNulty (1979), Nathan (1980), Ostas (1976), and Phaup and Hinton (1981), have concluded that price controls hurt the very individuals they are designed to serve by restricting the flow of legitimate credit. Accordingly, any attempt to regulate predatory lending should avoid price controls.

Antidiscrimination Remedies

Two federal statutes — the Equal Credit Opportunity Act of 1974 and the Fair Housing Act of 1968 — prohibit lending discrimination on prohibited grounds, including race, color, national origin, and gender. Both statutes authorize private damages actions. Only a paucity of private cases has been litigated under either statute, however, due to the high standards of proof, costly expert statistical analysis and low damages awards. Furthermore, federal lending discrimination laws are necessarily tangential in their approach, because they address discriminatory treatment rather than abusive loan terms *per se*.

Suitability

In contrast to the remedies previously discussed, which have limited utility in terms of stemming predatory lending, we propose taking a direct approach that goes to the heart of predatory lending - *i.e.*, abusive loan terms and practices.

Given the shortfalls in the current set of remedies, an effective remedy must accomplish several things. It must create effective disincentives to refrain from predatory loans and must force predatory lenders and brokers to internalize harm. It must outlaw predatory practices in such a way that the law is understandable, violations can be easily proven, and lenders and brokers cannot evade the law. It must avoid price regulation and other constraints on legitimate subprime loans. It must compensate victims for losses and grant loan reformation. And it must furnish the private bar and victims with adequate incentives to bring predatory lending claims.

In devising such a remedy, we take a leaf from the suitability doctrine in federal securities law. In its general form, a duty of suitability in mortgage lending would have three components. Under that duty, lenders and brokers would be prohibited from selling subprime loans:

(1) that exceeded individual customers' risk thresholds;

(2) to borrowers who qualified for prime rates; and/or,

(3) that contained oppressive mandatory arbitration clauses.

If the duty of suitability is appropriate for financial instruments that have been the traditional province of the affluent and the middle class, it is appropriate for financial instruments that are peddled to the poorest rung of society. Such a duty would counteract the current financial incentives of lenders and brokers to exploit information asymmetries among market participants. In essence, a duty of suitability would provide the disincentive to predatory lending that credit rationing historically provided before the rise of the subprime market.

To avoid impinging on legitimate credit, we recommend vesting the Federal Trade Commission with authority under Section 5 of the Federal Trade Commission to define the precise requirements of the duty of suitability through regulation. To ensure adequate enforcement, we further recommend amending Section 5 to add a private right of action for predatory lending, in addition to the Federal Trade Commission enforcement that now exists.

Kathleen C. Engel is Assistant Professor of Law at Cleveland-Marshall College of Law at Cleveland State University. She taught previously at Case Western Reserve University Law School and Northeastern University School of Law. Prior to teaching, Engel was an associate with Burnham & Hines in Boston, where she had a civil rights practice and represented the FDIC in complex commercial litigation. She has published in the fields of housing discrimination and criminal justice. Engel is a graduate of the University of Texas at Austin School of Law.

Patricia A. McCoy is Professor of Law at Cleveland-Marshall College of Law at Cleveland State University. Before entering academe, she was a partner at Mayer, Brown & Platt in Washington, D.C., where she specialized in banking, securities, and housing discrimination litigation. She is the author of Banking Law Manual: Federal Regulation of Financial Holding Companies, Banks and Thrifts (Lexis-Nexis 2d. 2000) and numerous articles on financial services law. McCoy is Chair of the Section on Financial Institutions and Consumer Financial Services of the Association of American Law Schools. She received her J.D. from the University of California at Berkeley.

Notes

[1] The Law and Economics of Remedies for Predatory Lending (latest draft available at http://www.law.csuohio.edu/handbook/predatorylending.pdf).

[2] Ironically, depository institutions may have a veiled presence in the predatory lending market. Some banks and thrifts, whose direct lending is legitimate, have subsidiaries or affiliates that engage in predatory lending. Although the disincentives to engaging in predatory lending are greatest for banks and thrifts, several of the disincentives, including reputational concerns, also apply to legitimate subprime lenders.

References

A Primer on Securitization, edited by Kendall, L. and M. Fishman, Cambridge: MIT Press, 1996.

Bowsher, Norman N., "Usury Laws: Harmful When Effective," *Review – Federal Reserve Bank of St. Louis*, Vol. 56, No. 8, August 1974, pp. 16-22.

Brueckner, Jan K., "Mortgage Default with Asymmetric Information," *Journal of Real Estate Finance*, Vol. 20, No. 3, 2000, pp. 251-74.

Frank, Robert H., *Macroeconomics and Behavior*, New York: McGraw-Hill, Inc., 1991.

Hylton, Keith N. and Vincent D. Rougeau, "Lending Discrimination: Economic Theory, Econometric Evidence, and the Community Reinvestment Act," *Georgetown Law Journal*, Vol. 85, No. 2, Dec. 1996, pp. 237-289.

Jaffee, Dwight M. and Thomas Russell, "Imperfect Information, Uncertainty, and Credit Rationing," *Quarterly Journal of Economics*, Vol. 90, No. 4, Nov. 1976, pp. 651-666.

Klausner, Michael, "Market Failure and Community Investment: A Market-Oriented Alternative to the Community Reinvestment Act," *University of Pennsylvania Law Review*, Vol. 143, May 1995, pp. 1561-1593.

McNulty, James, *A Reexamination of the Problem of State Usury Ceilings: The Impact in the Mortgage Market*, Washington, D.C.: Federal Home Loan Bank Board, Invited Working Paper No. 21, March 1979.

Nathan, Harold C., "Economic Analysis of Usury Laws," *Journal of Bank Research*, Vol. 10, No. 4, Winter 1979, pp. 200-211.

Ostas, James R., "Effects of Usury Ceilings in the Mortgage Market," *Journal of Finance*, Vol. 31, No. 3, June 1976, pp. 821-835.

Phaup, Dwight and John Hinton, "The Distributional Effects [of] Usury Laws: Some Empirical Evidence," *Atlantic Economic Journal*, Vol. 9, No. 3, Sept. 1981, pp. 91-98.

Stiglitz, Joseph E. and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, Vol. 73, No. 3, June 1981, pp. 393-410.

Sturdevant, Patricia and William J. Brennan, Jr., "The Double Dozen Dirty Predatory Mortgage Lending Practices," National Association of Consumer Advocates, Inc., available at http://209.219.154.214//dirty-mortgages1a.htm.

Weicher, John C., *The Home Equity Lending Industry: Refinancing Mortgages for Borrowers with Impaired Credit*, Indianapolis: Hudson Institute, 1997.

Williams v. Walker-Thomas Furniture Co., 350 F.2d 445 (D.C. Cir. 1965).

New Industry Developments

Discussion Comments
James H. Carr
Fannie Mae Foundation

Overview

The papers I have been asked to discuss address the issues of credit scoring, predatory lending, and community development venture capital. All three papers relate to a single important theme. That unifying theme is the issue of risk.

The first paper discusses alternative ways to measure individual-borrower risk and suggests that sophisticated scoring models may overstate credit risk for various underserved borrower groups. The second paper focuses on the extremely negative consequences that can occur within a market when individual-borrower risk is poorly understood or overstated. The final paper highlights the fact that broader community investments (in this instance, in the form of venture capital), can also be stifled when risks are poorly understood or measured.

My remarks will focus on the general direction and policy significance of each contribution. I will also highlight areas for further research or consideration that flow from each of the papers just presented. But, before addressing the individual papers, I would like to place those papers into a broader context.

Today's conference focuses on recent changes in the financial services arena and their impact on lower-income and minority communities. Those impacts have not been positive. The American financial system is arguably the most sophisticated and efficient in the world. And increasingly, middle- and upper-income households are benefiting from financial services' innovation and modernization. But while most households increasingly enjoy the fruits of financial modernization, lower-income, and particularly, lower-income minority households, face financial marginalization. Commercial banks, savings institutions, brokerage houses, and other intermediaries each day bring new and exciting services to the market place that more effectively link individual households to the capital markets. At the opposite end of the financial services spectrum, lower-income and minority communities are increasingly the focus of check-cashing outlets, pawn shops, rent-to-own stores, and payday lenders. The result is an increasingly segmented financial-services system in which lower-income, particularly minority, households often and increasingly pay substantially more for the financial-services transactions in which they engage. Moreover, total reliance on fringe lenders would be detrimental to households even if the fees charged by alternative financial-services firms were relatively the same as mainstream financial-services firms. The reason is that check cashiers, pawn shops, title lenders, and related financial services storefronts do not offer savings accounts. As a result, households that are solely reliant on them for financial services have neither the incentive nor the opportunity to save.

Further, the communities in which fringe lenders concentrate tend to be the breeding ground for a host of questionable, unscrupulous, or fraudulent financial-services activities such as excessive subprime lending and predatory lending. On their behalf, fringe lenders argue that their existence and success is a direct result of a lack of financial-services options for the households they serve. They point out that they are merely filling an important financial services gap. There is merit to that argument. In moderation, alternative financial-services providers play an important role in serving the needs of lower-income households that have difficulty managing credit or whose incomes force them to live on the margin. But the rapid growth of these institutions means that they are capturing an increasing number of households that should and could benefit from lower-cost, wealth building mainstream institutions available to and accessed by most American households. When added together, the proliferation of alternative financial-services storefronts and excessive subprime lending, concentrated in lower-income — particularly minority — communities will only exacerbate the growing wealth disparities between rich and poor that have captured so much public attention over the past few years. The need to better understand the financial markets, and more directly, market failure, for lower-income and minority communities, has never been more urgent.

The papers I have been asked to review address several aspects of the issues that I have just highlighted. They focus, in different ways, on how the lack of reliable information on credit risk undermines market efficiencies and leads to overpriced financial services and outright fraud for the most financially vulnerable households in our society.

Paper #1: The Influence of Bureau Scores, Customized Scores, and Judgmental Review in the Bank Underwriting Decision-Making Process

The justification for both excessive subprime lending as well as fringe financial services is that households in distressed communities are extremely high risk and these respective services are simply tailored to meet their needs. But because there is practically no publicly available data that could enable us to better understand the relationship between various levels of risk and fee structures, conversations on this subject are non-conclusive.

The first paper that examines alternative approaches to evaluating credit risk for home loans among underserved borrower groups attempts to address this issue. The research demonstrates that an intuitively reasonable custom-scoring model and judgmental loan-evaluation process can produce rejection rates that differ greatly from those produced by FICO scores. This information is useful to the extent that it suggests that FICO scores may not be the most useful or accurate measures of a household's creditworthiness. And, there remains a strong need for performance data on alternative underwriting criteria, particularly as it relates to underserved borrower groups.

This issue is increasingly important given the industry's movement to risk-based pricing. There is real potential to incorporate inherently biased risk-assessment models into even more complex systems. If that happened, those systems might provide an undeserved assumption of credibility to models that systematically charge more for mortgage credit based on poorly specified, inaccurate, and inappropriate risk assessment methodologies and tools. Of course, the paper's obvious weakness is the lack of performance data that would enable us to determine the validity of the alternative risk-assessment methods presented in the paper. But we should be cautious in criticizing the paper for the lack of information in that arena. For the more we criticize the paper, the more we reinforce one of the authors' principal points: the need for more and better performance data to evaluate the accuracy and fairness of alternative underwriting approaches.

Paper #2: The Law and Economics of Remedies for Predatory Lending

The second paper on predatory lending is groundbreaking for a variety of reasons and should be considered required reading for any policy analyst interested in the subject of predatory lending. The paper makes three particularly important contributions to the discussions on predatory lending.

First, and perhaps most importantly, it provides a useful set of criteria to define the practice of predatory lending. Often, discussions on predatory lending suggest that there is a bright blue line between predatory lending and subprime lending. The reality is that there is a very large gray area between the two. This paper is one of the first that directly addressed that issue.

A major predatory lending issue should be the systematic provision of high-cost loans to borrowers who could have reasonably received credit in the prime market. In these instances, loans may not contain the extremely abusive features that are commonly associated with predatory loans such as single-premium credit life insurance, balloon payments, prepayment restrictions that do not benefit the borrower, and related terms. Those loans might simply be high cost — marketed to households due to their financial vulnerability and protected-class characteristics such as race/ethnicity, age, or physical or mental challenges. In fact, this gray area is perhaps more important and destructive at a community level than the more infamous predatory lending behavior because it impacts many more households and involves significantly more money.

The typical subprime mortgage is roughly 300 to 400 basis points higher than a comparable prime-market loan. But even one percentage point can result in enormous wealth stripping from a family on a modest-priced home. For example, consider the difference in the cost of an $80,000 mortgage over its 30-year life, assuming only a one-percentage point increase in the interest rate. Assuming a prime-market rate of 8 percent, the long-term difference between an 8 percentage point and 9 percentage point mortgage is more than $20,000. The difference in cost over the life of the mortgage at the more typical 300 to 400 basis point differential would range from more than $60,000 to more than $80,000. And many minority households have loans that greatly exceed that typical 300 to 400 basis point differential. The traditional assumption that predatory lending must contain some set of egregious loan terms is in some important ways distracting. The failure to provide households with roughly equal creditworthiness equal access to credit on equal terms should be a violation of fair lending, equal credit opportunity and/or anti-predatory lending laws. This paper opens that door by encouraging regulators and others not to focus solely on a narrow set of loan provisions as defining characteristics of predatory lending.

The second contribution this paper makes is its thoughtful discussion of the evolution of the market trends that fueled the growth of subprime and, ultimately, predatory lending. For example, many other writers have focused on the role that securitization has played in this arena. But this paper goes beyond the fact that loans have been securitized and deals with the reality that information asymmetries between the secondary markets and primary lenders have helped to promote predatory lending.

The fact that secondary market participants may not have been aware that they were purchasing predatory loans should not mean that they should be absolved from being responsible for their actions. But an awareness of information asymmetries is important in policy discussions, particularly between financial institutions, nonprofit institutions, and regulatory agencies when they meet to discuss the roles of various actors in promoting predatory lending and how best to manage or regulate it in the future.

The paper's third strong point is the vast array of legal strategies that might significantly help to shut down predatory lending practices. Not only do the authors focus on major legal theories and strategies and address possible legislative as well as judicial strategies, they also highlight several obscure legal strategies and concepts. This is important because predatory lending is complex and the more strategies available to attorneys representing victimized households, the better. The solutions section also carefully focuses on the possible negative economic repercussions of possible strategies and discourages enactment of legislation or promulgation of regulations that might have a particularly negative impact on legitimate providers of subprime loans.

The paper also points to the weaknesses and limitations of solutions such as consumer education and additional disclosure requirements as potentially placing an unrealistically high burden and expectation on consumers. The paper presents perhaps one of the most thoughtful series of questions to date that should be addressed when considering the use of consumer financial education and counseling as a strategy to combat predatory lending.

This paper has its strengths, but, like any work, it is not without its weak spots. Three areas could be addressed to improve the paper even further. The paper carefully reviews the role of various market players in creating an environment wherein predatory lending could thrive. But it is silent in pointing out that federal regulatory oversight has failed to protect the financial interests of those lower-income and protected-class households who need protection the most. The failure of government to effectively manage the moral hazards created by information asymmetries from securitization and reduced commitment to creditworthiness by many of the new market players, including non bank and subprime lenders, led to deception and fraud and eventually made predatory lending possible and rampant.

In fact, government has not only been on the sidelines, but when it was in the game, they were often on the wrong side. There is no mention in the paper, for example, of how federal policies related to the Home Owners Loan Corporation or FHA underwriting criteria during the middle part of the 1900s directly and explicitly promoted segregated communities. And these communities now serve as the convenient market for abusive and discriminatory lenders to target.

The authors highlight, but do not discuss, a classic case of regulatory failure. That failure was the lack of aggressive steps on the part of government, immediately after the passage of fair lending and equal credit opportunity laws, to ensure that protected class households and their communities were fully protected and integrated into the larger, mainstream financial-services markets. The lack of any specific regulatory actions designed to meet the unique needs of disenfranchised households and communities is an issue that should not be overlooked as we consider the justifications for future federal policy and regulatory intervention and oversight.

Closely related to this issue is the weakness of the paper to highlight the need for better data collection. The paper thoughtfully discusses information asymmetries but does not address perhaps the single most important information asymmetry — the information gap between the behavior of subprime lenders and fringe lenders and the public's awareness of that behavior.

Information can often be a most powerful cure. The enhancement of the Home Mortgage Loan Disclosure Database with applicant attributes such as race/ethnicity, age, and gender powerfully demonstrates this point. At the time the advocacy community was attempting to have borrower-attribute data added to the Home Mortgage Disclosure Act (HMDA), there were many who argued that additional information would not do any good because it could only show who was rejected for mortgage loans but could not explain why. In retrospect, we know that view was wrong. From its immediate release, the enhanced HMDA data provided the spark that ultimately ignited a sea of change in the affordable lending arena. That data, which showed that Blacks and Hispanics were routinely rejected for home mortgage loans two, three, five and sometimes as high as seven times more frequently as non-Hispanic White households with similar incomes, brought swift condemnation from the general public, advocacy agencies, and regulatory institutions. In fact, many private financial institutions were so disturbed by the data that they unilaterally committed their institutions to address these huge disparities.

Better information would greatly help to identify major trends in lending to protected-class households and would likely begin to slow down some excessive fringe and subprime lending activities without any further regulatory actions. But even if that did not occur, better information on broad trends by various financial institutions would improve the ability of advocacy organizations and regulatory agencies to identify questionable activity for further examination.

The second shortcoming of the paper deals with its suggestions, or lack thereof, on how to promote vibrant and competitive markets as a solution to excessive subprime lending. The paper carefully points to the need to avoid actions that would limit legitimate private-market activities. But its suggestions to promote more competitive markets is limited to a few recommendations to enhance legitimate subprime lending. While some of these ideas are worth further exploration, the broader issue of integration of the markets is not raised.

Over the long term, a more comprehensive set of policies might look at ways in which regulatory agencies can help expedite the movement of the financial markets away from separate markets for subprime and prime credit and toward a market characterized by a continuum of credit in which all borrowers enter through the same door and receive credit based on their individual risk characteristics. This robust risk-based pricing environment would eliminate the blunt pricing cutoffs between prime and subprime lending and could lower costs for all borrowers, including credit-impaired applicants. But as I stated earlier, caution should be taken not to institutionalize poor credit-risk appraisal models into sophisticated risk-based pricing systems.

Finally, the broader issue of financial services, in general, in lower-income and minority communities should not be ignored. So long as disenfranchised lower-income and minority communities are inappropriately viewed as excessively high risk areas, and competition for mainstream financial services are limited, those areas will continue to be plagued by high levels of unscrupulous, if not fraudulent, financial-services providers who will simply shift their focus to those activities that are the least regulated.

Further, the lack of vibrant financial services markets, for both personal and business investments, also limits investment for broader community development activities.

Paper #3: Community Development Venture Capital

My last comment relates to the final paper presented on this panel. It addresses the potential role for venture capital in lower-income communities, and by extension, the lack of venture capital in these communities. It highlights the fact that venture capital can be a valuable tool for communities and a profitable vehicle for investors.

The paper is important because it traces the growth of the venture capital industry and highlights the fact that venture capital is increasingly a viable tool to promote community reinvestment activities. But the study is short on data, which limits its usefulness.

I am cautious not to criticize the paper's shortcoming on shortage of data. This lack of data is not the fault of the author; rather, it highlights an important possible role for regulatory agencies to more carefully examine the financial markets in distressed communities to help financial institutions and communities better understand their full market potential.

The real shortcoming of the paper is that it does not identify at least two major and systematic issues that arise in the context of venture capital for projects in lower-income and minority communities.

First, community development finance does not exist in a vacuum. An investment on one side of a street will be greatly influenced by what is located or ultimately located across from it. In vibrant investment markets, environmental uncertainties such as this and others are limited or minimized. In vibrant markets, private market priorities, as well as government's role with respect to zoning requirements, long-range plans, building codes, and related issues, are generally well known and provide a firm basis of information upon which to base investment decisions.

In lower-income and minority communities, there is often great uncertainty about all these issues and more. Issues such as the possible impacts of high crime rates, inability or ability to secure vacant or abandoned properties for subsequent investments, and local government's understanding of the need to work closely with developers to ensure the long-term viability of new investments are often open questions that discourage private investors.

Second, venture capital is only one form of specialized financing that might be used to promote community investment. By implication, the paper suggests that development of specialized financial intermediaries should be a goal of public policy. There are currently many specialized institutions attempting to meet the financing needs of lower-income and minority communities, including community development commercial banks, community development thrifts, community development credit unions, community development trust funds, and community development REITS. Research shows that intermediary efficiency of this fragmented and specialized development financing system is significantly lower than other types of intermediation, such as corporate finance or housing finance. Moreover, the trend in financial services is the shedding of institutional fragmentation in favor of institutional consolidation, process integration, and functional or product specialization. While specialized intermediaries might be useful to pilot or test products or approaches, the longer-term goal of community investment ought to be the full integration of these activities into the financial mainstream. This fully integrated system would involve public, private, and nonprofit institutions and would be able to fulfill the capital needs for families, businesses, and economic development projects at the community level.

Conclusion

The conference today addresses the financial services environment for lower-income and minority households and communities in a comprehensive and broad-based fashion. The need to bring market efficiencies to America's distressed communities cannot be overstated.

Over the past four decades, a variety of interventions have been launched to help improve the condition of impoverished and economically deprived communities. But despite the expenditure of hundreds of billions of dollars, many communities are not much better off today than they were decades ago; in fact, some are in worse shape.

Of the many innovative community development strategies and programs that have been launched, few, if any, have taken a direct and pointed aim at the financial-services infrastructure that serves distressed communities. Yet we know that access to mainstream wealth-building institutions is the most time-tested and proven way to build individual wealth and, ultimately, community wealth.

The significance of the Federal Reserve System's sponsorship of today's conference cannot be overstated. It is my hope that today's conversation will evolve into a much more robust focus on the full array of financing needs of households and communities that have not benefited from the efficiencies and power of the American financial-services infrastructure and the enormous capabilities it offers.

James H. Carr is Senior Vice President for Innovation, Research, and Technology at the Fannie Mae Foundation. He is responsible for the Foundation's housing finance and neighborhood strategies consulting unit and its Office of Housing Research, and for the development of technology tools to promote effective community investment. Before that, Carr was Vice President for Housing Research at Fannie Mae and Assistant Director for Tax Policy with the U.S. Senate Budget Committee. He is editor of Housing Policy Debate, Journal of Housing Research, Housing Facts & Findings and Building Blocks: A Practitioner's Guide to Planning and Financing Community Revitalization. Carr serves on research advisory boards at numerous colleges and universities, including Harvard University, University of California-Berkeley, and the University of Pennsylvania, and he is an advisor to the Organization for Economic Cooperation and Development's Urban Affairs Project Group in Paris. He holds a B.A. with honors from Hampton University and a master's in urban planning from Columbia University.

III. Wealth Creation

Asset Accumulation in Low-Resource Households: Evidence from Individual Development Accounts

Mark Schreiner
Michael Sherraden
Margaret Clancy
Lissa Johnson
Jami Curley
Min Zhan
Michal Grinstein-Weiss
Washington University in St. Louis

Sondra Beverly
University of Kansas

To escape from poverty requires assets, be they human, physical, social, or financial. Individual Development Accounts (IDAs) are designed to help the poor build assets. Withdrawals from IDAs are matched if used for home purchase, post-secondary education, or self-employment. Participants also receive financial education and support from IDA staff. This paper discusses evidence from the American Dream Demonstration (ADD) on a series of questions.

We thank the private foundations that fund the American Dream Demonstration (ADD): Ford, Charles Stewart Mott, Joyce, F.B. Heron, John D. and Catherine T. MacArthur, Citigroup, Fannie Mae, Levi Strauss, Ewing Marion Kauffman, Rockefeller, and the Moriah Fund.

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Robert Friedman, founder and chair of the Corporation for Enterprise Development (CFED), conceived and produced ADD. Brian Grossman, René Bryce-Laporte, and other CFED staff have also supported the evaluation of ADD.

Karen Edwards and Suzie Fragale of the Center for Social Development provided consistently excellent managerial and editorial support.

We are especially grateful to the host organizations in ADD and to their IDA staffs. Their commitment to evaluation and their willingness to track data carefully have greatly increased our knowledge of how to help low-resource people accumulate assets.

Can the poor save in IDAs? Low-resource people did save and build assets in IDAs in ADD:

- *Average monthly net deposits per participant were $25.42.*
- *The average participant used two-thirds of match-eligibility.*
- *The average participant made a deposit in seven of 12 months.*
- *With an average match rate of 2:1, participants accumulated about $900 per year in IDAs.*

How do IDAs work? Key links between savings and institutional characteristics in ADD were:

- *Savings increased — up to a point — with more hours of financial education.*
- *Higher match rates were linked with fewer unmatched withdrawals and with less risk of exit but not with higher savings.*
- *Higher match caps were associated with better savings outcomes.*

Where do IDA deposits come from? Participants used both new savings and reshuffled assets.

Who saves in IDAs? ADD did not necessarily serve only the most able:

- *Income was not linked to savings, and the very poor saved at a higher rate than the less poor.*
- *The receipt of public assistance, all else constant, was not associated with savings.*
- *Asian Americans saved about $10 more per month than Hispanics or Caucasians and about $20 more per month than African Americans or Native Americans.*

What do IDAs cost? So far in ADD, program costs have been about $2.70 per dollar deposited. Costs seem to have fallen through time.

Introduction

The question of how to help the poor get rich is, in essence, the question of how to help them accumulate assets. Poverty is a trap because resources are needed to produce resources. People with low resources relative to subsistence consumption, however, save few resources and so produce too little to embark on a path of consistent increases in consumption in the long term.[1]

To escape from poverty requires capital, be it human, physical, social, or financial. To this end, many U.S. policies subsidize asset accumulation. Few of these policies, however, reach low-resource people because they leverage existing wealth, operate via tax breaks, or require debt.

A new policy proposal designed to help the poor accumulate assets — Individual Development Accounts (IDAs) — does not make these requirements. Withdrawals from IDAs are matched if used to buy a home, pay for post-secondary education, or finance self-employment. Participants in IDAs also receive financial education and support from IDA staff.

This paper uses data from the American Dream Demonstration (ADD) to address a series of questions about asset accumulation in IDAs by low-resource people. We find that:

- Low-resource people can save and build assets in IDAs. We do not know, however, how much of IDAdeposits were new savings and how much were reshuffled assets.

- Observed factors constant, income, gender, and welfare receipt were not linked with net deposits in IDAs. Although members of all racial/ethnic groups saved in IDAs, some saved more than others. Also, the very poor saved a larger share of their income than the less poor.

- Institutional characteristics mattered, especially financial education and match rates.

- IDAs in ADD were costly. A different structure and bundle of services will be needed if IDAs are to become universal and permanent.

This paper proceeds as follows. We first present IDAs and ADD, review relevant saving theory, and discuss current asset-subsidization policy. We then discuss evidence from ADD on whether the poor can save in IDAs, how IDAs work, where deposits come from, who saves in IDAs, and what IDAs cost. The final section discusses the main results.

Individual Development Accounts and the American Dream Demonstration

IDAs subsidize asset accumulation by the poor. Unlike Individual Retirement Accounts (IRAs) or 401(k) plans, IDAs are targeted to the poor, provide subsidies through matches rather than tax breaks, and require financial education. IDAs largely decouple the asset-subsidy mechanism from wealth, taxes, and loans.

People who pass a means test deposit post-tax dollars in insured, interest-bearing passbook savings accounts. They receive monthly statements (from the bank and the IDA program), financial education, and support from staff and peers. Withdrawals are matched if used for home purchase, post-secondary education, or small business.[2] Matches are disbursed directly to vendors, and withdrawals for other purposes are allowed but are not matched. The original proposal calls for permanent accounts for all, opened at birth, with greater subsidies for the poor (Sherraden, 1991). Regardless of balances or activity, people would not be "on" or "off" IDAs just as they are not "on" or "off" IRAs. Funds for program costs and matches may come from public or private sources. As a simple way to subsidize savings earmarked for specific purposes, IDAs may fit a wide range of community-development and public-policy purposes.

Intellectual History

Development economics has long seen saving as central to long-term improvement in the well-being of the poor in nonindustrialized countries (Besley, 1992; Deaton, 1992). The importance of saving for the poor in industrialized countries, however, was somehow overlooked (Sherraden, 1991). Public assistance aimed to meet subsistence requirements, but it stopped short of transfers in levels and forms that would allow and encourage people to break out of poverty.

In 1988, a movement started to include the poor in asset-subsidy policies. Friedman's *The Safety Net as Ladder* proposed changes to public assistance to encourage development beyond subsistence. Haveman's *Starting Even* said that "transfer payments are necessary but not sufficient" (p. 149). Sherraden's "Rethinking Social Welfare: Towards Assets" critiqued the subsistence paradigm and proposed IDAs as a step toward a development paradigm.

The movement has gained intellectual momentum (Ackerman and Alstott, 1999; Conley, 1999; Oliver and Shapiro, 1995) and attracted support from all points along the political spectrum. For example, Bill Clinton — who as governor of Arkansas wrote the foreword to *The Safety Net as Ladder* — supported IDAs in his 1992 campaign and later proposed a large matched-savings program (Wayne, 1999). The Savings for Working Families Act (H.R. 4106 and S. 2023) would budget up to $10 billion for IDAs. Both George W. Bush and Al Gore had billion-dollar IDA proposals in their platforms, and both proposed some form of individual accounts for retirement.[3] The government of Canada plans to sponsor an IDA demonstration in 10 cities, and in the United Kingdom, the New Labour government has also proposed accounts that are like IDAs.

The American Dream Demonstration

Evaluation was built into the design of IDAs in the United States (Sherraden, *et al*, 1995). The focal point is the American Dream Demonstration (ADD). Run by the Corporation for Enterprise Development with private and public funds, ADD enrolled 2,378 participants in 14 programs across the United States since July 1997. In most cases, deposits are eligible for matches through 2001, and matched withdrawals may be made after that.[4] The evaluation of ADD uses several methods:

- Assessment of the process of program start-up and implementation through interviews with program staff. This component addresses the question, "How are IDA programs best set-up?"

- Monitoring of savings by participants. This component — reported on in this paper — asks, "What are the savings outcomes in IDAs?" It uses demographic and socio-economic data from interviews at enrollment and data from bank statements on monthly IDA cash flows.

- Case studies and in-depth interviews with participants. These add depth and context to the question, "How and why do people save in IDAs, and what do they see as impacts?"

- Cross-sectional survey of participants. The intent is to inform policy and program design even before ADD is complete (Moore *et al*, 2001).

- Assessment of community-level effects. This will address the question, “How does a concentration of IDAs affect a community?”

- An experimental design with a longitudinal survey of qualified applicants randomly allowed or denied access to IDAs in one program. This will address the question, “What are the economic and noneconomic impacts of IDAs?” There will also be a financial cost-benefit analysis.

Data from ADD

Data on programs and participants in ADD come from the Management Information System for Individual Development Accounts (MIS IDA), a system designed, sold, and supported by the Center for Social Development at Washington University in St. Louis (Johnson, Hinterlong, and Sherraden, 2000). The software stores data for evaluation as programs use it to manage logistics.

IDA staff members record five types of data in MIS IDA:

- Account-structure parameters at the start of the program

- Demographic and socio-economic data on participants at enrollment

- Monthly IDA cash-flow data from account statements

- Monthly program inputs and expenses

- Intermittent events such as attendance at financial-education classes or program exit

The cash-flow data may be the best (or the only) data on high-frequency saving by the poor in a subsidized-savings program. The analysis in this paper uses these data. The cash flows are accurate and complete; they come from records of depository institutions, satisfy accounting identities, and have passed through extensive cross-checks.

Of course, no data set is perfect. IDAstaff are not researchers, and, despite their consistent commitment to accurate data and their strong support for the evaluation as a whole, quality varies among programs and types of data. Most time-constant demographics are accurate.

Time-varying socio-economic data, regardless of accuracy, may change after enrollment, but the analysis here uses at-enrollment data to avoid endogeneity issues. Also, variables added to MIS IDA after ADD started were not collected from all already-enrolled participants, especially those who had exited. As in all surveys, income, assets, and liabilities are noisy and probably understated. The account-structure parameters in MIS IDA may not always match the rules used in practice. We have no foolproof way to know whether program staff recorded all intermittent events. Finally, program costs are measured with noise. Throughout this paper, we take care to note when data issues might influence results. Schreiner *et al* (2001) discuss the data at length.

The Questions that ADD Can Answer

Participants in ADD were both self-selected (they chose to participate based on expected net benefits) and program-selected (most programs targeted the “working poor,” women, and/or people of color). With data only on participants, we cannot sort out the effects of selection from the effects of use. The MIS IDA data cannot reveal the impact of access to IDAs on eligibles.

In fact, MIS IDA data cannot reveal impact even on participants because we have no credible way to estimate outcomes in the absence of participation. The experimental-design component of ADD will estimate impact for participants, but that data is not yet available, and even the experiment randomizes access not across eligible persons but across qualified applicants.

ADD runs for a limited time because it has limited funds. If the goal is long-term improvement in well being, if assets foster development, and if IDAs increase asset accumulation by the poor, then a permanent program is probably better than a time-limited one. ADD cannot tell us, however, how people would behave if they had permanent access to IDAs.

The MIS IDA data do show how participants saved in IDAs in ADD. This is not the grandest of questions, but it matters, especially because many people believe that the poor cannot save at all.

The MIS IDA data also address how institutions affect saving. Sherraden (1991) and Beverly and Sherraden (1999) hypothesize that saving by the poor and nonpoor depends not just on rational choice but also on institutions. Variation in rules across groups of participants in ADD shows how saving behavior changes with match rate, match cap, and financial education.[5]

Theories of Saving and the Poor

This section describes theories of saving and asset accumulation and how the institutional structure of IDAs incorporates insights from these theories.

Saving and Asset Accumulation

Income is defined as the inflow of resources to a household in a given period of time. *Assets* are defined as stocks of resources held at a given point in time. Whether seen as assets or income, resources may be *consumed* (changed into forms no longer useful) or moved through time.

Saving is defined as an increase in assets (or net worth) in a period. *Dissaving* is a decrease in assets. Saving is due to not consuming income, and dissaving is due to consuming assets.

Asset accumulation is a long-lasting increase in assets. Saving consistently in excess of dissaving leads to asset accumulation; saving followed soon after by dissaving does not.

The concept of *assets* encompasses far more than financial assets as cash or as balances in a bank account. The chief asset of most people, especially the poor, is human capital. People also possess household durables (such as homes, cars, clothes, furniture, and appliances) and producer durables (such as tools for self-employment). People also use the networks, norms, and trust encompassed in social capital to produce information, reduce transaction costs, buffer shocks, and comfort psyches. Sherraden (1991) gives a typology of assets and their returns.

Asset accumulation matters because resources are required for production (and thus for income and future capacity to consume and/or produce), smooth consumption, cope with risk, and make lumpy purchases. In the absence of constant, massive, and probably unsustainable transfers from government, long-term improvement in individual well-being requires increased productive capacity. Because assets beget assets, the escape from poverty requires asset accumulation.

Beyond these economic effects of resource use, Sherraden (1991) suggests that mere resource ownership has healthy effects on thoughts, behavior, goals, and overall well being. People who own assets expect better economic outcomes in the future, and this expectation may spark hope that changes current feelings, beliefs, and choices.

If asset accumulation matters so much (for both economic and noneconomic reasons) and if everyone both saves and dissaves to some extent, then what determines who enjoys the benefits of asset accumulation when savings exceed dissavings in the long term? Why do some people become (or stay) poor, and why do others become (or stay) rich?

Theories of Saving and Asset Accumulation

Three theories of saving relevant to IDAs are economic, social/psychological, and behavioral.

Economic theory. Economics assumes that people seek to maximize long-term utility subject to opportunities and constraints. People are assumed forward-looking and rational, and preferences are fixed. Choices and the stochastic distribution of their consequences are known and exogenous. Preferences are the *deus ex machina* of unknown causes that drive results.

Perhaps the most fundamental insight of economic theory for saving and the poor is simply that people with few resources relative to subsistence constraints, be they biological, psychological, or cultural, have less resources available to save. Also, the decreasing marginal utility of consumption means that the poor pay more (in terms of foregone utility) to save. Because current savings (in human capital, financial assets, social networks, and producer and consumer durables) determines future production and future income, poverty can be a trap of low assets.

Some economic theory also highlights the importance of indivisibilities. Some assets (such as a house, car, or college education) have a minimum size, and saving for a lumpy purchase is more difficult than if the asset could be purchased (and be productive) in smaller pieces.

Through the match, the institutional structure of IDAs addresses both the rate-of-return issue and the size-of-return issue. For example, the average match rate in ADD of 2:1 may be so high that people may find saving worthwhile despite a high value for current consumption.[6] Also, the match changes a given level of savings by participants into a higher level of asset accumulation, perhaps enough to purchase a lumpy asset.

Social/psychological theories.[7] These theories emphasize that people are not always rational and that social norms and interactions shape preferences. They try to get behind the *deus ex machina* of preferences to explain saving-related goals and expectations.

These theories assume that people do not always form their own goals or even know what choices they might make, let alone know the complete distribution of the consequences of choices. For example, people who see family and friends save tend to see saving as a choice that they themselves might make (Lusardi, 2000). Likewise, different cultural and familial norms and experiences may lead to different savings goals. For example, the American Dream of homeownership is a goal that U.S. society expects of married people more than of single people.

Broad social norms also mold saving expectations. Americans learn that Benjamin Franklin was wise and advised that a penny saved was a penny earned. Social norms are susceptible to policy through the rules of thumb that people use in the absence of perfect omniscience and rationality. For example, the Japanese seem to have largely conformed to the rather arbitrary suggestion of their government to save one-fifth of income (Bernheim, 1994). In the United States, the home-mortgage interest deduction implicitly suggests that a home is a good investment. Likewise, 401(k) plans signal workers that saving matters and is at least partly their responsibility.

The institutional structure of IDAs builds on social/psychological theory in several ways. First, the mere existence of IDAs sends a message that the poor can (and perhaps should) save. The match in particular attracts attention.[8] Second, IDAs require financial education; people are not assumed to know how to save nor the consequences of choosing to save. Third, IDAs provide feedback and social support through staff and peers. Fourth, planning for IDA withdrawals encourages participants to make goals and to think about the benefits of saving. Fifth, participants receive monthly statements that remind them of their saving goals and show their progress.

Behavioral theories. Like social/psychological theory, behavioral theory relaxes some assumptions in economic theory. It recognizes that people impose nonfungibility on resources through systems of mental accounts (Shefrin and Thaler, 1988). For example, small windfalls, perhaps from lottery wins, may be assigned to splurges. Likewise, debt may be acceptable for assets such as a home or college education, but not for restaurant meals or Christmas gifts.

Behavioral theory also recognizes that people know that they do not always do what is best for themselves. People are both forward-looking and myopic; they recognize that they will be tempted to spend even if saving would make them better-off in the long term. Thus, they may create their own mental or external rewards and punishments that make it difficult to spend rather than save (Thaler; 1994, Maital, 1986). For example, they may commit to rules of thumb (and make themselves feel guilty when they break them) such as saving all of the income of one spouse or "paying oneself first." Payroll deduction, probably the most common precommitment constraint, attenuates payday temptations. Christmas Clubs and time deposits offer the precommitment constraint of a substantial penalty for early withdrawal. Mortgage-financed purchases of homes or cars can also be a way to commit to save (Maital and Maital, 1994).

Behavioral theory also notes that people who try to save and succeed may learn to like saving more (Mischel, 1977). Because repetition is easier than innovation, saving may be habit-forming.

The institutional structure of IDAs fits behavioral theory because it provides ways to commit to save and to resist the temptation to dissave. First, IDAs create a new mental account: savings for a home (or college, or small business). The distinct account (and reinforcement from staff that its funds are off-limits, even though in fact they can be withdrawn — but not matched — at any time for any use) helps participants view IDA balances as distinct from "spending money" (Beverly, Moore, and Schreiner, 2001). Second, the expression of the match cap in terms of a monthly savings target may encourage participants to develop regular savings habits and give them a goal that they might not otherwise set for themselves. Third, when available, automatic deposits into IDAs may help curb temptations to spend money before it is deposited. Fourth and finally, the perceived obligation to make deposits in IDAs may give participants a socially acceptable excuse to deny requests from importunate members of social networks.

Asset-Subsidization Policy in the United States

U.S. public policy often subsidizes asset accumulation (Sherraden, 1991), and sometimes it reduces poverty. For example, the most important asset of the poor is their human capital, and the most widespread asset-subsidy policy is public education. Deductions for mortgage interest subsidize homeownership, the bedrock of the middle class and the second-most important asset of the poor. Subsidized student loans (and public colleges and universities) and subsidized retirement accounts are also common asset subsidies that reduce poverty.

The Homestead Act (Williams, 2000) and the G.I. Bill subsidized assets for many poor people.

Subsidies for asset accumulation often go disproportionately to the nonpoor because they directly or indirectly require existing wealth. For example, local-school finance leads to better public schools in wealthy neighborhoods. Tax-advantaged retirement accounts link subsidies to the human capital required to earn income in a high tax bracket.

Subsidized debt is indirectly linked to wealth because loans can finance only part of an investment package and because lenders often take wealth as a signal of creditworthiness. Prospective home buyers must accumulate both financial capital for a down payment and human capital to earn income to make mortgage payments. Likewise, student debtors must have savings (or wealthy parents, or time for a job) to pay for living expenses beyond tuition and books.

Tax breaks for asset accumulation (such as deferments for IRAs and 401(k) plans or deductions for student-loan interest and home-mortgage interest) are weak incentives for people in low tax brackets. Furthermore, larger loans mean larger subsidies, so the poor — who go to less-expensive colleges and who buy less-expensive homes — get smaller subsidies. Whatever the administrative, targeting, and incentive reasons to link asset subsidies to existing wealth (and thus previous saving), loans, and taxes, the current system does less for the poor than for the nonpoor.

Community development has focused on asset accumulation through education reform (job training, desegregation, and abolition of local-school finance) and homeownership (the Community Reinvestment Act and neighborhood redevelopment). These efforts will continue, but additional efforts may also be warranted. School reform, for example, is slow, and for many people, too late. Likewise, greater access to loans will help the poor buy homes, but it will not help them make mortgage payments. Finally, those who escape welfare may still get stuck in the ranks of the working poor unless they have high human capital.

IDAs may be a useful way to subsidize home purchase, post-secondary education, and self-employment for the poor because they largely decouple subsidies from existing wealth, taxes, and loans. Of course, IDAs require deposits, and these are easiest for people who already have wealth. If it makes sense to subsidize debt for asset accumulation by the nonpoor, however, then perhaps it also makes sense to subsidize savings for asset accumulation by the poor.

Can the Poor Save in IDAs?

ADD shows that the poor can save in IDAs. Although ADD does not prove that the poor saved more than they would without IDAs, it at least proves that the poor can save.[9]

Participation

Enrollment. As of June 30, 2000, the 14 programs in ADD had enrolled 2,378 participants. The average length of participation was 13.3 months, and 81 percent of enrollees were still active.

Graduation. About 13 percent of participants had a matched withdrawal; one-fourth of these "graduated" and left the program, and the rest were still saving for more matched withdrawals.[10]

Exit. About 16 percent of participants exited without a matched withdrawal. The cumulative risk of exit was 11 percent for the first 12 months and 16 percent for the first 24 months.

Savings Outcomes

Gross deposits. The average participant deposited $41.43 per month ($552 in 13.3 months).

Unmatched withdrawals. About 25 percent of matchable balances were removed in unmatched withdrawals. The 37 percent of participants with unmatched withdrawals (43 percent of whom were exits) averaged 2.9 unmatched withdrawals worth a total of $320. With an average match rate of 2:1, these people lost potential matches worth about $640. The unexpected size and frequency of unmatched withdrawals, in spite of their high opportunity cost, highlight the difficulty of asset accumulation for the poor, even in the supportive institutional context of IDAs.

Net deposits. Defined as gross deposits minus unmatched withdrawals minus balances in excess of the match cap, net deposits per participant in ADD were $353 ($420 for nonexits).

Average monthly net deposits (AMND) takes into account the length of participation. Mean AMND was $25.42 ($30.30 for nonexits). Median AMND was $17.96 ($23.35 for nonexits).

With an average match rate of 2:1, the average participant accumulated about $75 per month. Asset accumulation in ADD as of June 30, 2000 (assuming all balances at that point will eventually be removed in matched withdrawals) is about $1,000 per person (13.3 · 25.42 · 3).

Matched withdrawals. Those with matched withdrawals averaged 2.0 withdrawals for a total of $603. With an average match rate of 1.82:1, their total asset accumulation averaged $1,698.

Matched withdrawals were more common as balances grew with time; the probability of a matched withdrawal was nine percent in the first 12 months and 27 percent in the first 24 months.

Matched uses. Of participants with a matched withdrawal, 24 percent bought a home, 24 percent invested in microenterprise, and 21 percent pursued post-secondary education. The rest used their matched withdrawals for home repair, retirement, or job training.

Among the 87 percent of participants (including exits) with no matched withdrawals, 57 percent planned to buy a home, 18 percent planned for microenterprise, and 15 percent planned for post-secondary education. The other 10 percent planned for home repair, retirement, or job training.

Savings Behavior

Savings rate. On average, net deposits were 2.2 percent of income at enrollment (median 1.3 percent). The savings rate in IDAs decreased as income increased in cross-section. As discussed later, it may be that the institutional effects of IDAs are stronger than the economic effects of income, and perhaps these institutional effects are somehow stronger for poorer people.

Deposit frequency. At the mean and median, participants made deposits in seven of 12 months (7.6 of 12 months for nonexits). Although causality is difficult to determine, some evidence suggests that frequent depositors accumulate more than infrequent depositors. We suspect that this results when people target a level of saving and then consume the rest (rather than target a level of consumption and then save the rest) and so make a greater effort to save in difficult months.

Net deposits as a percentage of the prorated match cap. On average, participants were on a pace to save two-thirds of their match-eligibility. At the median, the share was 49 percent.

IDAs and EITC. Net deposits increased about $15 per participant per month in March, April, and May. Participants seem to save a chunk of tax refunds and/or payments from the Earned Income Tax Credit. Some programs in ADD explicitly encourage this, and other evidence (Beverly, Tescher, and Marzahl, 2000; Smeeding, 2000; Souleles, 1999) supports the idea that saving is easier from tax refunds and the EITC than from "regular" income.

Discussion

Can the poor save in IDAs? The possibility cannot be dismissed. Participants in ADD saved $25.42 per month, made deposits in seven of 12 months, and were on a pace to use about two-thirds of match eligibility.

Is two-thirds a high or low rate of utilization? The opportunity cost of not saving the full amount is rather high. As a comparison, three-fourths of IRA contributors take full advantage of that program (and more than 90 percent of eligibles do not participate at all), and one-third of contributors reach the contribution limit in each of three straight years (Bernheim, 1997).

Are IDAs enough to make a difference? To give perspective, median liquid assets at enrollment were $125. Median illiquid assets (mostly homes and cars) were $1,200, median debt was $1,335, and median net worth was $100.[11] At the median savings level ($17.96 per month), match rate (2:1), and months of potential participation (36), asset accumulation would be $1,940. Even if all deposits came from reshuffled assets, IDAs would increase median net worth by more than 1,000 percent.

For the nonpoor, a few hundred dollars, or even a few thousand dollars, may not seem like much. Data on matched withdrawals, however, suggest that participants in ADD do use IDAs to purchase assets expected to have high returns and that mark key steps in the life course. Perhaps more important, participants in qualitative components of the evaluation of ADD say that their accumulations have changed their outlooks for the better. Perhaps what matters is not only the amount accumulated but also the process (and the simple existence) of accumulation.

If the structure of IDAs offers strong incentives to make deposits and then to maintain them until a matched withdrawal, then why were unmatched withdrawals so common and large? The data do not reveal an answer, but a couple of explanations are possible. First, some participants may be close to subsistence and have highly variable income and/or expenses. If income drops (or if expenses spike, perhaps due to job loss or illness), then short-term needs may outweigh long-term opportunity costs. Second, some participants may be short-sighted or unwise; to the detriment of long-term well being, they may make unmatched withdrawals for consumption.

Should IDA programs restrict unmatched withdrawals? If participants expect at enrollment that they will later succumb to make withdrawals for consumption, then they would welcome restrictions. Indeed, Moore *et al* (2001) report that some participants in ADD seem to appreciate the formal and informal restrictions on unmatched withdrawals.

On the other hand, recurrent emergencies are a fact of life for the poor. One of the few ways that IDAs might do harm would be to put the cash out of the poor's reach. If unmatched withdrawals were tightly restricted, and if participants expected that they might have emergencies, then, to avoid the trouble of enrollment, deposits, and then withdrawals, they might not enroll, or they might wait to make deposits until the deadline.[12] If restrictions do lead some people to save outside IDAs until the deadline, then net deposits may decline because this cash is more likely to be spent (Bernheim, 1997; Caskey, 1997). Perhaps IDAs could offer, at enrollment or afterwards, the choice (but not the requirement) to put at least some IDA deposits in an account with greater restrictions on unmatched withdrawals.

Why did so many participants exit? As with unmatched withdrawals, the level of exit was unexpected and suggests that, even in the supportive institutional context of IDAs, saving is not easy for the poor. Some exits are inevitable, but two changes to policy and program design may reduce them. First, permanent access to IDAs would, in a way, make the exit issue moot, because everyone would always have an IDA, even if the balance were zero. Second, some programs in ADD kicked people out for low or infrequent deposits. This freed match funds for other participants, but if the goal of IDAs is long-term improvement in well being, then it makes little sense to cut off access precisely to those for whom saving is the most difficult. Not all people will save the same amount in the same length of time, but this does not mean that low savers would not benefit from greater access to institutionalized and subsidized savings mechanisms.

How Do IDAs Work?

Links between saving and the institutional structure of IDAs matter for two reasons. First, asset accumulation probably depends not only on tastes but also on the constraints and opportunities afforded by institutions (Sherraden, 1991). Second, policy can affect institutions.

With IDAs, three institutional effects may matter. First, the match, apart from its economic incentives, may signal that saving is worthwhile. Second, people may mentally change a match cap — technically a limit — into a goal, so that higher match caps may lead to higher savings for noneconomic reasons. Third, financial education may increase knowledge of how to save and of the benefits of saving (economic models often assume no need for education).

Here, we use Probit regressions to link match rates, match caps, and financial education with the risk of unmatched withdrawals and with the risk of exit. We also use a two-step regression to measure links between program rules and net deposits.[13] All the regressions start with the 2,378 participants in ADD and control for a wide range of program and participant characteristics.[14]

Match Rates

The question of the effect of the match rate on IDA savings relates to classic questions of the elasticity of saving to the rate of return and of the response of employees to match rates in 401(k) plans. The consensus, based on models and data known to be imperfect, is that the elasticity is indistinguishable from zero. Research on 401(k) plans consistently finds that the presence of a match boosts participation, but that higher match rates — at least once past 0.25:1 or so — do not increase contributions and may even decrease them (Bassett, Fleming, and Rodrigues, 1998; Bayer, Bernheim, and Scholz, 1996; Papke and Poterba, 1995; Kusko, Poterba, and Wilcox, 1994).[15] The income effect seems to overwhelm the substitution effect at all but very low rates of return. Of course, the match rates in IDAs are far higher than those in 401(k) plans.

In addition to institutional effects, substitution effects, and income effects, the match rate might be correlated with IDA savings through censoring of desired savings at the match cap. This masks any link between match rates and savings. As of June 30, 2000, 10 percent of participants in ADD were at the match cap. The share censored will increase once they all reach their time cap, much as the number of IRA contributors at the contribution limit is higher on April 15 than in October. Once ADD is complete, we will account for censoring, but we do not do so here.

In sum, institutional effects and substitution effects lead to a positive association between match rates and savings, but the income effect and censoring dampen the link.

In ADD, 24 percent of participants had a match rate of 1:1, 51 percent had 2:1 (the mean and median), 14 percent 3:1, and 6 percent from 4:1 to 7:1. In the regressions, a set of four dummies stands for match rates.

Unmatched withdrawals. Unmatched withdrawals are like negative savings, so the theory discussed above applies in reverse. Compared with participants with match rates of 1:1, participants with match rates of 3:1 or 4:1 to 7:1 had statistically less risk of unmatched withdrawals. Censoring is not an issue in this case, so it appears that institutional and/or substitution effects dominate the income effect.

Exit. People who leave an IDA program are like people eligible for a 401(k) plan who do not join. Consistent with the effects of match rates on participation in 401(k) plans, we expect higher match rates to decrease the risk of exit from IDAs.

For exit, censoring and income effects are irrelevant. It turns out that higher match rates were strongly and statistically significantly linked with less risk of exit. This makes sense, since institutional effects and/or substitution effects are the only forces in play.

Average monthly net deposits. The match rate had no statistically significant link with AMND. This result is consistent with research on 401(k) plans. Like that literature, we fail to control for censoring, but unlike that literature, we acknowledge this failure. Also unlike the 401(k) literature, we control for the match cap and for a host of other variables, and we use individual-level data rather than firm-level data. Thus, although the test here is still flawed, it is probably less flawed than any other tests so far.

Match Cap

The *match cap* is defined as the maximum accumulated deposit eligible for matches. To control for the length of time that different participants have to make match-eligible deposits, we divide the match cap by the number of match-eligible months to give the *monthly savings target*. We call this a *target* both to reflect the belief that participants often change caps into targets and to reflect that many IDAprograms in ADD advise participants to deposit this amount each month.

The average monthly savings target in ADD was $43, and average monthly net deposits per participant were two-thirds of the target. In the regressions, higher targets were strongly and statistically significantly linked with less risk of unmatched withdrawals, with less risk of exit, and with higher average monthly net deposits.

As with links between match rates and savings outcomes, three factors may explain these strongly positive associations between the monthly savings target and savings outcomes in IDAs. These are:

- Institutional effects in which participants change limits into goals. Thus, people may save more (or withdraw less, or exit less) when presented with a higher limit/goal.

- Net deposits are censored at the match cap. If caps vary and if they would censor some participants even in the absence of institutional effects, then censoring would induce a spurious positive correlation between savings outcomes and match caps.

- Endogeneity. Some IDA programs probably assigned higher savings targets to groups of participants whom they expected to save more, regardless of institutional structure. As with censoring, this induces a spurious positive correlation between caps and savings outcomes.

The data from ADD do not allow us to distinguish among these three factors.

Financial Education

Besides matches, a key feature of IDAs is required financial education.[16] Financial education in ADD took two forms, general and asset-specific, with the following broad goals:

- To increase awareness of savings as a wise choice through discussion of long-term benefits.

- To instill stronger future orientation through exercises in planning and budgeting.

- To transfer practical techniques to reallocate resources from consumption to savings, to convert savings to illiquid forms, and to maintain savings through time.

- To communicate IDA rules.

- To provide a setting for peer support and for the exchange of experiences.

- To equip participants to purchase and maintain large assets, houses in particular.

Each program in ADD sets the number of required hours, and some programs probably required more hours if they expected their participants to be low savers. Furthermore, each program selected or developed its own curricula and enforced the financial-education requirement in its own way. MIS IDA recorded only the number of hours attended by each participant. All hours of financial education were not the same, but the analysis here must assume that they were.[17] Average hours required were 13, and the average hours attended per participant were 10.4.

Regression results suggest that net deposits increased about $1 per month per hour of general financial education, up to 12 hours, at which point more hours had no effect.[18] Asset-specific education followed the same pattern with a large effect up to six hours and then a plateau.

The results from ADD strongly suggest that some financial education improves saving performance. Furthermore, short courses may be just as effective as longer courses.

Where Do IDA Deposits Come From?

IDAs aim to increase saving, but they do so only to the extent that deposits come from new savings rather than shifted (reshuffled) assets. For IRAs and 401(k) plans, research suggests that some deposits come from new savings and some from shifted assets (Bernheim, 1997; Hubbard and Skinner, 1996). Sherraden (1991) argues that the bulk of IDA deposits would be mostly new savings because the poor have few assets to shift. Some evidence for IRAs and 401(k) plans does suggest that the poor are less likely to shift (Engen and Gale, 2000; Bernheim and Scholz, 1993). Still, the poor do have some assets, and the match in IDAs provides strong incentives to shift.

Schreiner *et al* (2001) lay out a framework in which new savings come from increased income, increased net appreciation, increased gifts, and/or decreased consumption. Increased income or decreased consumption come from increased effort, increased time in production (household or market), and/or increased amounts, returns, or utilization of human capital. In contrast, asset shifts come from increased debt, decreased asset maintenance, or increased net conversions from non-IDA assets.

The ADD data do not distinguish well between new savings and shifted assets. First, like most data sets, some components of net worth are not measured. Second, net worth for participants without IDAs is, by definition, not observed. Third, participants are self-selected and program-selected, so they probably differ from non-participants in ways that make it difficult to use the net worth of non-participants as a proxy for the net worth of participants without IDAs.

If only liquid assets (balances in checking accounts and in passbook savings accounts, but not cash) held at enrollment could be shifted, and if all liquid assets that could be shifted were indeed shifted, then shifted assets would make up 53 percent (44 percent median) of IDA deposits. The strong assumptions of this exercise do little more than show that shifts were possible.

Survey responses from ADD participants (Moore *et al*, 2001) show that IDA deposits came from both new savings and asset shifts. As examples of new savings, 29 percent were more likely to work longer hours, 41 percent were more likely to work more, 61 percent were more likely to increase income in ways other than working more hours, 70 percent shopped more carefully for food, 68 percent ate out less often, and 34 percent of all participants spent less on alcohol or tobacco. As examples of shifted assets, 35 percent were less likely to save in non-IDA forms, seven percent borrowed from family or friends to finance IDA deposits, 16 percent postponed bill payment, nine percent found it more difficult to pay bills, 12 percent sold household or personal items, 17 percent postponed visits to the doctor or dentist, and eight percent gave up food or other necessities. In sum, IDAdeposits were some mix of new savings and shifted assets.

Who Saves in IDAs?

Because IDAs require participants to save and because participants are both self-selected and program-selected, there is some concern that IDAs work better for the most-advantaged of the poor. Evidence from ADD suggests that this is sometimes, but not always, the case.

Demographics

Compared to the U.S. low-income population, participants in ADD were better educated, more likely to be employed, and more likely to have a bank account.[19] This probably reflects how programs in ADD target the "working poor." Participants in ADD are also more likely to be female (80 percent), African-American (47 percent), or never-married (49 percent).[20] This reflects how ADD programs target the disadvantaged among the "working poor."

Gender, marital status, and employment were not linked with net deposits. Four-year college graduates saved the most, and high-school graduates and two-year college graduates saved the least. All else constant, owners of checking accounts saved about $50 more per year than others, but ownership of a passbook savings account had no statistical effect.

Public Assistance

Half of participants had received public assistance, either at enrollment or before. This was not, however, linked with net deposits, so unobserved characteristics correlated with receipt of public assistance were not correlated with willingness and/or ability to save in IDAs.

Income

ADD had a means-test at 200 percent of the family-size adjusted poverty guideline, and median income was just at poverty. About 21 percent of participants were below half the poverty line.

In regressions, income was not associated with net deposits, with unmatched withdrawals, or with exit. Furthermore, the savings rate decreased as income increased; the very poor saved a greater share of their income in IDAs than the less poor. This would not be expected from economic theory (Deaton, 1992) or from evidence for the United States as a whole (Wolff, 1998).

What explains this? First, a host of measurement issues tend to depress measured income more for the very poor than for the less poor (Schreiner *et al*, 2001). This could induce a spurious negative correlation between income and the savings rate. Second, censoring of savings at the match cap could also induce a spurious negative correlation.[21] Third, institutional effects may be strongest for the poorest. The "pull" of the savings target may be greater for those furthest away. Likewise, the asset accumulation due to the match is a larger share of total resources for the very poor than for the less-poor. Furthermore, the very poor may have more to learn about how or why to save, so, in response to given a level of financial education or social support/pressure, they may change their behavior more. All three factors — measurement error, censoring, and institutional effects — are probably at work, but the data from ADD cannot disentangle them. Still, the broad lesson is that in IDAs, less income need not imply less savings.

Do the poor save too much in IDAs? Saving postpones consumption, so, at least in the short term, people who save consume less and, all else constant, are worse off. Savers make this short-term sacrifice because they expect that it will improve their long-term well-being. Of course, saving can be overdone, but saving in IDAs is voluntary, and ADD provides little evidence that matches in IDAs have enticed participants to save to the point of harm.

Race/Ethnicity

About 47 percent of participants in ADD were African-American, 37 percent were Caucasian, nine percent Hispanic, three percent Native American, two percent Asian-American, and three percent "Other." Average monthly net deposits were at least $19.50 for all groups, but differences between groups were large. Compared with Asian Americans, AMND was $11.62 less for Hispanics, $12.77 less for Caucasians, $20.82 less for African Americans, and $22.30 less for Native Americans. The groups rank the same on other savings outcomes. Asian Americans had lower risks of unmatched withdrawals and exit, but these risks were about the same for African Americans and Caucasians.

Of course, these differences are not due to race/ethnicity *per se* but rather to a constellation of socially produced unobserved factors (often sedimented through centuries) linked with both savings and race/ethnicity. In a perfect model that controlled for everything, the estimated link between race/ethnicity and savings would be zero.

In the models here, observed characteristics explain about half the savings gap. Even half the gap, however, is large. Most analyses attribute to discrimination differences in outcomes correlated with unobserved factors that are correlated with race/ethnicity. This is correct, but differences in outcomes correlated with observed characteristics that are correlated with race/ethnicity are also due to discrimination. With more data, the correlation between outcomes and unobserved factors would shrink, but not because discrimination decreased. In the end, what matters are improvements in long-term well-being. This requires smaller gaps in observed and unobserved characteristics and smaller gaps in savings and asset accumulation.

Do IDAs narrow these gaps? The MIS IDA data do not reveal whether disadvantaged groups increased their savings more than others (or whether IDAs increased savings for anyone). It is virtually impossible, however, for IDAs to have worsened the African-American/Caucasian wealth ratio. With a match rate of 2:1, the worst case is that all IDA deposits from African-Americans ($20.99 per month) came from shifted assets and that all deposits from Caucasians ($29.04) came from new savings. Even so, the ratio of net worth would fall from about 4:1 at enrollment to about 3:1 at the end of ADD.[22] IDAs do not pretend to be a panacea for racial/ethnic gaps in wealth, but they do seem to have improved equity in at least some ways, and they certainly can improve access to institutionalized savings mechanisms for the poor regardless of race/ethnicity.

What Do IDAs Cost?[23]

Wise allocation of scarce resources requires some knowledge of costs. All resources have opportunity costs; a dollar used in an IDA is a dollar removed (at least implicitly) from some other use. What matters is not that IDAs have benefits for participants nor that IDAs have benefits for society as a whole. Rather, what matters is that the social net benefits of the use of resources in IDAs exceed the social net benefits of those resources in their best alternative use.

Benefit measurement awaits data from the experimental design. Until then, cost measurement can inform policy and program choices. Even without knowledge of benefits, knowledge of costs sets a benchmark for performance and may prompt greater efforts to improve efficiency.

Data on program expenses in MIS IDA are very rough and almost certainly overstated. We had no way to clean the data, and most host organizations did not break out IDA programs as cost centers. Furthermore, ADD programs were among the first IDA programs and so incurred extraordinary expenses in start up, in policy work, and in guidance for other programs in the field. Data collection for ADD itself added extraordinary costs.

With these caveats, program expenses (without matches) were about $70 per participant month, or $2.77 per dollar of net deposits.

With a 2:1 match, total outlays in IDAs were about $6 per $1 of net deposits ($1 savings, $2 match, and $3 program expense), or $2 per dollar accumulated.

Are these costs high or low? There is no benchmark from which to judge. The ultimate criterion is whether benefits exceed costs, but benefits are not yet measured. Furthermore, we do not know what level of efficiency is possible. IDAs are young, and “best practices” continue to evolve.

Costs in ADD did fall as programs grew and matured. Up to June 30, 1999, program expenses were about $117 per participant-month ($3.66 per dollar of net deposits); in the 12 months after June 30, 1999, expenses were about $43 per participant month ($2.20 per dollar of net deposits).

Would it be better to give participants $70 rather than to have them save $25? The comparison is not straightforward. IDAs are more than just a way to transfer resources to the poor (Sherraden, 1991). The institutional structure forces participants to form savings strategies, to save, and then to plan for matched withdrawals. Because IDAs encourage participants to think about their savings, they may spark hope, future orientation, and middle-class values.

Even if costs fell to $1 per dollar of net deposits and even if social benefits exceeded social costs, funders probably would not support a universal, permanent IDAprogram with the current decentralized structure and intensive bundle of services. At the same time, qualitative evidence from ADD suggests that participants highly value financial education and close contact with staff. The tension between the desire for intensive services and the cost structures that would allow for wide access may lead to two tiers of IDAdesigns, the first with broad access, simple services, and lower costs, and the second with targeted access, intensive services, and higher costs.

Discussion

To escape poverty requires asset accumulation. The United States has a wealth of policies that subsidize saving, but they often exclude low-resource households because they leverage existing wealth, operate via tax breaks, or require debt. Individual Development Accounts (IDAs) are a new policy proposal meant to help the poor accumulate assets without these requirements. Withdrawals of IDA deposits are matched if used to buy a home, to pay for post-secondary education, or to finance self-employment. Participants also receive financial education and support from IDA staff.

The American Dream Demonstration (ADD) shows that the poor can save in IDAs. Among the 2,378 participants as of June 30, 2000, average monthly net deposits per participant were $25.42, or two-thirds of match eligibility. The average participant made a deposit in seven of 12 months. With an average match rate of 2:1, the average participant accumulated assets at a rate of $75 per month or $900 per year.

Although the data are not conclusive, the institutional structure of IDAs — the match rate, the match cap or savings target, and financial education — seems to encourage participants to make deposits, to maintain their deposits, and to stay in the program. The effects of the savings target and of financial education are particularly strong.

The MIS IDAdata from ADD do not reveal whether IDAs increase savings. Qualitative evidence from other components of the evaluation of ADD suggests that IDAdeposits are financed both from new savings and from shifted (reshuffled) assets.

Participants in ADD were more advantaged than the general low-income population in some ways and more disadvantaged others. Gender and receipt of public assistance were not linked with net deposits. All else constant, income was also not linked with the level of net deposits, but the share of income saved in IDAs was greater for the very poor than for the less poor. We suspect that at least part of the explanation lies in institutional effects that are strongest for the poorest.

Although members of all racial/ethnic groups saved in IDAs in ADD, there were large gaps among groups. IDAs almost certainly decreased the ratio of Caucasian net worth to African-American net worth among participants, but the current pattern of unequal savings outcomes for different groups is still disturbing because it represents large amounts of lost potential for asset building, particularly for African Americans and Native Americans. Future work should ask why this occurs and what might be done to narrow the gaps.

IDAs are costly. In the long term, two types of programs seem likely, one with a universal and permanent design with low costs and one a local and temporary design that offers greater services but that costs more.

Mark Schreiner is Research Director in the Center for Social Development at Washington University in St. Louis. He studies ways to help the poor build assets through savings and loans in the United States and the Third World. In the United States, his research interests are asset-based development policy — especially Individual Development Accounts (IDAs) — and microenterprise. He was lead

author of Savings and Asset Accumulation in Individual Development Accounts*, and he designed the benefit-cost analysis of the Down Payments on the American Dream Demonstration of IDAs. He also conducted the first cost study of an IDA program. His microenterprise work appears in* Evaluation Review *and in* Social Service Review. *In the Third World, Mark's research interest is microfinance, and he designed and built the first credit-scoring models for microfinance organizations.*

*Michael Sherraden is Benjamin E. Youngdahl Professor of Social Development and founding director of the Center for Social Development, George Warren Brown School of Social Work, Washington University in St. Louis. He was educated at Harvard (AB) and the University of Michigan (MSW, Ph.D.). As an overarching theme, his work focuses on development rather than maintenance. He is particularly interested in ways in which social policies do not detract from — but rather contribute to — economic growth of households and communities. His work is characterized by innovative approaches to long-standing policy challenges, frequently drawing on insights from U.S. history, as well as experiences of other nations. Topics of research and policy development include service by youth (*The Moral Equivalent of War? *1990), productive aging (*Productive Aging: Concepts and Controversies*, forthcoming) and asset building (*Assets and the Poor*, 1991;* Inclusion in Asset Building*, forthcoming). Sherraden coined the phrase "asset-based policy" and proposed matched savings in the form of IDAs. He co-conceived the American Dream Demonstration, the first major demonstration of IDAs, and designed the research agenda. Research results from ADD have been influential in federal and state proposals for IDAs and other matched-savings policies. He introduced the concept of Individual Development Accounts.*

Margaret M. Clancy, a Project Director with the Center for Social Development at Washington University in St. Louis, is involved in national, state, and local projects of IDA data collection, analysis, and reporting. Her work also includes MIS IDA software development and training for state and regional IDA initiatives. She is involved with IDA program and policy design. Margaret was formerly a Vice President at a large trust company, where she worked in the pension and institutional division administering corporate 401(k) and defined benefit pension plans. She received her Bachelor of Science degree in Business Administration from Southern Illinois University in

Edwardsville, Illinois, and her Master of Social Work degree from Washington University in St. Louis. She is also a Certified Employee Benefits Specialist.

Lissa Johnson is a Project Director with the Center for Social Development at Washington University in St. Louis. Her current projects include IDA data monitoring and evaluation, IDA software design and development, end-user training, and youth-service information network design. Johnson received her B.A. in English Literature from Kenyon College in Gambier, Ohio, and her Master of Social Work degree from Washington University in St. Louis. She is also a Licensed Clinical Social Worker (LCSW) in the state of Missouri.

Jami Curley is a doctoral student at the George Warren Brown School of Social Work at Washington University in St. Louis and a research associate for the Center for Social Development. She works on the MIS IDA data from the American Dream Demonstration — cleaning data, conducting analyses, and reporting.

Min Zhan is a doctoral student at the George Warren Brown School of Social Work at Washington University in St. Louis. She is also a research associate for the Center for Social Development. She works on the data from the American Dream Demonstration and her responsibilities include conducting analyses and writing reports and academic publications. She is particularly interested in the uses of IDAs for post-secondary education under the current welfare reform.

Michal Grinstein-Weiss is a Ph.D. candidate in the George Warren Brown School of Social Work at Washington University in St. Louis. She received her BA and MSW from The University of Haifa, where she graduated with honors. Currently, Michal is a research associate at the Center of Social Development at Washington University in St. Louis. Prior to entering the doctoral program, she was a research associate at Minerva Center For Youth Studies, and at Richard Crossman Chair, in The University of Haifa. While there, she successfully managed national research projects and co-authored several articles and reports.

Sondra Beverly is an assistant professor in the School of Social Welfare at the University of Kansas. She received an M.S.W. and a Ph.D. from the George Warren Brown School of Social Work at Washington University in St. Louis and an M.A. in economics from the University of

Missouri–St. Louis. Dr. Beverly is Faculty Associate at the Center for Social Development and Research Affiliate at the Joint Center for Poverty Research. She is currently evaluating a program that links tax refunds to low-cost bank accounts in an effort to encourage account ownership and saving.

Notes

[1] These insights come from a standard economic-growth model with stochastic production and subsistence constraints.

[2] Some IDA programs also match for job training, home repair, investment in retirement accounts, or even for the purchase of a car or computer.

[3] Bush proposed a regressive system within Social Security, and Gore proposed a progressive system outside Social Security.

[4] Schreiner *et al* (2001) describe programs and rules in ADD.

[5] Although programs set rules before enrollment, the rules still depended in part on expected participant behavior, so they are tainted by endogeneity bias to some unknown extent.

[6] Economic theory does not unambiguously predict that savings will increase in response to an increased rate of return. People might save more due to the increase in the inter-temporal price of current consumption (substitution effect). But people might also save less if the inter-temporal price of future consumption falls enough (income effect). We take up this issue again below.

[7] Parts of this section and the next draw on Beverly and Sherraden (1999).

[8] Some participants in ADD hesitated to enroll because IDAs seemed too good not to be a scam.

[9] The empirical results from here on are drawn from Schreiner *et al* (2001).

[10] These and other figures presented here will change as ADD progresses.

[11] Median net worth is participant-by-participant, not median assets minus median liabilities.

[12] Likewise, many IRA contributors make a deposit only if they have extra cash in tax season.

[13] The first part of the Heckman two-step controls for unobserved factors that influence both the risk of exit and the level of average monthly net deposits for non-exits.

[14] Detailed results are in Schreiner *et al* (2001) and are available upon request.

15 These studies all have several (usually unacknowledged) flaws. First, they do not control for censoring at the contribution limit. Second, they do not control for the contribution limit, for the combined maximum contribution plus match, or for more than a handful of other variables. Third, they measure match rates and contributions not for individuals but for averages across participants in a firm. Fourth, they do not control for endogeneity between the match rate and savings.

16 Bernheim and Garrett (1996) find that financial education increases participation in 401(k) plans and that the effects are largest for those who saved little before the education. Bayer, Bernheim, and Scholz (1996) find that financial education also increases contributions to 401(k) plans. They also find that the effects are largest for non-highly compensated employees.

17 Schreiner *et al* (2001) discuss other weaknesses in the data on hours of financial education.

18 The two-step regression has exit as the first step and controls for the length of participation and thus for the opportunity to attend financial education. In principle, a two-step hazard model would produce cleaner estimates, but MIS IDA did not record monthly changes in the independent variables nor exactly when participants attended classes.

19 This looks at people in households with income at or below 200 percent of the family-size adjusted poverty threshold in the first week of September 1995 in the Survey of Income and Program Participation. The fall in poverty since 1995 suggests that, all else constant, participants in ADD are likely more disadvantaged than the general low-income population in 1995.

20 About 42 percent were in households headed by unmarried women with children.

21 As discussed above, it is not worthwhile to control for censoring until ADD is complete.

22 The average absolute wealth gap, however, would increase in this scenario. Also, it is unclear how IDAs might change the aggregate wealth gap between Caucasians and African Americans.

23 This section draws on Schreiner (2000) and Sherraden (2000).

References

Ackerman, Bruce, and Anne Alstott, *The Stakeholder Society*, New Haven: Yale Press, 1999.

Bassett, William F., Fleming, Michael J., and Anthony P. Rodrigues, “How Workers Use 401(k) Plans: The Participation, Contribution, and Withdrawal Decisions,” *National Tax Journal*, Vol. 51, No. 2, 1998, pp. 263-289.

Bayer, Patrick J., Bernheim, B. Douglas, and John Karl Scholz, "The Effects of Financial Education in the Workplace: Evidence from a Survey of Employers," National Bureau of Economic Research Working Paper No. 5655, 1996.

Bernheim, B. Douglas, "Rethinking Savings Incentives," in Alan J. Auerbach (ed) *Fiscal Policy: Lessons from Economic Research*, Cambridge, MA: MIT Press, 1997, pp. 259-311.

_____, "Personal Saving, Information, and Economic Literacy: New Directions for Public Policy," in *Tax Policy for Economic Growth in the 1990s*, Washington, D.C.: American Council for Capital Formation, 1994, pp. 53-78.

Bernheim, B. Douglas, and Daniel M. Garrett, (1996) "The Determinants and Consequences of Financial Education in the Workplace: Evidence from a Survey of Households," National Bureau of Economic Research Working Paper No. 5667.

Bernheim, B. Douglas, and John Karl Scholz, "Private Saving and Public Policy," *Tax Policy and the Economy*, Vol. 16, No. 7, 1993, pp. 73-110.

Besley, Timothy, "Savings, Credit and Insurance," in T.N. Srinivasan and Jere Behrman, (eds). *Handbook of Development Economics*, Volume 3A. Amsterdam: Elsevier, 1992, pp. 2125-2207.

Beverly, Sondra G., Moore, Amanda, and Mark Schreiner, "A Framework of Asset-Accumulation Stages and Strategies," manuscript, University of Kansas, 2001.

Beverly, Sondra G., Tescher, Jennifer, and David Marzahl, "Low-Cost Bank Accounts and the EITC: How Financial Institutions Can Reach the Unbanked and Facilitate Saving," manuscript, University of Kansas, 2000.

Beverly, Sondra G., and Michael Sherraden, "Institutional Determinants of Savings: Implications for Low-Income Households and Public Policy," *Journal of Socio-Economics*, Vol. 28, No. 4, 1999, pp. 457-473.

Caskey, John P., (1997) "Beyond Cash-and-Carry: Financial Savings, Financial Services, and Low-Income Households in Two Communities," report for the Consumer Federation of America and the Ford Foundation, Swarthmore College.

Conley, Dalton, *Being Black, Living in the Red: Race, Wealth, and Social Policy in America*, Berkeley: University of California Press, 1999.

Deaton, Angus, *Understanding Consumption*, Oxford: Clarendon Press, 1992.

Engen, Eric M., and William G. Gale, "The Effects of 401(k) Plans on Household Wealth: Differences Across Earnings Groups," manuscript, 2000.

Friedman, Robert, *The Safety Net as Ladder*, Washington, D.C.: Council of State Policy and Planning Agencies, 1988.

Haveman, Robert, *Starting Even*, New York: Simon and Schuster, 1988.

Hubbard, R. Glenn, and Jonathan S. Skinner, "Assessing the Effectiveness of Saving Incentives," *Journal of Economic Perspectives*, Vol. 10, No. 4, 1996, pp. 73-90.

Johnson, Elizabeth, Hinterlong, James, and Michael Sherraden. "Strategies for Creating MIS Technology to Improve Social Work Practice and Research," paper presented at the Technology Conference for Social Work Education and Practice, Charleston, August, 2000.

Kusko, Andrea L., Poterba, James M., and David W. Wilcox, "Employee Decisions with Respect to 401(k) Plans: Evidence from Individual-Level Data," National Bureau of Economic Research Working Paper No. 4635, 1994.

Lusardi, Annamaria, "Explaining Why So Many Households Do Not Save," manuscript, University of Chicago, 2000.

Maital, Shlomo, "Prometheus Rebound: On Welfare-Improving Constraints," *Eastern Economic Journal*, Vol. 12, No. 3, 1986, pp. 337-344.

Maital, Shlomo, and Sharone L. Maital, "Is the Future What It Used To Be? A Behavioral Theory of the Decline of Saving in the West," *Journal of Socio-Economics*, Vol. 23, No. 1/2, 1994, pp. 1-32.

Mischel, Walter, "The Interaction of Person and Situation," in David Magnusson and Norman S. Endler (eds) *Personality at the Crossroads: Current Issues in Interactional Psychology*, Hillsdale, NJ: Lawrence Erlbaum Associates, 1977.

Moore, Amanda, Beverly, Sondra, Schreiner, Mark, Sherraden, Michael, Lombe, Margaret, Cho, Esther Yin-Nei, Johnson, Lissa, and Rebecca Vonderlack, *Saving, IDA Programs, and Effects of IDAs: A Survey of Participants*, Research Report, Center for Social Development, Washington University in St. Louis, 2001.

Oliver, Melvin L., and Thomas M. Shapiro, *Black Wealth/White Wealth*, New York: Routledge, 1995.

Papke, Leslie E., and James M. Poterba, "Survey Evidence on Employer Match Rates and Employee Saving Behavior in 401(k) Plans," *Economics Letters*, Vol. 49, 1995, pp. 313-317.

Schreiner, Mark, "Resources Used in 1998 and 1999 to Produce Individual Development Accounts in the Experimental Program of the American Dream Demonstration at the Community Action Project of Tulsa County," Research Report, Center for Social Development, Washington University in St. Louis, 2000.

Schreiner, Mark, Sherraden, Michael, Clancy, Margaret, Johnson, Lissa, Curley, Jami, Grinstein-Weiss, Michal, Zhan, Min, and Sondra Beverly, *Savings and Asset Accumulation in Individual Development Accounts*, Center for Social Development, Washington University in St. Louis, 2001.

Shefrin, Hersh M., and Richard H. Thaler, "The Behavioral Life-Cycle Hypothesis," *Economic Journal*, Vol. 26, 1988, pp. 609-643.

Sherraden, Michael, "On Costs and the Future of Individual Development Accounts," Comment, Center for Social Development, Washington University in St. Louis, 2000.

_____, *Assets and the Poor: A New American Welfare Policy*, Armonk, NY: M.E. Sharpe, 1991.

_____, "Rethinking Social Welfare: Toward Assets," *Social Policy*, Vol. 18, No. 3, 1988, pp. 37-43.

Sherraden, Michael, Page-Adams, Deborah, Emerson, Shirley, Beverly, Sondra, Scanlon, Edward, Cheng, Li-Chen, Sherraden, Margaret S., and Karen Edwards, *IDA Evaluation Handbook:A Practical Guide and Tools for Evaluation of Pioneering IDA Projects*, Center for Social Development, Washington University in St. Louis, 1995.

Smeeding, Timothy M., "The EITC and USAs/IDAs: Maybe a Marriage Made in Heaven?" manuscript, Syracuse University, 2000.

Souleles, Nicholas S., "The Response of Household Consumption to Income-Tax Refunds," *American Economic Review*, Vol. 89, No. 4, 1999, pp. 947-958.

Thaler, Richard H. (1994) "Psychology and Savings Policies," *American Economic Review*, Vol. 84, No. 2, pp. 186-192.

Wayne, Leslie, "USA Accounts Are New Volley in Retirement Savings Debate," *The New York Times*, Jan. 24, 1999, p. 4.

Williams, Trina, (2000) "The Homestead Act: Our Earliest National Asset Policy," manuscript, Center for Social Development, Washington University in St. Louis.

Wolff, Edward N., "Recent Trends in the Size Distribution of Household Wealth," *Journal of Economic Perspectives*, Vol. 12, No. 3, 1998, pp. 131-150.

FINANCING THE DEVELOPMENT OF URBAN MINORITY COMMUNITIES: LESSONS OF HISTORY

Timothy Bates
Wayne State University

Government intervention into financial markets seeks to alter capital availability patterns that disadvantage minorities and low-income people. The desire to increase access to credit for these traditionally underserved groups motivated President Clinton to launch the Community Development Financial Institution (CDFI) program. In fact, CDFI-like institutions proliferated in the late 1960s, and many of them still exist today. The Minority Enterprise Small Business Investment Company (MESBIC) program, started in 1969, created several hundred privately owned firms that finance inner-city situated and/or minority-owned small businesses.

This study uses U.S. Small Business Administration records to analyze the impacts of actual MESBIC investments in small businesses. Further, all MESBICs that were actively functioning in 1987 are tracked over a seven-year period, and the characteristics of those still operating are compared to the MESBICs that went out of business. Strategies used by surviving MESBICs that actively financed minority business enterprises are identified, and the traits of effective MESBICs are contrasted to those that shut down. Nearly 100 MESBICs remain active today, and the track record of the program over the past 30 years offers a wealth of insights to present-day proponents of CDFIs.

Introduction

Government policies and programs that address economic problems facing inner-city minority communities are often conceived and marketed as vehicles for achieving goals that are quite difficult to meet.

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One such program is President Clinton's Community Development Financial Institution (CDFI) initiative, which was launched in 1994. CDFIs are a diverse collection of banks, bank-owned community development corporations (CDCs), credit unions, loan funds, and so forth, that have received subsidized funding from government to serve low-income, inner-city communities. The common defining trait of CDFIs is their shared mission of filling gaps in the services provided by mainstream financial institutions.

Modern-day proponents of CDFIs typically ignore the rich history of the forerunners of today's CDCs, microenterprise loan funds, community development banks, and the like. CDFI-like institutions in fact proliferated in the late 1960s, and an understanding of their successes and failures offers rich insights for those choosing not to ignore the lessons of history. Michael Porter suggests that the urban-racial crisis of the 1960s produced social-policy fixes; lacking a firm foundation in private business development, these "fragmented and ineffective" policies offer no positive guidance to revitalizing depressed urban minority communities (1995, p. 55). Many of those first-generation CDFIs were, indeed, rooted in ineffective policies. A detailed understanding of the failures and successes of that earlier era provides society with the opportunity to replicate the successes and avoid many of the pitfalls of a previous generation of CDFIs.

President Nixon, in 1969, proposed establishing 100 minority enterprise small business investment companies (MESBICs) to alleviate the institutional gap in financial capital availability believed to be constraining minority business development nationwide. Co-sponsor of the legislation creating the program, Senator John Tower of Texas, explained its expected utility in terms virtually indistinguishable from those used by today's proponents of CDFIs (Bates, 1997a). The founders of the MESBIC program rationalized their chosen strategy in terms of remedying the deficiencies of mainstream financial institutions, particularly their uninspiring record of financing minority-owned firms. MESBICs were going to make financing more widely available to minority-owned firms, facilitating "capital formation in the minority community generally," according to Senator Tower (Hansley, 1992, pp. 2, 3).

This study of the MESBIC industry's successes and failures proceeds along three lines. First, each and every one of the 1,100 plus small-business loan and venture-capital investments actually made by MESBICs in 1993 is sorted to identify the nature of the assisted firms. Second, all 119 of the MESBICs actively operating in 1987 are tracked over a seven-year period, and the traits of the 61 still operating at the end of 1994 are compared to the 58 MESBICs that went out of business. Third, case studies are used to illuminate the nature of MESBICs that have remained in operation by successfully financing minority-owned businesses. The track record of the MESBICs over the past 30 years offers a wealth of insights to present-day proponents of CDFIs.

The Small-Business Investments Made by MESBICs

MESBICs are privately owned small business investment companies that receive part of their funding at subsidized rates from the U.S. Small Business Administration (SBA). These funds are largely invested in immigrant and minority-owned businesses and they provide, by design, patient capital, *i.e.* equity capital as well as long-term subordinated debt. The uniqueness of MESBICs, renamed Specialized Small Business Investment Companies (SSBICs) in the 1990s, lies in their status as equity-capital providers to minority business enterprises (MBEs). Prior to the mid-1990s, no other federal government small business assistance efforts sought to encourage equity capital (popularly known as "venture" capital) investment in MBEs. What sorts of small businesses do MESBICs invest in? In practice, how did the MESBICs perform?

I obtained from the SBA a comprehensive listing of every small-business investment made by MESBICs nationwide in fiscal year 1993. Approximately 100 MESBICs were operating that year, and the SBA managed to generate data for 1,101 of the 1,140 small business investments finalized in 1993 (Bates, 1996). Amazingly, approximately half of all of these debt and equity investments in small businesses flowed to firms operating in New York City. One line of New York City small business, in turn, accounted for most of the investments made by area MESBICs. The nation's MESBIC program in the 1990s is first and foremost a program dedicated to financing the purchase of New York City taxi-cab medallions. The year 1993 was not atypical; thousands of cab medallion purchases have been financed by MESBICs over the past decade. In terms of both numbers and dollar amount of investments, New York cab-medallion financing far exceeds the total of MESBIC investments in all lines of minority businesses operating in the Midwest, the South, and the Far West. The surviving MESBICs have evolved and adopted over the decades to the circumstances of their marketplace and the constraints imposed upon them by their government sponsors. Medallion Funding, Porter's example of success, calls itself Medallion Funding because its chosen market niche lies in financing the purchase of New York City taxi medallions. Financing medallions typifies an investment strategy known as “asset-based lending.” The mechanics of asset-based lending and the reasons for its attractiveness to inner-city lenders are explored throughout this study.

Like the cab financiers in New York, most of the MESBICs nationwide that actively invest in MBEs are asset-based lenders. Indeed, most of the CDFIs that survive into the 21st century are likely to be asset-based lenders. Asset-based lending is a pragmatic adaptation to the circumstances of financing small businesses in urban America.

The Economics of Asset-Based Lending

The crux of asset-based lending is simple: if the business receiving the loan succeeds, the MESBIC gets repaid, and if the business fails, the MESBIC gets repaid. Asset-based lenders are collateral driven. Taxi medallions represent outstanding collateral: they have appreciated steadily in value and they are highly liquid. If the taxi owner defaults on the loan, the MESBIC repossesses the cab medallion and sells it for an amount exceeding the outstanding loan balance. Asset-based lenders are less concerned about the viability or the growth prospects of the minority business being financed than they are about the value of the collateral that protects them from loss in the event of loan default.

Beyond taxi medallions, loans to restaurants, laundries, and grocery stores are the second, third, and fourth most common type of investment in small business made by the U.S. MESBIC industry. These loans flow largely to Asian immigrant business owners, and they are concentrated in major urban centers of Asian immigration, particularly Los Angeles and New York. MESBIC investments in restaurants nationwide are more common than investments in all lines of manufacturing combined; investments in laundries are more numerous than investments in all lines of wholesaling combined (Table 1). The firms that MESBICs invest in are often operating in industries where tiny firms, such as restaurants, are widespread. But the typical small business financed by a MESBIC is not a tiny firm. The median MBE nationwide is a zero employee operation, but the median MBE attracting a MESBIC investment is an employer. The median MBE nationwide has annual revenues of less than $100,000, but the median MBE receiving MESBIC funds has annual sales exceeding $500,000.

A recurring theme in the scholarly literature is the chronic unprofitability of lending to inner-city MBEs operating in traditional lines of business like restaurants and laundries (Bates, 1993). Yet MESBICs often target larger firms operating in this niche and operate profitably. To illustrate how MESBIC asset-based lenders service this market, the operations of Exim Capital provide a clear-cut model. Exim Capital is operated by Victor Chun out of his Fifth Avenue office in Manhattan. Along side his MESBIC, Chun runs an accounting firm. He approves less than one loan application out of every 20 submitted to his MESBIC. In reviewing loan applicants, Victor Chun looks at collateral, homeownership, strong business cash flow, and the applicant's business experience. He regularly finds solid applicants, even though many have been rejected by banks. Chun believes that local banks do not want to lend to small firms. Loan applicants seeking under $50,000 are discouraged because Exim Capital has learned that it is not economical to process such small transactions. Exim Capital is looking to make small business loans in the $50,000 to $150,000 range to experienced, high-net-worth owners. Approved loans must be secured by solid collateral so that payment will be forthcoming irrespective of the viability of the small business under consideration.

Chun reviewed with me the collateral involved in six typical loans made by Exim Capital, which involved secured loans to Jee and Jung Cleaners; C.H. Kyung, Inc., and four other firms. Loan sizes ranged from $52,000 to $105,000 in these six transactions. Looking solely at collateral in the form of business and real estate assets owned by the borrowing firm and its owner (including business and residential real estate), the six deals offered collateral to Exim Capital ranging in amount from $162,500 to $801,000. In the case of one typical loan, Exim is the first lien holder on the borrowing business and the second mortgage holder on the personal residence of the owner of the borrowing firm, thus securing a $55,000 business loan with net collateral of $525,000. Quite irrespective of the success or failure of the small firm getting this $55,000 loan from Exim, Victor Chun is going to collect fully on the loan. All of Exim's other loans are similarly secured.

The inner-city environment has been Darwinian for MESBICs choosing to operate there: Exim Capital is a survivor, and typifies the mode of operation for the successful MESBIC doing asset-based lending to small minority-owned firms in central cities. MESBIC asset-based lenders flock to collateral-rich borrowers and taxi medallions. Most Blacks and Latinos have personal net worth well under $100,000, as do nearly 75 percent of Asians in the U.S. Exim might consider financing a taxi medallion for someone with personal wealth of less than $100,000, but nothing else.

Financial Viability Among MESBICs

Small-scale, relatively inactive MESBICs are frequently not viable from a cost of operations perspective. Examining the consolidated income statement for all active MESBICs operating in 1993 (Table 2) reveals that the industry as a whole is unprofitable. Income statement data are presented in two distinct ways. First, mean absolute dollar amounts of income and expenses are recorded, and second, income statement items are normalized, i.e. divided by total assets on a firm by firm basis. The first method of data presentation in Table 2 effectively allows larger firms to dominate the statistics, while the second method has the effect of weighting each MESBIC equally when means are calculated.

The typical MESBIC (Table 2) generated 7.33 cents in revenues per asset dollar, while incurring expenses of 8.43 cents to generate those revenues. The resultant spread (revenues less costs) per asset dollar was minus 1.10 cents before taxes and minus 1.18 cents after taxes. Sale of securities (which represent prior equity-capital investments in MBEs) added more negative numbers to the bottom line: the mean MESBIC, on balance, lost 2.70 cents per asset dollar in 1993. Examining on the non-normalized means (Table 2) suggests that the larger SSBICs are doing better than the smaller ones: average revenues of $469,000 less costs of $411,000 produced net income of $58,000; after taxes and realized losses from sales of securities, the bottom line was reduced to minus $3,000.

For the MESBIC industry, 1993's financial performance was not an atypical year. Examination of industry financial statements for other recent years revealed patterns of 1) recurring losses from operations, 2) frequent losses from the sale and disposal of venture-capital investments, and 3) a high attrition rate (MESBICs going out of business) (Bates, 1996).

The smaller MESBICs are clearly doing worse than the larger ones. Picking an arbitrary cutoff and defining MESBICs with less than $2 million in total assets as “small,” and the others as “larger,” stark differences stand out on the expense side of the aggregate income statements. Over the 1987 to 1993 period, *loan losses and labor costs absorbed 38.8 percent of the total revenues of the average large MESBIC, versus 66.5 percent of the total revenues of the typical small MESBIC*. The group of small MESBICs incurred these high costs while investing in a portfolio of assets that was top-heavy in bank CDs (Bates, 1997a).

Surviving and Failing MESBICs from 1987 to 1994

The evidence summarized above associates MESBIC weakness with its small overall size (measured by total assets), high costs of operations, and venture-capital investments in MBEs. The highest yielding asset widely held by MESBICs is cash assets, suggesting financial strength may be maximized by avoiding investments in MBEs altogether (Bates,1997a). These findings are treated as hypotheses guiding an econometric investigation that differentiates surviving MESBICs from those that dropped out of the industry.

A group of 119 MESBICs that were operating in 1987 is traced to October 1994: 61 were still in business and 58 shut down. Table 3 summarizes balance sheet and income statements in 1987 for these MESBICs, broken down into groups of: 1) active firms, still operating in late 1994; 2) liquidated firms, forced into liquidation by SBA due to insolvency; and 3) firms that voluntarily departed from the MESBIC industry.

The liquidated MESBICs (Table 3) stand out as the most active investors in MBEs, devoting 68.1 percent of their assets to small business investments and 25.1 percent to cash assets. The active MESBICs, in contrast, invested 64.0 percent of their collective assets in small business investments and 29.7 percent was devoted to cash assets. The MESBICs that surrendered their charters largely held cash assets. The liquidated MESBICs also stand out because of their high expenses (8.6 percent of total assets) and their realized losses from the sale of securities. The average total asset size of the active firms ($5.3 million) exceeded that of the liquidated MESBICs (average total assets of $2.8 million) by a wide margin.

Table 3's mean statistics, by themselves, are not an accurate guide to the causes of liquidation among MESBICs. Asset holdings among the active firms, for example, are skewed by a few highly-liquid MESBICs. A series of logistic regressions was undertaken to identify MESBIC traits that have predictive power to differentiate surviving MESBICs from those that were forced to close down. These regressions defined active and liquidated firm status as the dependent variable: charter-surrendering MESBICs were not considered. The following hypotheses guide these logistic regression exercises.

1. Large MESBICs are more likely to remain active than small ones. While size is a powerful explanatory variable, it was excluded from

some of the regression exercises so that *consequences* of size of operations could be more closely analyzed.

2. Low-cost MESBICs are more likely to remain active than high-cost MESBICs.

3. Highly-liquid MESBICs are more likely to remain active than others.

4. MESBICs generating high loan losses more likely close than MESBICs that control loan losses.

5. MESBICs capable of producing (realized) capital gains on their MBE equity investments are more likely than others to remain active.

Results from the logistic regressions are presented in Table 4. Of the factors expected to predict MESBIC survival accurately, three emerge clearly as statistically significant determinants; a fourth is marginal. The larger MESBICs that control costs and invest successfully in MBE equity capital are most likely to remain in operation. Investing heavily in cash assets is a marginally significant positive factor, but not a robust one.

Table 4's econometric modeling is complicated by the fact that the larger-scale MESBICs *clearly* tend to be the ones most likely to control costs and invest venture capital profitably in small businesses. Scale economies operate both to hold down the cost of operation and to make possible the kind of portfolio diversification that is a prerequisite for intelligent venture-capital investing (Bates, 1997a). Yet being large, by itself, neither guarantees control of costs nor viability among the venture-capital investments. The average size of the surviving MESBICs in 1987 ($5.3 million in assets) is nearly twice that of the MESBICs that shut down ($2.8 million in assets on average). Overly small size and hence scale of operations clearly tends to undermine the viability of MESBICs, particularly those operating with total resources of under $5 million.

The clearest message emerging from the econometric findings and the earlier discussion of the MESBIC characteristics described in Tables 2 and 3 is that failure-prone MESBICs are identifiable. Small MESBICs that generate high expenses per dollar of total assets are particularly likely to go out of business. Furthermore, active small business investing, particularly unsuccessful venture-capital investing, typifies failure-prone small MESBICs. Survival and profitability, for

MESBICs with total assets of under $5 million, is promoted by investing in bank CDs, not minority-owned businesses. Although this finding may explain why money-market investments are much more widespread than venture-capital investments in MBEs in the MESBIC industry, it also suggests that most small MESBICs are not capable of meeting the goals that justified creation of the MESBIC program in the first place.

Because they are often incapable of serving as providers of debt and equity capital for MBEs, they should not be holding MESBIC charters. Lacking the scale that is a prerequisite for cost-efficient operations and diversification of portfolio risks in inherently risky venture capital investments, such MESBICs generate negative profits (Bates, 1997a). Those who favor eliminating these ineffective MESBICs should be encouraged by the fact that they appear to be effectively destroying themselves. Chronic unprofitability erodes their net worth, and results in forced bankruptcy initiated by the SBA's Office of Liquidations (Bates, 1996).

One surprising finding emerging from the logistic regression equations is that loan loss provisions made by MESBICs in 1987 had no predictive power for delineating MESBICs still active in 1994 from the discontinued MESBICs (Table 4). Yet, controlling loan losses is vitally important for MESBIC survival and long-run viability. Discussions with SBAofficials overseeing the MESBIC program indicate that weak MESBICs consistently understate loan losses; they literally hide their losses. If a weak, money-losing MESBIC were to report heavy loan losses, officials from the SBA Office of Liquidations would quickly take note.

Returning to Table 4's econometric findings, the goal of identifying successful MESBICs merits elaboration. Being large (total assets of $5 million plus) facilitates cost control and success in investing in small businesses, while being small tends to produce the opposite effect. Yet being large, by itself, does not guarantee that a MESBIC will remain a profitable, active financier of minority-owned businesses. Successful lenders among the MESBICs are the asset-based lenders. The MESBICs sort into groups of successful and unsuccessful equity investors as well. MESBICs that make money from their equity investments dominate the ranks of the largest and most profitable firms in the industry. A case example of TSG Ventures is used to highlight MESBIC success in venture-capital investing.

TSG Ventures Inc: A Model of Successful Investing in Minority-Owned Businesses

TSG possesses the essential traits of a successful MESBIC: it is a professionally managed, well capitalized investment company operating on a large enough scale to diversify its risks and hold down its operating costs. TSG was formed in 1992 when Cleveland Christophe and Duane Hill led a management buyout of Equico Capital Corporation, a subsidiary of the Equitable Life Assurance Society. From 1981 to 1992, Duane Hill was the president and chief executive officer of Equico. TSG's success is properly traced back to Mr. Hill's appointment as president of Equico. Prior to joining TSG, he worked at J.P. Morgan for eight years, serving as a vice president. When Hill first arrived in 1981, Equico was an under-performing MESBIC. Possessing total assets of nearly $15 million in 1981, Equico managed to generate a net loss of $2.581 million in that year, caused primarily by writeoffs of bad loans. Mr. Christopher joined Equico in 1990. Previously, he had been senior vice president of the TLC Group, the leveraged buyout firm controlled by Reginald Lewis.

Equico was one of the nation's original MESBICs created by a major corporation, Equitable Life, and was chartered in 1970. By the end of its 1981 fiscal year, Equico, like so many other MESBICs of that era, had managed to generate a large cumulative deficit, $5.662 million, in addition to carrying a large unrealized loss on loans and investments. Judged by its initial capitalization, Equico was bankrupt. Equitable Life injected an additional $3.5 million into Equico during 1981 when Duane Hill took over as president, and Equico raised $1.0 million more that year by selling three percent cumulative preferred stock to the SBA.

In 1981, Equico resembled the overall MESBIC industry. Its investment activities were loan oriented, with its loan dollar volume exceeding its equity investments by more than a 10:1 margin. Major asset categories were 1) loans, $7.3 million; 2) equity investments, $0.6 million; and 3) money market investments, $6.1 million.

Like many MESBICs active in the 1970s, Equico often behaved like a community development bank, focusing on financing small minority-owned businesses. This emphasis was due, in part, to the fact that large-scale, growth-oriented minority-owned businesses were less numerous than they are today. Managers of MESBICs realized that small MBEs catering to minority clients were not an appropriate target market for venture-capital investing, so the emphasis was on providing loans to small-scale, community-oriented minority-business borrowers.

The problem with this investment strategy was that small, minority-owned firms were a high risk market for MESBICs specializing in lending. Most MESBICs lost money servicing this clientele (Bates, 1996).

Prior to Hill's 1981 arrival as president, Equico had tried to achieve viability by servicing two distinctly different markets — the small-scale, community-oriented minority firm, and the larger-scale MBEs that possessed growth potential. The problem with serving small, inner-city operations was one of continuing high levels of loan default. Equico had to move out of this segment because losses were sufficiently high to threaten its survival. The key element of Duane Hill's turnaround strategy for Equico was to drop the community-oriented "mom and pop" operations, and focus solely on larger-scale MBEs with growth potential. These firms could absorb equity investments and put the funds to profitable use financing the growth of the enterprise. Hill's shift from small operations to growing MBEs competing in the broader marketplace included a shift in Equico's investment strategy from loans to equity investments.

How did the new strategy work? A loan portfolio generates a steady cash flow for a MESBIC: repayments of principal and interest should pour in each month. New equity investments hurt cash flow: recipient MBEs use equity dollars to finance firm growth. Initial dividend payments are unlikely to be forthcoming if the young MBEs successfully generate high growth with their equity-invested dollars. Dividend payouts are more likely to be paid after a period of sustained growth has produced a large-scale, profitable, minority-owned business. It is difficult to judge what the equity investment payoff is to a young, rapidly growing MBE during the first several years of the equity investment lifespan. The immediate results of Hill's early years of running Equico, therefore, were:

1. Continuing losses and writeoffs from the $7.3 million loan portfolio inherited in 1981 from Equico's previous management.

2. Reduced cash flow from small business investments as the loan portfolio shrunk.

3. Minimal dividend income from the growing portfolio of equity investments in minority-owned firms.

Equico's cash flow as it shifted from being a lender to being a venture capital investor was propped up by interest income generated by investments in bank certificates of deposit. Equico's cumulative deficit initially rose from $5.7 million in 1981 to $10.0 million in 1985, reflecting the slow payoff to venture-capital investing.

During the first phase of Equico's turnaround the early 1980s, Duane Hill implemented an investment strategy that emphasized making equity investments in larger-scale MBEs that possessed growth potential. By the mid-1980s, that strategy cleaned up Equico's deficit-laden balance sheet, and put the firm on a trajectory of growth and profitable operations. During the 1985 to 1990 period, neither the SBA nor Equitable Life injected additional capital into the company. Equico's new-found financial strength was rooted in the operating strategy that Hill had successfully implemented.

How does one identify a larger-scale MBE that is capable of using an equity-capital investment to create firm growth, as well as appreciation in the value of the firm itself? The minimal requirements include 1) a very strong management team, 2) a proven product and/or service, 3) annual sales exceeding $1 million, and 4) a profitable operation in the past year. A firm with these traits would also have to present (or demonstrate) 1) strong internal accounting and financial controls, 2) audited financial statements, 3) strong personal credit ratings of the top managers, and 4) a written business plan with three- to five-year projections. The key element is having a firm run by experienced, successful, highly capable managers. Finally, a firm with the potential to grow ten-fold over the next five years is more likely to attract an equity capital than one on a slower-growth trajectory.

The 1990s saw Equico move into a leadership role in the MESBIC industry. TSG emerged as a premier venture capital firm in the MESBIC industry after its 1992 management-led buy out of Equico from its parent, Equitable Life. A comparison of 1981 and 1994 balance sheets indicates that the value of TSG's small business equity investments increased nearly twenty-fold, rising from $0.6 million to $10.3 million. Meanwhile, TSG realized net gains on investments of over $4.5 million during 1993 and 1994, *i.e.* its gains are real, not merely paper gains. Year-end 1994 balance sheet figures indicate that TSG relied upon its shareholders and internally generated earnings (retained earnings) as its sources of funds. Reliance upon debt was minimal. The important lesson offered by TSG is that a professionally managed venture capital firm can thrive by serving the equity capital needs of growing minority-owned businesses.

Lessons Learned

In light of its transition from a chronically unprofitable investment firm propped up by capital infusions from Equitable Life and the SBA to an industry leader, insights were sought from TSG's management team about how the overall MESBIC program may be turned around. Is it possible to move the MESBIC industry as a whole in the direction of TSG? Duane Hill suggests that such a move is not likely. A major barrier holding down the number of successful MESBICs specializing in venture capital investing is, according to Hill, the government itself.

Elaborating, Hill states that the SBA has not traditionally been interested in the viability of the MESBIC industry. Top administrators at the SBA, according to Hill, have often been political appointees who do not bring appropriate expertise to their positions. Their turnover is high. They cannot move the entrenched SBAcareer bureaucrats so they stop trying, which results in a situation of poor program management. Many of the SBA's current top administrators, Hill acknowledges, are capable and enlightened managers. Highly capable managers have held top SBA appointments in the past and their willingness to take on the bureaucracy has typically declined rapidly with their tenure. Is the situation today any different? "It is hard to be optimistic," Hill states.

What is wrong with the bureaucracy that makes it such an impediment to create a thriving MESBIC industry? The SBA, according to Hill, prefers to have MESBICs financing unsophisticated minority business owners: "college graduates with corporate experience are not socially or economically disadvantaged." Yet these are precisely the kinds of owners TSG seeks to finance.

Hill paints a dismal future for the industry, but he also points out a possible road to reform. The top SBA officials in the 1990s, according to Hill, were more tolerant of successful MESBICs than their predecessors, and this attitude has even penetrated the bureaucracy to some degree. If the SBA's leadership truly was to reform the entrenched bureaucracy, real progress could be forthcoming. Hill is not optimistic. He believes a more likely scenario is that the SBA will drive the most successful MESBICs out of the industry.

Lessons for Community Development Financial Institutions

The CDFIs that have been so actively promoted by the Clinton Administration began operating in the mid-1990s with funding that partially reflects subsidies from the federal government. Funding small businesses in inner-city, low-income minority communities is a major part of their mandate. The fact that the vast majority of the MESBICs chartered since 1969 had similar missions and went out of business should be noteworthy to CDFI planners (Bates, 1996). Two distinct types of small business financing dominate among surviving MESBICs that operate profitably 1) asset-based lending that is collateral driven, and 2) venture-capital investing targeted to large-scale MBEs run by sophisticated, highly experienced business managers. Have we learned the right lessons from the MESBIC experience?

Heeding the lessons of 30 years of MESBIC operating experiences is not apparent in one of the premier CDFIs, a financial institution organized in the Atlanta empowerment zone in August 1996, a Community and Individual Investment Corporation (CIIC). Identified as a "for-profit" entity, the Atlanta CIIC's mandate includes funding:

1) Micro loans, ranging from $1,000 to $5,000 to finance inventory, working capital and equipment for home-based businesses and self-employed individuals;

2) Start-up loans and "micro-equity" investments, ranging from $5,000 to $50,000 to finance inventory, equipment and facilities and other costs for businesses with fewer than three years of operating or earnings history;

3) Expansion loans of up to $500,000 for the acquisition of inventory, equipment and facilities for established firms whose growth plans exceed internal financing capacity;

4) Commercial mortgage loans of up to $500,000 for the acquisition and improvement of income property within the empowerment zone and linked communities.

All of this broadly resembles the strategy guiding the Equico MESBIC in the 1970s that targeted the small firms operating in the local community, as well as the larger-scale firms possessing growth potential. Of the many scores of MESBICs that pursued such investment strategies in the 1970s, none remain today. Most went broke; the survivors radically changed their investment strategies and became the Exim Capitals (asset-based lenders) and the TSGs (high-end venture capital investors) of today. CDFIs (and their CIIC variants) that pursue a strategy of risky small-business investing will experience similar fates.

Timothy Bates serves as Distinguished Professor of Labor and Urban Affairs at Wayne State University. He has written six books on entrepreneurship and local economic development, the most recent of which is Race, Self-Employment, and Upward Mobility: An Illusive American Dream*, published by Johns Hopkins University Press. Prior to his Wayne State appointment, he was Chair of the Urban Policy Analysis Graduate Program and Professor of Policy Analysis at the New School for Social Research. In 1999, Bates served as Floyd B. McKissick Visiting Scholar at the University of North Carolina, Chapel Hill, Center for Urban and Regional Studies. He received his Ph.D. in economics from the University of Wisconsin.*

Table 1
Industry Distribution of Firms Invested in by MESBICs during 1993

A. Broad Industry Groups	Number	%
Farm, Forestry, Fishing, Mining	6	0.5
Construction	32	2.9
Manufacturing	73	6.6
Transportation, Communication	517	47.9
Wholesale	46	4.2
Retail	204	18.5
Finance, Insurance, Real Estate	15	1.4
Selected Services	208	18.9
TOTAL	1101	100.0

B. Selected Specific Industries with Numerous MESBIC Investments	Number
Taxi	464
Grocery	54
Restaurant	80
Laundry	57
TOTAL	655

Source: Form 1031 data from internal SBA records.

Table 2
MESBIC Industry Income Statement, 1993 (mean values for 101 active MESBICs)

	$Amount ($thousands)	% of total assets (calculated firm by firm)
A. Revenue		
1. Interest on business loans	409	5.73
2. Dividend income	4	0.20
3. Misc. business income	7	0.18
4. Total of 1, 2, and 3	420	6.11
5. Interest on cash assets	28	0.84
6. Other income	21	0.38
7. Total revenue	469	7.33
B. Expenses		
1. Cost of funds	148	1.53
2. Labor costs	122	3.15
3. Misc. operating costs	99	2.14
4. Provision for loan loss	42	1.62
5. Total expenses	411	8.43
C. Profit		
1. Net pretax income	58	-1.10
2. Income taxes	3	.08
3. Net income after taxes	55	-1.18
4. Realized gain on securities	-58	-1.52
5. Profit net of securities losses	-3	-2.70

Source: Internal SBA records

Table 3
MESBIC Industry Consolidated Balance Sheet and Income Statement, 1987
(all values are means expressed as a percentage of total assets)

ASSETS	Active firms (%)	Liquidated firms (%)	Surrenders (%)
1. Debt in small firms	53.9	56.1	23.4
2. Equity in small firms	10.1	12.0	14.0
3. Cash, money-market investments	29.7	25.1	58.6
4. Misc. assets	6.3	6.8	4.0
Total assets	100	100	100
LIABILITIES + NET WORTH			
Total Liabilities	19.5	23.7	15.9
NET WORTH			
1. Private capital investment	43.3	46.9	61.5
2. 3% preferred stock sold to SBA	40.2	36.1	32.8
3. Undistributed earnings	(3.0)	(6.4)	(10.2)
Total net worth	80.5	76.4	84.1
PROFIT and LOSS			
1. Total revenue	9.4	8.9	7.7
2. Total expense	7.7	8.6	7.2
3. Net income before tax	1.7	0.3	0.5
4. Net income after taxes	1.1	0.0	(0.2)
5. Realized gain (loss) on securities	2.1	(0.3)	(0.9)
N	61	46	12

Source: SBA internal records

Table 4
Explaining MESBIC Survival over the 1987-1994 Period

A. Logistic/regression analysis of patterns of survival and failure among MESBICs.

Variable	(1) Regression coefficient (std. error)	(2) Regression coefficient (std. error)	(3) Regression coefficient (std. error)
Intercept	-.366 (.326)	-.353 (.331)	.890* (.453)
Capital gain	--	--	11.555* (5.309)
Cost	--	--	-8.411* (4.008)
MESBIC size	.00013* (.00007)	.00013* (.00007)	--
Liquidity	.849* (.515)	.854* (.516)	--
Loan loss	--	-2.53 (1.527)	--
n=107			
-2 Log L (Chi square)	137.7(8.5)	137.7(8.6)	138.0(8.3)

*Statistically significant, five percent significance level

References

Bates, Timothy, "A Review of the Small Business Administration's Major Loan Programs," P. Horvitz and R. Pettit (Eds.), *Sources of Financing for Small Business*, Greenwich, CT: JAI Press, 1985, pp. 211-23.

Bates, Timothy, *Banking on Black Enterprise*, Washington, D.C.: Joint Center for Political and Economic Studies, 1993.

Bates, Timothy, "An Analysis of the SSBIC Program: Problems and Prospects" (Research contract 94-001-01 final report), Washington, D.C.: U.S. Small Business Administration, 1996.

Bates, Timothy, "The Minority Enterprise Small Business Investment Company Program", *Urban Affairs Review*, Vol. 32, No. 5, May 1997, pp. 683-703.

Bates, Timothy, "Response: Michael Porter's Conservative Urban Agenda Will Not Revitalize America's Central Cities: What Will?," *Economic Development Quarterly*, Vol. 11, No.1, February 1997, pp. 39-44.

Hansley, J., "The Applicability of the Small Business Investment Company Model for Southern Africa" (Final Report), Washington, D.C.: Agency for International Development, 1992.

Porter, Michael, "The Competitive Advantage of the Inner City," *Harvard Business Review*, Vol. 73, No. 3, June 1995, pp. 55-71.

Porter, Michael, "New Strategies for Inner-City Economic Development," *Economic Development Quarterly*, Vol. 11, No.1, February 1997, pp. 11-27.

U.S. Bureau of the Census, "Survey of Minority-Owned Business Enterprises," Washington, D.C.: U.S. Department of Commerce, 1997.

Social Capital and the Cost of Business Loan Contracting

Brian Uzzi and Ryon Lancaster
Northwestern University

Social capital is the stocks of social trust, norms, and networks that persons draw on to solve common problems, and the denser these networks, the more likely that members of a community will cooperate for mutual benefit. Drawing on embeddedness theory from sociology, we argue that embedding commercial transactions in social attachments and networks builds social capital, which in turn should reduce the need for writing contracts and monitoring loan performance — a savings that is shared by the bank and firm in the form of lower spreads and less restrictive loan covenants. To develop our framework, we conducted original fieldwork at 11 Chicago banks and then examined its representativeness using statistical analyses of two national random samples of small-to-medium-sized business. We find that firms tied to their lender through embedded ties, and a network of bank ties that is composed of a complementary mix of embedded and arm's-length ties, are less likely to have collateral taken, pay large spreads, or both as conditions of their loans.

The banker-client relationship is the backbone of community banking. Midcap firms lack the financial wherewithal and slack resources that large firms possess and tactically employ to widely shop financial markets for attractive bank financing. Consequently, small-to-medium-sized firms typically limit their search for capital to local financial institutions, which relative to the localized borrower have more knowledge about capital markets and finance. It has been argued that through close relationships with their local bankers, community-based madcap firms can overcome these search and information disadvantages in two ways. They gain better access to the specialized financial knowledge of

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bankers as well as transmit more private information about their firm to bankers — information that is difficult to communicate through public channels such as certified financial statements or analysts (Beveridge, 1985; Lento, 1994; Petersen and Rajan, 1994; Immergluck and Mullen, 1998; Padhi, Woosley, and Srinivasan, 1999; Uzzi, 1999). A key explanation for these relationship benefits is that local banks build up *social capital* with local corporate borrowers (Putnam, 1993; Uzzi, 1999). The World Bank defines social capital as "the norms and social relations embedded in social structures that enable people to coordinate action to achieve desired goals." This suggests that much of the value of social capital is not embedded in formal governance arrangements such as contracts or hostage taking but in informal governance arrangements that can potentially replace formal governance mechanisms that are more costly to monitor and enforce (Macneil, 1980; Granovetter, 1985; Uzzi, 1997; 1999).

In this paper, we develop and test an explanation of how social capital provides governance benefits for firms and banks engaged in lending transactions. We examine how social capital between the firm and the bank affects the governance costs incurred in borrowing, specifically how social capital increases or decreases the likelihood that the firm has to pledge collateral and/or pay a high spread on a loan.

To contribute to this new area of financial research, this study draws inferences from multiple original data sources and qualitative and quantitative analyses to better specify the embeddedness framework and to increase descriptive and inferential validity. First, we conducted fieldwork at 11 banks to better understand embeddedness' properties and functions, illustrate causal mechanisms, and provide an empirical basis for conjectures about embeddedness' effect on governance. Second, we analyzed two national samples of U.S. firms, linked by a repeated survey design, to statistically test our framework's representativeness.

Social Embeddedness Theory

Social embeddedness theory explains how social capital arises in commercial relationships and provides governance benefits in financial exchanges (Granovetter, 1985; Uzzi, 1997). It holds that mutual dependencies or ambiguity prompt exchange partners to embed their exchanges in social attachments that furnish common expectations of governance. A social attachment is an affiliation of mutual interests and fidelity that develops when actors enact behavior that is culturally associated with familiar, noncommercial activities and exclusively shared with select others (Blau, 1964). Social attachments within which commercial exchanges are embedded include social gatherings, dining, entertainment, sports competitions, shows, or other events enacted collectively. The embedding of commercial transactions in social attachments provides governance over business dealings by associating the routines used to govern commercial transactions with the protocols of exchange that are used among actors who come to know each other well (Granovetter, 1985). These protocols of exchange reside in preexisting social structures and are learned and internalized through socialization so that they become espoused norms of proper behavior that provide order and anticipated rewards between exchange partners. Thus, by promoting shared expectations of trust and reciprocity between transactors that reduce the degree to which formal control arrangements are preferred, embeddedness builds social capital which enables resources that are otherwise used for formal governance mechanisms to be serviced more productively (Putnam, 1993; Fukuyama, 1995).

Social embedding can also create new value in the relationship by facilitating the transfer of private information, which can further strengthen expectations of trust and reciprocal obligations (Uzzi, 1997). In contrast to public information, private information refers to knowledge that is not publicly reported or accessible through standard market means such as company reports, audited financial statements, regulatory filings, bid and ask prices, price quotes, or other forms of prepared information. It references the firm's strategy, distinctive competencies, undocumented product capabilities, management conflicts, succession plans, or other critical supplier or customer dependencies that can furnish prospects for exchange partners to create mutual benefits by selectively matching their capabilities or by motivating Pareto improved solutions to transacting problems. Moreover, because private information is difficult to benchmark in a competitive market, actors typically share it with exchange partners they trust to protect it from misappropriation (Udell, 1999). This can increase the value of exchanges based on private information because transactors outside the relationship lack access to the private information or resources needed to imitate the firm's competitive advantage. In contrast, while public information is a vital source of value creation for other reasons, it is more easily imitated by rival firms that can access similar information available in the public domain. Thus, social embeddedness can create governance benefits relative to formal means by enabling a preexisting system of social governance to be serviced in a commercial context and by motivating Pareto improved solutions to exchange problems.[1]

Anecdotal evidence suggests that investment banks tied to their clients through embedded rather than arm's-length ties access more classified client information and develop more customized client products (Eccles and Crane, 1988; Baker, 1994). Statistical analyses, however, have shown that embedded ties have no effect on a firm's ability to acquire credit but do lower its interest rate on a loan (Uzzi, 1999). At the level of the network rather than the dyad, work suggests that a network composed of different types of ties permits a fuller range of action than is possible if either type of tie existed alone. In markets where loan provisos may be dispersed among banks with varying capabilities, a mix of ties may enable firms to both "shop the market" for novel provisos *and* collaborate with their close lenders to reduce governance costs that can arise when adopting novel yet unfamiliar loan stipulations. Consistent with this argument, small businesses that had networks with a complementary mixture of embedded and arm's-length ties were less credit-rationed and paid lower interest rates on loans (Uzzi, 1999). These results suggest that embeddedness can produce important stocks of social capital that banks and borrowers capitalize on to reduce the governance costs of their loans. In the next section, we report on field research that helps clarify how these social capital benefits translate in reduced governance costs on loans.

Field Research Findings[2]

We found that midmarket banks and firms face specific informational and behavioral governance problems in loan agreements that promote embeddedness and make social capital highly productive for community banks. Midcap firms depend heavily on banks for both capital and financial advice because unlike large corporations, they normally lack significant retained earnings, access to money markets, or the financial expertise needed to insure the bank's credibility. An RM explained, "In the Fortune 500, they know what price to pay and what information qualifies them for different alternatives. Midmarket companies can't afford a treasury department, let alone three finance people. So, imperfect awareness means most conversations are negotiations. The entrepreneur says, 'I need X.' The bank says 'No, you need Y, and we'll structure it Z.'" "They're somewhat suspicious," stressed another RM, "lots of entrepreneurs feel like, 'we're just a small guy, they're a big bank.'"

Although midmarket banks have comparatively deeper pockets of resources and expertise, they also face exchange problems. Because most midmarket firms are not debt-rated or publicly-certified, public information about the firm is often "opaque." A typical view of RMs was, "Take a company and based on different accounting treatments you have different looking balance sheets. If all you did was look at the numbers, you would make different decisions on the same company!" Also, the bundling together of the entrepreneur's personal life and the professional activities of the firm also make it difficult for RMs to assess the firm's creditworthiness and motivations with standard, prepared data. One RM revealed, "One of the challenges as a banker in this segment of the market is being trusted. [I] may have to listen to, 'I want to divorce my wife,' or heart-wrenching things like — 'my son's a knucklehead, my daughter's a ditz,' or 'if I do that deal my wife's going to leave me.' So, you really must be able to have those kinds of conversations to be successful and those are the kinds of conversations that frequently entrepreneurs will need RMs to have with them."

Consistent with the social embeddedness framework, we found that banks and firms attempted to redress the above governance problems by embedding their commercial transactions in social attachments, even though well-conceived contracts might make social ties superfluous. Typical accounts focused on how social embedding injected protocols of trust and reciprocity that add predictability to the commercial transaction. One RM said, "A relationship gets the client to perceive me differently. I've found that if you can get clients to invest in time outside of the office, they've got more of an emotional investment in your relationship, [a] bond that goes outside a pure business relationship. So, when they're considering your bid, they've got an emotional attachment with me that they don't have with LaSalle, American, or Harris Bank, which should help me keep the business. It's part of mitigating risk from my perspective."

We found that social capital produced three distinct governance benefits. First, preferences for formal control mechanisms were ostensibly eliminated — freeing up resources for other productive uses. These regulative benefits followed from embeddedness'ability to instill self-enforcing motives for cooperation and trustworthiness, which are themselves reinforced by anticipated benefits. An RM stated, "If I develop a relationship, it'll be easier for me to ask you penetrating questions. It'll also be more difficult hopefully, for you [the client] to screw me in a deal because you'll be hurt [emotionally] and feel that there's something of value, which you would jeopardize. As a bankerbusinessperson, the more relationship there is the less I'll be viewed as commodity." By contrast, arm's-length ties held up these benefits. "It goes both ways," said a RM of arm's-length relationships, "I have a customer that I'm really getting tired of, it's just not a very close relationship, it's very transactionally-oriented. They're giving us the information and talking to us when they need us. Otherwise, they keep us in the dark. That's just not good. But they need us and our management and our bank to believe in them. At some point, we're going to say, [as he gestured as if holding a scale in his hands], 'Is it worth doing business with these guys?'"

Second, embeddedness was associated with efficient information search, which lowered transaction costs. In contrast to arm's-length ties, this efficient information search was not related to the costs of information search across separate relationships. Rather it was related to the costs of identifying and gathering information relevant to transactions *within* the relationship. In this sense, embedded ties appeared to increase the depth, rather than breath, of information search, enabling access to different kinds of competitive information. For example, RMs revealed that an embedded tie reduced the number of separate relationships they needed to contact in order to check the credibility of information. One RM said, "I call one person and I deal with them as opposed to having to call three people at the firm. It lowers my transaction costs."

Third, embedded ties facilitated the transfer of *private* knowledge. This consequence is especially noteworthy because the value and need for private information can often arise *after* contractual stipulations have delimited which actions are compulsory — reducing motives to voluntarily share proprietary information. "These are not publicly traded companies," said an RM," so the closer our relationship the more willing he is to share with me whether his long-range goal is in jeopardy, if he's getting divorced, bringing his kids into the business, or buying out his partner. Is he comfortable with the status quo?"

Finally, our findings suggest that embedded ties not only can create unique governance benefits for banks and firms, but also *motivate Pareto improved solutions to how those benefits are distributed*. This property is significant in lending because the value generate by governance benefits is primarily allocated at the bank's discretion, which conventional arguments say provide banks with information monopolies over small firms that they exploit (Angbazo *et al*, 1998). A typical method of Pareto improvements used by bankers was to offer their embedded ties lower premiums for at least the first year of the loan —

reserving the right to widen the premium only if the firm failed to maintain *its* projected performance level, which disagreed with the bank's forecast. This simple governance structure gives the firm special low cost financing during the beginning of the loan — the period of highest interest returns for bank. It also suggests that embeddedness motivates Pareto improved solutions because both the bank and firm potentially gain above what they would if a standard governance structure of a flat spread was applied. The firm is spurred on to increase its efficiency to maintain the special rate — actions that make firms and banks better off, and only make banks worse off for one year if the firm's estimate is incorrect. In the following citation, a lead RM explained the nature of this process, noting particularly how the governance benefits of embeddedness are mutually shared. "Because we knew this guy [I said]…'Tell you what we'll do: We'll give you a price of X today. We'll base our pricing as if those expenses were not in your financial statements. But after twelve months, if it's all flushed through you will continue on in this price level. If you don't, boom, your pricing will go up.' So, because of the relationship, because we knew the guy and we really believed in him and trusted him, we gave him the benefit of the doubt on the pricing for the first year. He has to continue to perform or it goes up. So, that's a way we would sort of marry the two, the objective and the subjective, if you will."

These findings suggest that *the greater the degree to which bank-firm transactions are embedded in social attachments*, the greater the borrower's social capital, which should decrease the need for the bank to monitor and enforce the loan agreement through formal means. Two quantifiable indicators of this effect are whether banks take collateral and the size of the premium on the loan (Carruthers and Halliday, 1997; Spulber, 1999). Thus, *the greater a borrower's social capital (as measured by the degree to which it embeds its commercial transactions with its bank in social attachments), the less likely it is to pledge collateral, pay heavy premiums, or both as conditions of a loan.*

While we have focused on the relative advantages of embedded versus arm's-length ties between a bank and a firm engaged in loan deal, our argument also addresses how the structure of a firm's banking network can affect its social capital. Conventional financial wisdom argues that firms optimize their borrowing potential by developing an expansive banking network of arm's-length ties (Mintz and Schwartz, 1985; Williamson, 1988). Extending previous work, we argue that network benefits depend more exactly on the *complementarity* among the types of ties in a firm's network rather than the size (Baker, 1990; Uzzi, 1996). Complementarity refers to the notion that the characteristics of different types of ties can reinforce each other's strengths while compensating for each other's weaknesses so that a fuller range of action is possible than if either tie existed alone. By analogy, the concept of network complementarity builds on portfolio theory, which argues that the value of a portfolio's assets are not absolute but fluctuate with the mix of assets in the portfolio (Kolb and Rodriguez, 1996). In social networks, complementarity suggests that a tie's value is greatest when there are other ties in the portfolio that strengthen its benefits and compensate for its weaknesses, while the portfolio's value as a whole rises if the benefits of different ties do not coincide.

Theory and our fieldwork suggest that complementarity varies in the degree to which networks have an integrated mix of embedded and arm's-length relationships rather than one type of tie (Baker, 1990; Uzzi, 1999). On the one hand, arm's-length ties provide wide access to public information about prices and loan structures that is dispersed throughout the market, yet lack the distinctive cooperative mechanisms of embedded ties (Eccles and Crane, 1988; Baker, 1990). Consequently, a firm with a network of arm's-length ties may be highly effective at garnering public market information but is ill equipped to motivate a lender to collaborate on a deal that integrates innovative, but unfamiliar, data from other bankers. For instance, an RM recounted a situation in which a firm with an arm's-length tie to the bank approached him with competing bids. She noted that without an embedded relationship there was no motivation to negotiate for an integrative outcome, even if she was willing to offer the firm a price quote on the loan. She said, "Do I want to be doing this term loan when there are other banks out there?" I kind of said, "Why don't you ask one of your other banks? [So], I priced it too high, figuring one of the other banks will come in with a lower bid. I won't insult them by saying, 'No, I don't want the business,' but I know they're not gonna give me it."

On the other hand, while embedded ties effectively motivate risk sharing and integrative agreements *within* a relationship, they attend to local resources and historical solutions, limiting the firm's ability to recognize solutions and resources in the market. Consequently, a firm with a network of only embedded ties risks becoming insensitive to innovations available at other banks. This can be problematic in banking markets where it is infeasible for any single bank to know the full scope of market prices or loan structures. This suggests that while embedded ties can create comparative advantages over arm's-length ties at the dyad level, their potential benefits are compromised if the firm's network lacks arm's-length ties to other banks. *Thus, the above lines of theory imply that an integrated mix of both types of ties, rather than the simple number of contacts, positively affects governance.*

We found inferential evidence that networks high in complementary create optimal governance benefits. Frequently, bankers noted that entrepreneurs used their arm's-length ties to gather public market information on loan structures or pricing, assembled this information, and then presented it to their close lender who incorporated the premium ideas into the deal. This also strengthened the embedded tie by keeping it market-sensitive and expanding its collaborative gains. In the example below, an RM recounts the dynamics of a recent deal in which he was one of the arm's-length banks in a firm's network. The RM noted how the entrepreneur used arm's-length ties to access market information and diverse expertise and then passed that information on to his embedded bank, which in turn used it to create a custom loan structure low in governance costs. He said, "Three banks were pitching on the same deal, and the company said, 'give us a creative idea on how you would structure this.'" We provided a very creative idea with term loans and revolving credit (factors affecting price and structure). They said, "We really like this structure but X has been our bank for 50 years and we don't want to pull the agency from them." When the term sheet came back from X bank, X bank had basically our term sheet with their name on it. The CFO laughed and said to me, "Look, your bank came up with the idea. So, we'd like to give you the first shot at our trust business or the private banking of the owners" (business worth less than the original deal). So, we gave the banking insight on the marketplace to the firm (but the firm made the deal with its close bank).

Thus, *the greater a borrower's social capital (as measured by the degree of complementary between embedded ties and arm's-length ties in the firm's network of bank relationships), the less likely it is to pledge collateral, pay heavy premiums, or both as conditions of a loan.*

Quantitative Data and Methods

We test the generalizability of the fieldwork with data from the National Survey of Small Business Finances, which was administered by the Federal Reserve Bank and the Small Business Administration (see Uzzi, 1999 for a description). We analyzed these data using the repeated survey design method, which pools together different samples of firms that are polled on the same items at different times. The technique is designed to "use the cumulated cross sections to analyze the size and stability of individual-level relationships" by dummy coding the different samples and then interacting the dummy variable with independent variables of interest (Firebaugh, 1997: 5). In our analysis, we included a dummy variable for Year and interactions between year and our embeddedness measures to uncover changes in the effects of embeddedness that might exist between the 1989 and 1993 data.

Dependent Variables: In order to test our hypotheses, we modeled the joint probability of the firm's likelihood of pledging collateral and/or paying a high premium on its most recent loan. We created an ordered three-category discrete variable that reflects the spectrum of governance cost on loans from best to worst from the firm's perspective. *Best deal* was defined as loans with no collateral and small premiums; *worst deal* was defined as loans with collateral and large premiums; and *intermediate deal* was defined as loans with collateral and a small premium, or with no collateral and a large premium. Large and small premiums were defined as above or below the medium premium for firms in the same sample (*i.e.*, 1989 or 1993). We also ran analyses with large and small premiums defined at the 75th and 25th percentiles to check for sensitivities to different specifications and found none.

Independent Variables: To develop valid measures of embeddedness that captured the ethnography's richness and yet were parsimonious enough for statistical analysis, we applied methods that look for convergence between theory on relationships and the narratives of interviewees (face validity) by asking RMs how embedded ties could be quantitatively measured and distinguished from other variables (discriminant validity) (Miles and Huberman, 1994; Bollen and Paxton, 1998). For instance, we probed RMs with inquiries such as, "If you wanted to determine if your colleague had a close tie with a client like the one we have been discussing, what quantitative information would you use?"

Embedded ties have been operationalized as the duration of the relationship and the multiplexity of the relationship (Dore, 1983; Marsden and Campbell, 1984; Gambetta, 1988; Iacobucci and Ostrom, 1988; Gulati, 1994; McAllister, 1995; Dyer 1999; Lazega and Pattison, 1999; Uzzi, 1999). Duration is the length of the relationship and multiplexity refers to the degree to which a single relationship has multiple dimensions — particularly business and personal dimensions because these counterparts can foster trust and a wider range of reciprocal obligations. In banking, the personal dimension of a multiplex tie often refers to whether the RM manages the entrepreneur's personal banking, which invites intimate dialogues that deepen social attachments. Consistent with theory, RMs independently suggested that duration and multiplexity were reasonable proxy measures of embedded ties. We measured *duration* as the log of number of years and *multiplexity* as the log of the number of business and personal bank services (log) used by the firm. Services included brokerage, leases, cash management, transfers, credit card processing, letters of credit, revolving credit, night depository, pension funds, and personal estate, trust, and retirement planning.

Our measure of network complementarity also relied on convergence among network theory on banking and face and discriminant validity. Research has shown that firms with networks of arm's-length ties tend to disperse their banking in small parcels among many banks, whereas firms with networks of embedded ties tend to consolidate their banking in a relationship, a finding consistent with our interview data. RMs said that banks were likely to share risks and collaborate with clients that consolidated their business with the bank because interaction and prospects for retention and new business were enhanced with these clients. RMs also stated that they typically supply public information on prices or structures to clients that did at least some business at the bank, but rarely for customers without at least an arm's-length tie (such as cold callers) because they must ration their time among certain customers. Baker (1990) showed that a Herfindahl index, a relative of the Gibbs-Martin index of social heterogeneity, parsimoniously summarizes in a single measure the distribution of different ties in a firm's ego-network, has high face validity, precedent in network studies of banking. Following Uzzi (1999), we defined this measure as $\sum(P_j^2)$, where j goes from 1 to n banks and (P_j) is the share of the firm's banking business that is dedicated to bank j. (P_j) is the sum of savings, checking, and line of credit accounts, which RMs use to indicate the level of business between a firm and a bank. Hence, if a firm apportions 70 percent of its transactions to one bank, 20 percent to a second bank, and the remaining 10 percent to a third bank, then its network complementarity score is equal to $[(.70)^2 + (.20)^2 + (.10)^2] = .54$. This index varies between 0.0 and 1.0. Near zero, a firm's network is composed of many arm's-length ties (low complementarity); near one, a firm's network is composed of one or a few embedded ties (low complementarity). An intermediate value of about 0.50 indicates that a firm has an integrated mix of embedded ties and arm's-length ties (high complementarity). A possible drawback of the measure is that it loses comparability across cases if there is a large variance in the size of firms' banking networks. In our sample, there are small differences in the size of networks. Moreover, we control for network size, measured as the number of institutions a firm uses for banking services. This measure correlates highly with key indices of network structure that our data do not allow us to directly construct and has been used to control for standard arguments about network structure and governance (Borgatti and Feld, 1994; Powell, Koput, and Smith-Doerr, 1996). Control variables used in this study are described elsewhere (Uzzi, 1999; Uzzi and Gillespie, 1999).

Statistical Results

Table 1 presents the results of our ordered three-category dependent variable. Models 3 through 5 display the baseline models of financial theory (Petersen and Rajan, 1994; 1995). These models indicate that the cost of governance arrangements on a loan are positively associated with the loan term, fixed rate loans, and debt ratio, and negatively associated with the Prime Rate, age of firm, and cash in retained earnings. These results offer consistent if uneven support for financial perspectives on governance before embeddedness is taken into account. The year indicator variable suggests that 1993 firms were significantly less likely to pledge collateral and pay larger premiums than 1989 firms as a condition for the loan. However, the interaction terms between year and our embeddedness variables were statistically non-significant, aside from multiplexity's effect on the spread. While the effects suggest that no differences exist in the coefficients between periods, a finding most likely due to the similar economic conditions in each period, the dissimilarities in the composition of the two samples do provide additional evidence in support of the generalizability of embeddedness' main effects.

Consistent with our expectations about the effect of social capital, the duration and multiplexity of the bank-firm relationship *increases* the probability of obtaining a best deal and decreases the probability of incurring a worst deal in the nested models and the full model (2-sided test at $P < .01$). Similarly, as hypothesized, network complementary *increases* the probability of receiving a best deal and decreases the probability of incurring a worst deal. The linear coefficient of network complementarity is negative and significant and the quadratic term is positive and significant in line with our hypothesis that a network with a complementary mix of embedded and arm's-length ties provide premium governance benefits. That is, firms with predominantly arm's-length ties and those with predominantly embedded ties get worse deals than those with a complementary network utilizing both embedded and arm's-length ties.

These inferences are supported by the results of network size, which present the conventional argument that network size is positively related to governance benefits. Contrary to conventional arguments but consistent with the embeddedness approach, the models show that network size is negatively related to governance benefits. This suggests that those firms with large networks lose *rather than gain* governance benefits. A large number of ties may expand a firm's capacity to identify potential deals but the governance characteristics of those deals are lower. These two findings suggest that embeddedness not only promotes governance benefits for individual elements of loans, but that it also promotes governance benefits for the entire loan package.

The results also indicate that embeddedness has a proportionately larger effect on reducing the probability of a worst deal than on increasing the probability of a best deal, in terms of both the probability of occurrence (*i.e.*, the y-intercept) *and* magnitude of effect (*i.e.*, slope). Thus, while banks can share the benefits of embeddedness by refraining from imposing worst deal contracts and granting best deal contracts, they are empirically more likely to share governance benefits through the former course of action. This effect is consistent with the inference that embeddedness promotes Pareto improved deal-making, rather than the financial theory argument that banks use relationships to exploit information monopolies over firms. Banks appear likely to mutually share the governance benefits of embeddedness in ways that make firms better off but themselves no worse off. Presumably, a decrease in the probability of giving a firm a worst deal heightens the bank's risk of underwriting an unprofitable loan, but only in case of foreclosure. In contrast, sharing the benefits of embeddedness for best deals, while still a statistically significant outcome, more immediately affects the loan's income streams. Thus, midcap firms avert the worst case scenario that can arise as a consequence of their unilateral dependence on banks. Our inference is that these Pareto improved outcomes would not occur in the absence of embeddedness. Embeddedness improves governance and motivates attempts to productively mutually redistribute its benefits.

Discussion

In contrast to the current literature on community development, which focuses on how formal governance devices such as contracts reduce credit costs, we qualitatively and quantitatively examined the role of social capital in lowering capital costs using a social embeddedness approach. Consistent with our embeddedness argument, banks and firms that rely on embedded ties appear to gain benefits that surpass formal mechanisms, even if they work in concert with formal mechanisms. The fieldwork suggested that embedded ties create expectations of trust and reciprocity that facilitate governance by eliminating the need for costly formal governance arrangements — thereby freeing resources for other productive uses. Embeddedness also promotes private knowledge transfer, which communicates where the distinctive competencies of the firm reside, enabling network partners to find Pareto improved solutions to exchange problems. Specifically, statistical analyses showed that firms tied to their lender through embedded ties and that have a banking network with a complementary mix of embedded and arm's-length ties are less likely to have collateral taken or pay high premiums as a condition of a loan. The benefits of embedded ties can become self-compromising at the network level if a firm maintains only embedded ties because they limit access to novel information in the market, even if they encourage open bilateral exchange. This criticism of networks suggests that one liability of embeddedness is that the benefits of its self-organizing governance may also be a source of compromise that can undermine its advantages.

These results suggest that social capital is not as straightforward a benefit as has been thought (Putnam, 1993). Having more social capital within a community is important, but if the community loses access to information within the larger lending market, the returns to social capital reverse. Too much social capital prevents businesses from knowing about new governance arrangements used by other banks because of their over-embeddedness with local community banks or branches, and so end up having higher costs on the loan than they would if they also had arm's length relationships with banks outside of the community. This implies that small- and medium-sized businesses need access to both local sources of capital, who know the local conditions and local entrepreneurs, but also access to the larger lending market which provides access to market information. Thus, community development is fostered both by local banks with high levels of social capital within the community and giving firms access to banks outside the community for greater access to market information.

These results have important implications for understanding the role of capital in community development. The recent trend in consolidation of the banking industry threatens those local banks that are more likely to lend in their local community (Immergluck and Mullen, 1998; Squires and O'Connor, 1998). While consolidation does not necessarily reduce the ability of small business to acquire capital (Strahan and Weston, 1996), it can reduce the ability of firms to access credit from a number of banks, the costs of credit could increase, adversely affecting both firms and banks by not applying Pareto optimal governance structures on loans.

Recent research on the use of credit scoring technologies used by large banks has shown that these technologies increase the access of credit from large banks for small and mid-sized firms, and make these loans more attractive to large banks (Peek and Rosengren, 1998). Our results indicate that this decreases the cost of credit for firms that are able to access larger institutions. However, there is a danger from these practices becoming too widespread, since the benefits of complementary networks would be eliminated if there were not the same access to private information that is difficult when credit scoring is used, because of its reliance on public and standardized information.

Finally, the economic benefits for embedded ties might not be the same for all entrepreneurs, especially women and minorities who might not be able to develop the same social relations with banks that white men are able to. As Uzzi (1999) argues:

> The "scripts" that white male RMs use to forge ties with white male entrepreneurs are "coded differently by minorities and women because relationship-building involves contextually defined activities. These differences may therefore unintentionally hamper the formation of embedded ties between groups that use alternative scripts. Thus, one tentative conclusion is that prejudices against an out-group may explain only part of the discrepancy in lending because collaboration among in-group members improves access for in-group members, even if out-group bias does not exist. Thus, if these provisos are correct they suggest that in-group effects may be as important as out-group effects in explaining market stratification. They also suggest that the systems lenders use to select and train RMs in relational practices can improve minorities' access to credit, as well as lenders' ability to attract the business of undervalued firms. (1999: 801-802).

Thus, while the use of embedded ties and complementary networks might be advantageous to entrepreneurs seeking credit, these same relations might also hinder members of under-represented groups. Using formal rating procedures, such as credit scoring to prevent this effect might also fail in bringing access to capital and credit, might still disproportionately affect minorities (Ladd, 1998). However, the value of informal governance arrangements in motivating Pareto improved outcomes suggests that it is better for banks, and the firms with whom they trade, if they recruited RMs from these under-represented groups and modified their training with an eye to potential in-group bias, than if they adopted only formal rating procedures without using relationships to access private information.

Brian Uzzi is Associate Professor of Management and Economic Sociology at Northwestern University's Kellogg Graduate School of Management. He studies the relationship between social structure (networks, institutions, and status orders) and economic behavior. Currently, he is examining how the social ties and networks of entrepreneurs affect their corporate financing behavior and how networks among artists create industries without firms in creative arts industries, particularly the American broadway musical. His book, Athena Unbound: The Advancement of Women in Science and Technology, *examines the relationship between social networks and career success in the hard sciences (Cambridge University Press, 2000). His work on social networks and the role of relationships in markets appears in the American Sociological Review (1996; 1999). He holds an M.S. in industrial administration and psychology from Carnegie Mellon University and a Ph.D. in sociology from the State University of New York at Stony Brook.*

Ryon Lancaster is a doctoral student in sociology and management at Northwestern University. His research interests include the relationship between social structure and economic activity and the origins of social institutions. His dissertation is on the reorganization of the Catholic Church and related institutions in the twelfth century.

Table 1
Ordered Probit Estimates of the Effects of Embeddedness on Joint Loan Governance Costs.
SSBF 1989 and 1993. Pooled Repeated Survey Design.

Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Embeddedness									
Duration of bank-firm tie	-.150***	-.103**				-.093**			-.092**
	(.027)	(.040)				(.031)			(.031)
Multiplexity of bank-firm tie	-.191***	-.134***					-.100**		-.107**
	(.033)	(.039)					(.036)		(.036)
Network complementary	-1.726***	-2.612***						-.856*	-.829*
	(.374)	(.537)						(.417)	(.420)
Network complementary sqrd	1.391***	2.381***						.849*	.823**
	(.306)	(.461)						(.332)	(.335)
Network size	.036**	.039**				.038**	.047***	.056***	.058***
	(.013)	(.013)				(.012)	(.013)	(.013)	(.013)
Year * Duration		-.080							
		(.054)							
Year * Multiplicity		-.170*							
		(.070)							
Year * Network comp.		1.170							
		(.737)							
Year * Network comp. sqrd.		-1.383*							
		(.600)							

Table 1 *(continued)*
Ordered Probit Estimates of the Effects of Embeddedness on Joint Loan Governance Costs.
SSBF 1989 and 1993. Pooled Repeated Survey Design.

Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Organization Characteristics									
Employment size					-.038	-.059**	-.045*	-.058**	-.046*
					(.020)	(.021)	(.021)	(.021)	(.022)
Age of firm					-.007***	-.004**	-.007***	-.007***	-.004*
					(.001)	(.001)	(.001)	(.001)	(.001)
Sales change					.000	-.000	-.000	-.000	-.000
					(.002)	(.002)	(.002)	(.002)	(.002)
Corporation (0/1)					.065	.058	.061	.067	.057
					(.056)	(.056)	(.056)	(.056)	(.056)
Cash on hand					-.025**	-.025**	-.026***	-.024**	-.023**
					(.008)	(.008)	(.008)	(.008)	(.008)
Size of deposit accounts									
With lender					-.020	-.020	-.019	-.020	-.019
					(.011)	(.011)	(.011)	(.011)	(.011)
Debt ratio					.061*	.049	.057*	.056	.051
					(.029)	(.029)	(.029)	(.029)	(.029)
Loan Characteristics									
Prime rate				-.276***	-.272***	-.269***	-.272***	-.274***	-.270***
				(.029)	(.029)	(.029)	(.029)	(.029)	(.029)
Loan term				.002***	.002***	.002***	.002***	.002***	.002***
				(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
Fixed rate loan (0/1)				.424***	.357***	.355***	.340***	.354***	.348***
				(.045)	(.047)	(.047)	(.047)	(.047)	(.047)

Table 1 *(continued)*

Ordered Probit Estimates of the Effects of Embeddedness on Joint Loan Governance Costs.

SSBF 1989 and 1993. Pooled Repeated Survey Design.

Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Market Characteristics									
Bank competition			.077	.070	.049	.053	.050	.047	.049
			(.047)	(.048)	(.048)	(.048)	(.048)	(.048)	(.048)
MSA location (0/1)			-.073	-.031	-.000	-.017	-.007	-.007	-.025
			(.051)	(.052)	(.053)	(.054)	(.053)	(.053)	(.054)
Year (1=1993)	-.363***	.040	-.204***	-.723***	-.683***	-.695***	-.750***	-.687***	-.757***
	(.048)	(.233)	(.047)	(.080)	(.082)	(.082)	(.085)	(.082)	(.085)
Cut Point 1	-2.125	-1.912	-1.093	-3.224	-3.887	-3.993	-3.917	-3.831	-4.054
	(.125)	(.160)	(.212)	(.335)	(.352)	(.358)	(.354)	(.363)	(.370)
Cut Point 2	-.661	-.440	.348	-1.705	-2.336	-2.437	-2.359	-2.272	-2.491
	(.121)	(.158)	(.212)	(.332)	(.348)	(.354)	(.350)	(.360)	(.366)
Number of observations	2,805	2,805	2,829	2,767	2,763	2,740	2,763	2,763	2,740
Chi-squared	123.58	143.17	55.37	269.69	359.49	375.57	377.70	380.25	393.52

*p < .05 ; **p < .01; ***p < .001 (two-tailed tests). Coefficients reported with standard errors in parentheses. Estimates for 2 digit SIC codes are included in equation but not shown. The dependent variable has 3 categories: 1 = Loan has no collateral and a small spread; 2 = Loan has either no collateral and a large spread or collateral and a small spread; or 3 = Loan has collateral and a large spread.

Notes

[1] While these arguments suggest that embeddedness can provide governance benefits, current reasoning holds that arm's-length ties, which are low in embeddedness, generate governance benefits by increasing and actor's access to public information. The strategic implication is that actors that construct expansive networks of arm's-length ties can reduce their bilateral dependence and costs of monitoring and enforcing agreements with less informed actors (Burt; 1997). Consistent with this argument, Mizruchi and Stearns (1994) reported that big firms with large networks of arm's-length ties to their banks gained better access to financing.

[2] See Uzzi (1999) for a complete description of the field methods.

References

Angbazo, Lazarus A., Jianping Mei, and Anthony Saunders. "Credit Spreads in the Market for Highly Leveraged Transaction Loans." *Journal of Banking and Finance*, 1998, 22, pp. 1249-1282.

Arrow, Kenneth J. "What Has Economics to Say About Racial Discrimination." *Journal of Economic Perspectives*, 1998, 12, pp. 91-100.

Baker, Wayne E. "Market Networks and Corporate Behavior." *American Journal of Sociology*, 1990, 6, pp. 589-625.

Baker, Wayne E. *Networking Smart: How to Build Relationships for Personal and Organizational Success*, New York: McGraw-Hill, Inc, 1994.

Beveridge, Andrew A. "Local Lending Practice: Borrowers in a Small Northeastern Industrial City, 1832-1915." *Journal of Economic History*, 1985, 45, pp. 393-403.

Blau, Peter M. *Exchange and Power in Social Life.* New York: Wiley, 1964.

Borgatti, Stephan P., and Scott L. Feld. "How to Test the Strength of Weak Ties Theory." *Connections*, 1994, 17, pp. 45-46.

Burt, Ronald S. "The Contingent Value of Social Capital." *Administrative Science Quarterly*, 1997, 42, pp. 339-365.

Carruthers, Bruce G., and Terence G. Halliday. *Rescuing Business: The Making of Corporate Bankruptcy Law in England and the United States,* Oxford: Oxford University Press, 1998.

Davis, Gerald F., and Mark S. Mizruchi. "The Money Center Cannot Hold: Commercial Banks in the U.S. System of Corporate Governance," *Administrative Science Quarterly*, 1999, 44, pp. 215-239.

Dore, Ronald. "Goodwill and the Spirit of Market Capitalism," *British Journal of Sociology*, 1983, 34, pp. 459-482.

Dyer, Jeffrey H. "Improving Performance by Transforming Arms-Length Relationships to Supplier Partnerships: The Chrysler Case," *Organization Science*, 1999.

Eccles, Robert G., and Dwight B. Crane. *Doing Deals: Investment Banks at Work,* Boston, MA: Harvard Business School Press, 1988.

Firebaugh, Glenn. *Analyzing Repeated Surveys,* Thousand Oaks, CA: Sage, 1997.

Fukuyama, Francis. *Trust, Social Virtues and the Creation of Prosperity,* New York: Free Press, 1995.

Gambetta, Diego. *Trust: The Making and Breaking of Cooperative Relations,* London: Blackwell, 1988.

Granovetter, Mark. "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology*, 1985, 91, pp. 481-510.

Gulati, Ranjay. "Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances," *Academy of Management Journal*, 1994, 38, pp. 85-112.

Iacobucci, Dawn, and Amy Ostrom. "Commercial and Interpersonal Relationships; Using the Structure of Interpersonal Relationships to Understand Individual-to-Individual, Individual-to-Firm, and Firm-to-Firm Relationships in Commerce," *International Journal of Research in Marketing*, 1996, 13, pp. 53-72.

Immergluck, Daniel and Erin Mullen. *Getting Down to Business: Assessing Chicago Banks' Small Business Lending in Lower-Income Neighborhoods,* Woodstock Institute, 1998.

Kolb, Robert W., and Ricardo J. Rodriguez. *Financial Markets,* Cambridge, MA: Blackwell Publishers, Inc, 1996.

Lazega, Emmanuel, and Philippa E. Pattison. "Multiplexity, Generalized Exchange and Cooperation in Organizations: A Case Study," *Social Networks*, 1999, 21, pp. 67-90.

Lento, Rochelle. "Community Development Banking Strategy for Revitalizing Our Communities," *University of Michigan Journal of Legal Reform,* 1994, 27, pp. 773-812.

Macneil, Ian. *The New Social Contract,* New Haven, Conn.: Yale University Press, 1980.

Marsden, Peter V., and Karen E. Campbell. "Measuring Tie Strength," *Social Forces*, 1984, 63, pp. 482-501.

Mayer, Martin. *The Bankers: The Next Generation*. New York: Truman Talley Books/Dutton, 1997.

McAllister, Daniel J. "Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations," *Academy of Management Journal,* 1995, 38: pp. 24-59.

Mintz, Beth, and Michael Schwartz. *The Power of Structure of American Business,* Chicago: The University of Chicago Press, 1985.

Mizruchi, Mark S., and Linda B. Stearns. "Money, Banking, and Financial Markets," In Neil J. Smelser and Richard Swedberg (eds.), *Handbook of Economic Sociology*, pp. 313-341. Princeton, NJ: Princeton University Press, 1994.

Padhi, Michael S.; Lynn W. Woolsey, and Aruna Srinivasan. "Credit Scoring and Small Business Lending in Low- and Moderate- Income Communities," In Jackson L. Blanton, Alicia Williams, Sherrie L.W. Rhine (eds.), *Access to Capital and Credit: A Federal Reserve System Research Conference Proceedings,* 1999.

Peek, Joe and Eric S. Rosengren. "The Evolution of Banking Lending to Small Business," *New England Economic Review*, 1998, 2, pp. 27-36.

Petersen, Mitchell A., and Raghuram G. Rajan. "The Benefits of Lending Relationships: Evidence from Small Business Data," *The Journal of Finance*, 1994, XLIX, pp. 3-37.

Petersen, Mitchell A., and Raghuram G. Rajan. "The Effect of Credit Market Competition on Lending Relationships," *Quarterly Journal of Economics*, 1995, 110, pp. 407-443.

Powell, Walter W.; Kenneth W. Koput, and Laurel Smith-Doerr. "Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology," *Administrative Science Quarterly*, 1996, 41, pp. 116-145.

Putnam, Robert D. *Making Democracy Work: Civil Traditions in Modern Italy*, Princeton, NJ: Princeton University Press, 1993.

Rogers, David. *The Future of American Banking: Managing for Change*, New York: McGraw-Hill, Inc., 1993.

Scott, Richard W. *Institutions and Organizations*. Thousand Oaks, CA: SAGE Publications, 1995.

Smelser, Neil J., and Richard Swedberg. "The Sociological Perspective on the Economy," In Neil J. Smelser and Richard Swedberg (eds.), *The Handbook of Economic Sociology*, pp. 3-26. Princeton, NJ: Princeton University Press, 1994.

Spulber, Daniel F. *Market Microstructure*. Cambridge: Cambridge University Press, 1999.

Squires, Gregory D. and Sally O'Connor. "Access to Capital: Milwaukee's Small Business Lending Gaps." In Jackson L. Blanton, Alicia Williams, Sherrie L.W. Rhine (eds.), *Access to Capital and Credit: A Federal Reserve System Research Conference Proceedings*, 1999.

Stinchcombe, Arthur L. "Contracts as Hierarchical Documents," In Arthur L. Stinchcombe and Carol Heimer (eds.), *Organizational Theory and Project Management*: pp. 121-171. Oslo: Norwegian University Press, 1985.

Strahan, Philip E. and James Weston, "Small Business Lending and Bank Consolidation: Is There a Cause for Concern?" *Current Issues in Economics and Finance*, 1996, 2(3).

Udell, Gregory F. "The Small Business Lending Relationship." In Jackson L. Blanton, Alicia Williams, and Sherrie L. W. Rhine (eds.), *Business Access to Capital and Credit: A Federal Reserve System Research Conference Proceedings*, pp. 503-514. Chicago: Federal Reserve Bank of Chicago, 1999.

Uzzi, Brian. "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations," *American Sociological Review*, 1996, 61, pp. 674-698.

Uzzi, Brian. "Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness," *Administrative Science Quarterly*, 1997, 42, pp. 35-67.

Uzzi, Brian. "Embeddedness and the Making of Financial Capital: How Social Relations and Networks Benefit Firms Seeking Financing" *American Sociological Review*. 1999, 64, pp. 481-505.

Uzzi, Brian and James Gillespie. "What Small Firms Get Capital and at What Cost: Notes on the Role of Social Capital and Banking Networks." In Jackson L. Blanton, Alicia Williams, Sherrie L.W. Rhine (eds.), *Access to Capital and Credit: A Federal Reserve System Research Conference Proceedings*, 1999.

Williamson, Oliver E. "Corporate Finance and Corporate Governance," *The Journal of Finance*, 1988, XLIII, pp. 567-591.

WEALTH CREATION

Discussion Comments
Peter Chinloy
American University

Introduction

An issue for social and economic policy is the degree to which all of the citizenry participates in the financial sector. The financial sector, particularly depository financial institutions, hold the medium of exchange and allow for the processing of transactions. Even if some of these transactions are migrating to electronic media such as the Internet, if there is a digital divide there will remain an underserved group. At the same time, technology may hold out the promise of a reduction in cost for dealing with the underserved.

Depository financial institutions also face regulations on making loans in areas where they take deposits or where there is a restriction in the debt capital market. If there are opportunities to invest in inner-city or majority-minority areas, then commercial firms would take advantage of them. Such business operations rarely exist, other than small retail stores. There are few job-producing activities, obliging residents to travel to other areas to work. Porter (1998) has identified inner cities as an untapped frontier for business opportunities, with estimates of disposable income and demand for consumer goods. Despite these opportunities, there appears to be a market failure, since firms continue to shun these areas. Lenders are afraid of default.

A response is to encourage debt and equity investment through a targeted mechanism. In an examination of such programs, **Bates** (2001) provides a series of strategic lessons. First, loans that are successful require collateral support, whether in a valued asset such as a taxi medallion or in cross-collateralization using a house. Second, the successful borrowers tend to be immigrants rather than the native born. While loan programs clearly cannot favor one group over another, this evidence raises questions about who should be targeted.

The process of making a loan, particularly when businesses are difficult to evaluate, may require informal networks and contacts. Again, technology such as the Internet may arguably reduce the cost of the informal network. Smart systems can simulate the interaction between a loan officer and customer, but these may only go so far, and computers will never be able to make a site visit. It is in this area that **Uzzi** (2001) investigates connections and closeness between borrowers and lenders. The results here are that the stronger the degree of relationship and connectedness, the more successful the lending arrangement. This provides some modest comfort for smaller and community banks in an era where economies of scale and technology are becoming more predominant.

The lending side is half of what banks do; the other half is the deposit side. Apart from the paucity of depository financial institutions in inner-city areas, an issue is whether such can develop indigenous sources of capital. Banks serve as mobilizing forces for pools of capital, whether on the debt or equity side. On the aggregate level, the United States during the 1990s has exhibited a negligible and sometimes negative savings rate. Some discussion indicates that the situation is not as severe as it appears since capital gains on assets are excluded from the definition of saving. Expenditures on consumer durables are sometimes counted as consumption as opposed to investment. But a relevant question remains as to whether low-income households are willing to save, and whether their savings rates might exceed those of high-income households. That is an important policy question in an environment where tax policy might suggest that some people will save and invest a reduction in the take from the government.

Another side of the savings and investment issue is the widespread presence of middle-class entitlements such as retirement and pension accounts. Typically these are matched accounts either by employers in the case of 401(k) or 403(b) accounts, and implicitly by the government, since the contributions are made from before-tax income. Other retirement accounts provide for matches by the government if the individual contributes, such as individual retirement accounts. The match is *de facto*, in that before-tax income is contributed. All these programs require an individual to work and have a job that either has a formal pension program or provides sufficient income so that the individual can make a contribution. For the underclass, these conditions are not always in place.

The Loan Side

On the asset side, banks and other lenders are seeking, partly through regulatory prompting, lending opportunities in inner-city and underserved markets. Deregulatory efforts that have removed the distinction between debt and equity markets, such as repeal of the Glass-Steagall provisions, imply that lenders and others can source capital in different ways.

Bates (2001) examines the Minority Enterprise Small Business Investment Company (MESBIC) program. These are private firms that finance inner-city and minority-owned businesses. The financing takes the form of debt and equity. There is a sample of 199 firms that were operating in 1987. Of these, 61 were still operating in 1994; 58 went out of business. An analysis is also presented about what makes for the successful survivors.

There are two industries that are success stories. The first is in the taxi medallion industry. About half of all the firms receiving support from the program are in one industry; taxi medallions in New York City. Medallions are highly regulated: the price is in excess of $500,000. The medallion holders are protected against competition by the police, and most holders rent the cabs to others. These are all mechanisms by which medallion holders have their property rights protected. Medallion Funding is an organization that funds the taxi operators, and has been identified by Porter (1998) as a firm that has achieved success in the inner city. The taxi operators pay the medallion holder a daily fee to operate the cab. This situation is then exactly analogous to an asset-backed security. This is similar to a mortgage, auto loan, or credit-card receivable. There is an asset price and a cash flow. As long as security of the asset remains, the prospect for securitization is possible.

The second is in small businesses that are located in inner-city areas. This type of business includes restaurants, laundries, and grocery stores. Some of these firms are in New York City. There are two keys to success. The first is loan size. Small loans, typically less than $50,000, are inefficient to process and require monitoring against agency and moral hazard costs. The second is having collateral. Loans that are cross-collateralized with the mortgage on a house tend to default less frequently. The conclusions are that larger-sized loans backed by collateral are less likely to default. Loans without these provisions have extremely high default rates, and typically lose all the principal.

Another finding is that a majority of the participants in these loan programs are immigrants, whether they be taxi or small business entrepreneurs. The number of domestic entrepreneurs is limited. The immigrants may be self-selected, in that only the more motivated ones immigrate to the United States in the first place. The ability to wade through a regulatory set of forms and programs is daunting to only the very entrepreneurial, not to mention the language barrier. It is not clear whether these are unintended consequences of the programs. Particularly since this program has “minority” written in the title, it is an issue whether the original intention was to help immigrants or the domestic-born. The latter are unsuccessful in this program, suggesting that modification of the terms and conditions may be appropriate if the intention is to facilitate domestic minorities entering business.

Another reason why some loans are successful and remain performing is because of a tie between lenders and borrowers. Informal and formal networks to obtain consumer loans are compared by **Uzzi** (2001). The paper discusses how formal networks, such as with a bank, involve specific governance issues such as contracts, including guarantees and other recourse. Other informal lending mechanisms are widely prevalent but receive less attention, yet are important in financing small business. Examples are *kye*, *susu*, or *partner* arrangements, where there is rotating financing. The paper contains some challenging results in a probit specification. The argument and hypothesis is that informal governance networks can be strong and tight motivators.

In arrangements there is a sense of trust and reciprocity. The social embeddedness allows banks to evaluate loans to otherwise risky customers. Social customs such as playing golf substitute for formal pricing, such as interest-rate premiums and the requirement for additional collateral.

One of the issues that emerges in the gradual takeover of smaller banks by larger ones is whether these trust and reciprocity arrangements can survive. Some larger lenders have mechanized and automated loan processing, partly to establish neutral standards that can survive legal challenges on discrimination grounds. Another reason is to take advantage of economies of scale. Ties and reciprocity rely on community banking and close touch. There is a technological possibility that the Internet and other mechanisms can simulate some of the tie arrangements.

If ties are important and difficult to manage at large institutions, there are some predictions as to the evolution of the banking system. Larger firms will discount the value of ties in purchasing smaller ones, since they cannot easily continue the informal arrangements within standardized corporate structures. There could be a two-tiered system of lending, where national lenders use automated procedures and local lenders exploit more informal arrangements. Since national lenders have no or negative value to these arrangements if they create liability problems, customers may sort themselves. Those with close ties will seek them elsewhere in medium-sized or smaller banks and a clientele effect operates.

An issue is one of agency and management supervision. Pricing of arrangements is difficult, and the bank management wants to be assured that investments on the golf course are proving to have payoffs. There are conflicts between those whose rainmaking capability brings in business and others left at the office. The compensation scheme could be the rewarding influence, with loan officers paid on commission for bringing in business. With banks allowed to enter the securities business, and increasingly a financial advisor and stock salesperson available in each branch, this is only another progression in the banking industry.

Possibly because of these agency issues, banks have come to rely on commissioned salespeople to generate leads in commercial loans and mortgages. These individuals, frequently not employees of the bank, act as intermediaries. Then the management does not have to worry about the morale and other issues of one employee claiming to be working on the golf course. An outsourcing of the loan origination function within a bank is already a development that has occurred in the mortgage market and is spreading to other loans. **Uzzi** (2001) defines embedded ties by the duration of the relationship and the multiplexity of it. The conclusion is that the stronger and longer the tie, the better the loan performance. Another issue is whether customers have embedded ties with larger, faceless banks because of inertia or the high transaction costs of switching banks. A challenge for the banking industry is to preserve this capability in the face of increasing consolidation.

The Deposit Side

A first step in wealth creation is the ability to have deposit accounts. Such accounts are already a challenge in inner-city areas. While nobody will become rich on a checking or savings account because of the interest paid, opening and having such an account available is a starter in wealth creation. Moreover, such accounts can generate wealth if fostered by matching programs.

When consumers are faced with the prospect of their savings being matched, they respond positively. Evidence from the Survey of Consumer Finances on overall wealth indicates that for the median household, most financial assets are held in pension and insurance accounts. Pension accounts such as 401(k) plans at private employers and 403(b) plans at nonprofits provide a double match. If the employee agrees to have a portion of the paycheck withheld, the employer will make a contribution. The employee is able to make the contribution from before-tax income, so effectively the tax authorities are a second contributor. For an employee in the 15 percent income tax bracket with no state income tax and an employer matching dollar-for-dollar, on a $2 contribution to the fund the employer is contributing $1, the tax authority 15 cents, and the employee 85 cents. Individual Retirement Accounts have a single match, with the contribution deductible. Roth IRA plans and insurance accounts have the feature of protecting the income tax-free. Evidence is that individuals will save when allowed to have matches, although some of the funds are transfers from other accounts.

What of those who either do not have an employer offering a full benefits package, as many underclass members do not, or want to have additional savings? An answer is an Individual Development Account, as studied by **Schreiner**, **Sherraden**, **Clancy**, **Johnson**, **Curley**, **Zhun**, **Beverly**, and **Grinstein-Weiss** (2001).

This program offers matches for underserved individuals willing to make savings efforts themselves. The matches are provided by foundations and other grantors, and contain incentives to save. Individuals can receive matches of up to $3 for each dollar saved, providing incentives comparable to those in the middle and upper classes. The requirements are that participants receive financial education and that any withdrawals be for prescribed uses such as home purchase, postsecondary education, or a small business.

The study is of a demonstration program, the American Dream experiment. In the sample, the average accumulation after a 2:1 match is $900 per year. This amount implies that households are saving on average $25 per month into these accounts. The accounts then allow individuals to unlock barriers to other lumpy purchases in a constrained capital market. The results are promising. Since the overall savings rate for the United States since 1998 has been negative, the presence of any savings is an incentive for the economy. Even if some wealthier households are dissaving because of actual or unrealized capital gains on assets, someone has to provide the internal pool of capital in the economy. It could be the case that within certain income and wealth ranges, the marginal propensity to save is decreasing in income and wealth. The evidence here seems to be supportive.

Concluding Remarks

There are policy initiatives to increase the amount of loans and deposits in underserved areas. Banks and other regulated depository institutions find themselves sometimes obliged to comply under terms of legislation such as the Community Reinvestment Act. In the other case, entrepreneurial banks are seeking opportunities. Two themes recur through these papers. The first is the clientele that takes advantage of targeted programs to increase loans and deposits. If that clientele is self-selected, having inherently extreme values of the talent being encouraged, then the programs might be seen to be successful where they otherwise might not be. Nevertheless, there are success stories on the loan and deposit side. There are opportunities for profitable lending in inner-city neighborhoods, with the appropriate loan size and collateral. There are opportunities to take profitable deposits, and the average size is comparable to the overall liquid wealth in the population.

The second is that informal ties strengthen loan arrangements. Increasing use of expert systems, and their migration to the Internet, suggests that the ties and arrangements could be priced. A community bank can be simulated on the Internet. This would be bad news for golf courses.

Peter Chinloy is on the faculty at American University and is a visiting professor at Cornell University. His areas of interest include mortgage finance, commercial real estate, and equity structuring in real estate. He is a member of the editorial boards of four journals, including Real Estate Economics and the Journal of Real Estate Finance and Economics. Chinloy has been on the faculty of the University of British Columbia and the University of Southern California. He received an undergraduate degree in accounting and economics from McGill University and master's and doctoral degrees from Harvard University.

References

Bates, Timothy, "Financing the Development of Urban Minority Communities: Lessons of History," Discussion Paper, Wayne State University, 2001.

Porter, Michael, "The Competitive Advantage of Nations," *New York: Free Press*, 1998, 896 pages.

Schreiner, Mark, Michael Sherraden, Margaret Clancy, Lissa Johnson, Jami Curley, Min Zhan, Sondar Beverly, and Michael Grinstein-Weiss, "Asset Accumulation in Low-Resource Households: Evidence from Individual Development Accounts," Discussion Paper, Washington University at St. Louis, 2001.

Uzzi, Brian, and Ryon Lancaster, "Social Capital and the Cost of Business Loan Contracting," Discussion Paper, Kellogg School of Business, Northwestern University, 2001.

IV. Evaluation of CRA

The Effect of the Community Reinvestment Act on Bank and Thrift Home Purchase Mortgage Lending

Eric S. Belsky
Harvard University
Michael Schill
New York University
Anthony Yezer
The George Washington University

This analysis considers the extent to which the Community Reinvestment Act has led institutions under its authority to increase the number of home purchase mortgage loans to low-and-moderate-income (LMI) borrowers and neighborhoods. The basis for the analysis is a large sample of loans for the 1993-1999 time period submitted by financial institutions under the Home Mortgage Disclosure Act (HMDA) of 1975. The HMDA data for this analysis have been enhanced through linkage to a descriptive file on lenders from the Federal Reserve Board.

The paper describes findings that are consistent with the assertion that CRA has had an effect. A statistical analysis of lending patterns in individual MSA's, which includes economic and demographic controls, demonstrates two relevant facts. First, lenders subject to the requirements of the CRA and their affiliates originate a higher portion of loans to low and moderate-income borrowers and neighborhoods in areas where there is active community organization (empowered by CRA) focused on expansion of credit to LMI borrowers and neighborhoods than in areas where there is not. Second, CRA lenders and affiliates originate a higher portion of loans to LMI borrowers and neighbor-

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hoods in metropolitan areas where higher shares of metropolitan area lending take place in CRA assessment areas.[1]

The analysis that identifies a positive CRA effect can be used to produce very specific quantitative estimates of how much credit expansion CRA generates. However, given the uncertainties in the model specifications and the inherent imprecision in defining explanatory variables that measure CRA impact, it seems inappropriate to read significance into precise quantitative impacts of CRA. While alternative variables and specifications are not likely to change the measures of direction of CRA impact, they could easily change the magnitude of that impact in important ways.

Finally, it is important to note that the analysis presented here does not answer the question of whether lending to low-and-moderate-income borrowers and communities has increased overall. At one extreme, it is possible that the expanded effort on the part of CRA lenders is at the expense of non-CRA lenders, and that there was no overall increase in the number of LMI loans originated. On the other hand, it is equally possible that all financial institutions, including non-CRA lenders, have benefited from financial innovations designed by CRA lenders, and that the statistical analysis systematically understates the effects of CRA in expanding LMI lending. The analysis described here addresses the narrower issue of whether or not CRA may have influenced CRA-lenders to expand LMI credit flow.

Introduction and Background

The United States Congress passed the Community Reinvestment Act in 1977 to encourage financial institutions to make loans in low-and-moderate-income (LMI) neighborhoods to meet the needs of those communities. The Act was seen as a response to the perception that savings and loan associations and banks were “redlining" low income areas, in effect denying credit to an area based on its perceived average characteristics rather than the actual creditworthiness of individual loan applications (Pogge 1992, Schwartz 1998, 123 Cong. Rec. 17,604 1977). Recently, the Act has been interpreted to encourage lending to low income borrowers, irrespective of the location of their properties.

This analysis considers the extent to which the Community Reinvestment Act has led institutions under its authority to increase the number of home purchase mortgage loans to low-and-moderate-income borrowers and neighborhoods.[2] The four sections that follow describe the Community Reinvestment Act and how it might be expected to affect loan volume; define the specific tests developed to estimate its effect; present the empirical test results; and summarize the overall conclusions that are supported by the tests.

This analysis is noteworthy, because there have been only a few attempts to study the impacts of CRAon lending patterns, to understand how the results of the Act have compared to the intent of the Act (Evanoff & Segal 1996; Avery, Canner, Calem, Bostic 1999; Shlay, 1988, 1989; and Hula, 1991; Canner and Smith, 1991). Most of the studies of mortgage lending patterns have been cautious in drawing conclusions about the role that CRA may have played in generating observed patterns. The tentativeness of these conclusions mostly reflects weaknesses in the data as well as the difficulties in controlling for other, non-CRA-related influences. Although no empirical study has quantified the effect of the CRA on mortgage lending, several have advanced evidence suggesting CRA has increased credit flows to LMI areas and borrowers, while others have suggested that it has not. Two of these studies are summarized below, to illustrate the ambiguity in the key research findings.

Evanoff and Segal (1996) reached mixed results regarding the effects of CRA in their examination of mortgage lending data over the 1990-95 period. On the one hand, the researchers found that white-black differences in denial rates and applications narrowed for both lenders covered and not covered by the CRA. This evidence, by itself, supports the contention that observed expansion of low-and-moderate-income lending may be due to factors other than CRA.[3]

On the other hand, Evanoff and Segal also found CRA-eligible loans were an increasing share of the originations made by CRA-covered institutions and their affiliates in the first half of the 1990s, suggesting that CRA may have had a positive effect in increasing LMI originations. The authors also found that the CRA-regulated institutions and their affiliates had much greater shares of their originations in CRA loans in the 1990s (a period of more intensive CRA enforcement activity) compared with the 1980s (a period of less intensive CRA enforcement activity).[4]

Using a relatively robust database on the characteristics of financial institutions and affiliated mortgage companies required to report data under the Home Mortgage Disclosure Act (HMDA), Avery and his colleagues (1999) analyzed the behavior of “consolidating” organizations.[5] They found that the proportion of LMI home purchase originations made by consolidating organizations and their affiliates typically increased in the counties in which they had branch offices. These counties are likely to be included in the assessment areas regulators focus on when evaluating the LMI lending performance of CRA lenders. Moreover, LMI home purchase loans as a share of their total originations increased more among consolidating banking organizations than among organizations that did not engage in merger activity in the same counties. Because weak LMI lending performance is evidence regulators can use to block mergers, it is logical that merging institutions would strive more vigorously than non-merging institutions to expand LMI lending.

Avery and his colleagues concluded that these findings were consistent "with the view that the CRA has been effective in encouraging bank organizations, particularly those involved in consolidation, to serve LMI and minority borrowers and neighborhoods." At the same time, Avery and his colleagues also found that consolidating banking organizations lost market share over the period to independent mortgage and finance companies and credit unions. This loss of share suggests that factors other than CRA may have been at work.

The analysis of CRAeffect reported here focuses on home purchase lending, and ignores home refinancing and business loans. Regulators have emphasized home purchase loans. Also, home purchase lending is a significant part of all LMI lending, and in 1998 accounted for slightly over one/third of single family mortgage lending, small business lending, and community development lending combined.

The Community Reinvestment Act and Its Expected Effects

The CRA of 1977 affirms the obligation of federally insured deposit-taking institutions to meet the credit needs of the entire communities in which they take deposits, including low and moderate income borrowers and neighborhoods, consistent with safe and sound business practices. The four regulators of these federally insured institutions (the Federal Reserve Board, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the Office of Thrift Supervision) are required to assess the CRA performance of banks and thrifts. Lenders evaluated under the CRA receive a grade for their performance and effort in meeting the credit needs for low-and-moderate income borrowers and neighborhoods. Clearly, the intent of the act is to encourage CRA lenders to expand LMI loan originations.

The main incentives for lenders to at least comply with the Act by achieving a satisfactory rating, or to go further and strive for an outstanding rating, are that a CRA institution's lending record and grades are released to the public and must be considered when regulators are asked to approve any of the following:

- applications for a federal bank or thrift charter or FDIC deposit insurance;
- plans to relocate a main office or to establish or relocate a branch; or
- efforts to merge, consolidate, or acquire the assets or assume the liabilities of another regulated depository institution

As a result, banks and thrifts that care about their public reputations or intend to acquire other institutions may well be motivated to strive for high marks on CRA because no other single measure signals the commitment of a bank or thrift to low-and-moderate income (LMI) borrowers and areas as clearly its CRA grade. Moreover, some government agencies and state and local governments will only place their deposits with banks that have earned high CRA ratings.

There are reasons to suspect that CRA may have been more effective in the 1990s than in earlier years. Focus groups with regulators, lenders, and leaders of community-reinvestment oriented nonprofit groups that were conducted for a project funded by the Ford Foundation suggest that regulatory behavior has evolved in several stages.[6]

1. Through much of the 1980s regulations were seen as being enforced inconsistently, and CRAwas not perceived as having a major effect on lender behavior. However, during this time period, community groups were beginning to urge banks and thrifts to expand CRA lending, and banks and thrifts were experimenting with new products. As a result, infrastructure was being put in place that could support expanded LMI lending.

2. In 1989 the CRA took on a more prominent role with lenders. CRA ratings, which had been confidential, became publicly available. Community groups gained access to more information about lending patterns after legislation was passed to expand the Home Mortgage Disclosure Act to include information on individual loan applicants and application disposition. For the first time under CRA, a merger was denied.

3. In 1995, the CRA regulations were strengthened still further. Evaluation standards were revised, and more attention was given to 'quantitative measures of loans originated' than marketing and outreach efforts. Lenders, regulators, and community groups all felt that this brought about significant changes in bank and thrift behavior.

Mergers in the financial industry accelerated in the 1990s and probably heightened awareness of CRA regulations. Because a proposed merger or acquisition could be blocked due to CRA considerations, it is reasonable to assume that senior management of banks and thrifts became more conscious of and responsive to CRA requirements, to avoid regulatory actions that could disrupt consolidation plans.

It is difficult to say to what extent CRA seems to have influenced lending by CRA-regulated institutions and their affiliates throughout the 1990s because other changes occurred simultaneously that likely helped expand credit flows to lower and moderate-income borrowers and neighborhoods. The economy expanded strongly, competition in metropolitan markets increased because an increasing number of institutions operated with a national scope, Fannie Mae and Freddie Mac pursued federal goals for expanding credit to low-and-moderate-income borrowers, new technologies permitted institutions to better measure and manage mortgage risks, and the enforcement of fair lending laws intensified. The tests defined in the next section are designed to sort out these various influences and more clearly isolate the CRA effect.

Two Specific Tests of CRA's Effects

CRA should increase lending to LMI individuals and neighborhoods This analysis includes two specific tests of the existence of this increased lending.

- **The LMI Loan Growth Rate Test** First, over the 1993 to 1999 time period, did institutions subject to CRAexaminations expand originations of home purchase loans faster than institutions not under CRA?

- **The LMI Origination Share Test** Second, over the 1993 to 1999 time period, to what extent did the existence of CRA cause institutions to originate a higher proportion of their total home purchase loans to lower income borrowers and/or lower income neighborhoods?

The tests are based on a large sample of loans for the 1993-1999 time period. The source of this sample comes from information submitted by financial institutions under the Home Mortgage Disclosure Act (HMDA) of 1975. As currently amended, HMDA requires that depository institutions and their affiliates, savings and loan corporations, credit unions, and nondepository mortgage lenders submit information on each of their loan originations and purchases that are tied to applicants located in Metropolitan Statistical Areas. The required information used for this report includes income of an applicant and the geographic location of the property for which the loan is being sought, so LMI loans can be distinguished from other loans.

At least two studies have concluded that HMDA data cover over three-quarters of all originations in metropolitan areas,[7] so that it is generally considered to be a representative picture of originations. Underreporting is thought to be most prevalent among independent mortgage and finance companies. Reporting among banks and thrifts (the institutions covered by CRA) and their affiliates is thought to be nearly complete among those required to report. Smaller banks and thrifts are exempt from HMDA, however, and so do not report at all, nor do banks operating in rural areas.

The HMDA data used in this analysis has been enhanced by linking it to a descriptive file on lenders from the Federal Reserve Board. This descriptive file makes it possible to classify individual lenders as being covered or not covered by the requirements of the Community Reinvestment Act. In addition, the file makes it possible to classify some lenders as being specialized in subprime loans or in loans related to manufactured housing.

The Empirical Results

This section reports the results of both a national benchmarking test and a pooled time-series, cross-section test based on MSA-level observations. The national benchmarking test focuses on the growth of LMI loans originated by CRA lenders and their affiliates, while the MSA-level analysis reviews the increase in share of all CRA lender and affiliate loans that can be classified as LMI.

One way to understand the effect of CRA on lending institutions is to benchmark the national home purchase lending performance of CRA lenders and their affiliates against the performance of independent mortgage banks and credit unions. These "non-CRA covered" lenders accounted for about one third of all LMI lending during the 1993-99 period. Using this group as a benchmark roughly controls for economic and other changes that might also explain the expansion in overall CRAlending. Both groups were influenced by the same changes in the marketplace, but independent mortgage companies and credit unions were not subject to the CRA regulations, so the comparison has the potential to highlight the independent effects of the CRA.

Three observations about the overall lending data are essential before comparing the performance of CRA lenders and their affiliates to the performance of independent mortgage banks and credit unions. The first observation relates to the difference in loan product mixes between CRA lenders and their affiliates and independent mortgage banks and credit unions, while the second relates to the impact of acquisitions on the growth rate calculations.

Over the 1993 to 1999 time period, LMI home purchase loan originations from CRA lenders and affiliates specializing in subprime and manufactured home lending increased dramatically. However, they remained much less specialized than other lenders in these types of lending (Figure 1), and virtually all of the LMI lending over this period from CRA lenders came from prime lenders. Consequently, the home purchase loan product mixes were different for CRA lenders and non-CRA lenders.

A second key observation about the home purchase lending from depository institutions and their affiliates concerns recent acquisitions. Acquisitions of non-bank lenders by banks and thrifts over the period complicate any benchmarking analysis. CRA-lender acquisitions of independent mortgage companies since 1993 increased their LMI lending. Using HMDA data and other records it is possible to identify non-bank affiliates that were acquired by banks or thrifts after 1993, but only if the acquired institution retained a separate HMDA reporting number. As a result, affiliate acquisitions that resulted in the termination of the acquired institution's HMDA reporting identification number are not traceable. This would suggest that the available data underestimate the share of any increase in lending attributable to acquired affiliates. On the other hand, many banks moved increasing shares of all of their activities to their affiliates over the period — including affiliates purchased after 1993. That would tend to overstate the share of the increase attributable to acquired affiliates. The estimate of the share of lending contributed by acquired affiliates is therefore imperfect and it is impossible to determine with available data whether it is an over- or under-estimate. However, in a national benchmarking analysis, the importance of acquired affiliates suggests it is important to look at the data with and without known acquired affiliates included, to see if the conclusions depend on how these acquired affiliates are treated.

A third observation relates to the assessment area definitions of banks and thrifts. CRA performance evaluations focus on particular geographic areas that represent the key deposit-gathering areas of each lender. In the 90's banks and thrifts were expanding the scope of their lending activities to reach out beyond the boundaries of the deposit-gathering areas. Consequently, less than half of all bank and thrift lending nationwide falls within assessment areas. Arguably, CRA should stimulate loan originations inside assessment areas more than outside assessment areas.

Figure 2 presents benchmark comparisons of Non-CRA and CRA lenders over the 1993 to 1999 time period. During that time non-CRA lenders grew their LMI lending at an annual rate of 11 percent, while CRA lenders and affiliates expanded their lending slightly faster, by 11.6 percent. Differences in average annual growth rates of CRA lenders and non-CRAlenders appear after disaggregating prime lenders and other lenders (subprime and manufactured home lenders) separately. From this perspective CRA prime lenders grew lending more than 50 percent faster than non-CRA prime lenders, and CRA subprime and manufactured home lenders grew lending almost 100 percent faster than non-CRA lenders.

The performance assessment of CRA lenders reverses if only the activity of CRA lenders inside their assessment areas is considered. From that perspective, CRA lenders had lower growth rates than non-CRA lenders, principally because the LMI growth rates of CRA prime lenders (6.0 percent) were lower than CRAgrowth rates of non-CRA prime lenders (6.7 percent). Netting out the lending of known-acquired affiliates further widens the gap between CRA lenders and non-CRA lenders.

It's not possible to draw firm conclusions from this national benchmarking test. Conceptually, focusing solely on assessment area lending seems superior to focusing on total CRAlending, because CRAlenders face regulatory scrutiny only in those areas. This approach suggests that CRAlenders have grown CRAlending more slowly than non-CRA lenders. However, uncontrolled differences between assessment areas and non-assessment areas may be influencing the results. Consequently, the next section of this paper uses a more robust statistical technique to control for these economic and demographic differences, and produce a more reliable test of CRA effects .

The objective of the econometric modeling described here is to determine if the CRA, independent of other factors, has worked to promote bank and thrift lending to LMI individuals and communities. The regression model described here is based on pooled time-series/cross-section data for US Metropolitan Statistical Areas from the 1993 to 1999 time period.

Few previous studies have modeled geographic variations in mortgage credit flows. Megbolugbe and Cho (1993) model these variations at the metropolitan level. Evanoff and Segal (1996) review a handful of other studies that have modeled these flows at the census tract level (Ahlbrant 1977; Hutchinson, Ostas, & Reed 1977; Avery & Buynak 1981; Bradbury, Case & Dunham 1989; Shlay 1988; Shlay 1989; Holmes & Horvitz 1994; Perle, Lynch, & Horner 1993).[8] Most of the studies at the census tract level have focused on a single metropolitan area. In these previous studies, the dependent variables most commonly modeled are levels of mortgage lending, expressed as number of loans or dollar volume. The dependent variables are often divided by the number of owner-occupied homes in the tract or metropolitan area to standardize for variations in level of mortgage demand by tract. The independent variables typically used to account for variation in cross-MSA or cross-tract volumes of total mortgage credit flows in these studies focus on economic, demographic, housing supply, mortgage supply, and housing demand. The most common economic variable included in these analyses is median household income. Housing market variables include the number of building permits issued, vacancy rates, and share of owner-occupiers. Measures such as number of branch offices and total amount of deposits are used to capture the influence of mortgage supply in the area. Typical demographic variables include shares by race, shares of different family types, shares by age of household head, and median household size.

Unlike these previous studies, the dependent variable here focuses directly on CRA lending performance: **the LMI home purchase loan origination share of CRA lenders and their affiliates, net of those affiliates acquired after 1993 in each metropolitan area**.[9] This variable was selected because it is one of the measures that bank examiners have used since 1995 under the CRA lending test to evaluate CRA lending performance of banks, thrifts, and their reported non-bank affiliates. Modeling metropolitan variations in this measure for CRA lenders and their affiliates closely models the approach taken by regulators. Regulators implicitly acknowledge that variations in economic conditions, regulatory effects, and other factors across metropolitan areas render comparison of the CRA lending performance of individual CRA lenders to national benchmarks as inappropriate. As a result, regulators compare performance of individual CRAlenders to a peer group drawn from comparable lenders in their communities (Belsky, Lambert, & von Hoffman, 2000). Thus, the modeling approach followed here parallels the regulatory process and presents an opportunity to test for the influence of CRA, economic conditions, demographics, loan reselling activity and other factors on the CRA lending performance of CRA lenders and their affiliates.

MSA-level regressions of mortgage credit flows are also subject to spatial aggregation bias, which may be particularly problematic for examining home mortgage loan flows to LMI neighborhoods.[10] While the models used examine the influence of MSA-level factors on credit flows at the MSA level, the supply and demand for mortgage credit varies down to the census tract level. For this reason, the effects of factors that influence credit flows at the census tract level could be lost when averaged over an entire MSA. Such factors would then erroneously appear not to influence the MSA-level measures of credit flows that constitute the dependent variables in the models. Similarly, estimates of the coefficients on independent variables may be biased. Investigating the effect and direction of spatial aggregation bias on our results would require building similar models at lower levels of geographic aggregation. The results of these models would then have to be compared against the observed importance of the various factors in each set of models, as well as with what is known about the determinants of credit flows from existing research. For these reasons, further research in the area covered by this study is warranted.

The modeling effort presented below attempts to account for the variation in CRA performance for CRA lenders and their affiliates, net of known acquired affiliates, across metropolitan areas. Affiliates that retained their HMDA identifier after acquisition and thus known to have been acquired after 1993 are netted out because we wish to isolate changes in CRA lending achieved by institutions net of those due to merger and acquisition.

The average proportion of lending by CRA lenders and affiliates that is LMI is referred to as their "LMI origination share." For the data used in the analysis, the average value of the LMI origination share is 31 percent, with a standard deviation of 6 percent. The mean and standard deviation are not weighted by MSA size (in other words, each

MSA observation counts equally in the calculation of the average and variance).[11]

Figure 3 illustrates the wide range of observed LMI origination shares at the MSA level. The loan origin shares vary both across time and across MSAs. For example, the LMI loan origination share in Birmingham increases from 27 percent in 1993 to 35 percent in 1999. Over the same time period, Baltimore's share increases more slowly, from 35 to 39 percent, but is higher than Birmingham's in each individual year. In San Francisco, the LMI loan origination share is stable at about 23 percent over the entire 1993 to 1999 time period.

Interpreted as a performance measure, higher values of the dependent variable indicate stronger CRA lending performance.[12] Thus, the modeling effort is designed to identify which CRA impact independent variables have positive coefficients, indicating that higher values of the CRA impact variables are associated with higher values of the performance measure.

In theory, a variety of factors including (1) economic conditions, (2) housing market conditions, (3) demographic characteristics, (4) regulatory influences, and the (5) industrial organization of mortgage markets (including product specialization and historic levels of services of different types of institutions in different areas) should influence the CRA home purchase loan performance of CRAlenders and their affiliates. This section describes some specific measures for each of these influences and the expected relationship between these influences and the CRA lending performance of CRA lenders and their affiliates. We use some, but not all, of the independent variables used in used in previous studies, as our dependent variable differs from the dependent variable of other models.

To maximize the use of available information, cross-sectional data on 180 metropolitan areas were pooled for the years 1993 through 1999. Individual year dummies were included to control for the fixed effects of time on the origination share levels. Because of the small number of observations after controlling for fixed effects of time and because of the lack of priors about the structure of the error term, no corrections were made for the possible presence of heteroskedasticity. Correcting for its presence might result in smaller standard errors, yielding more efficient estimates. As a result, the statistical significance of the variables reported below is likely understated, producing conservative estimates of significance. The model also does not control for possible serial correlation because the number of observed time periods is too small to support meaningful testing and correction.

For the origination share model, CRA lending performance (P) in metropolitan area (i) in a particular year (t) is modeled as a linear function of a vector of CRAregulatory impact variables (R), economic variables (E), housing market variables (H), demographic variables (D), industrial organization variables (I), time dummy variables (T), and an error term (e).[13]

$$P^{it}=f(R^{it},E^{it},H^{it},D^{it},I^{it},T)+e.$$

The variables that fall within each of the vectors in the simple linear model are listed in Figure 4, along with their mean values and standard deviations across metropolitan areas.

In most cases, the specification of the variables selected and their reasons for inclusion are straightforward. A discussion follows of the variables, the reason for their selection, their functional forms, and their expected relationships to the dependent variables. Important omitted variables include a more direct measure of mortgage lending risk, which is concentrated among borrowers who make low down payments (though an unemployment rate variable proxies for it), and more precise measures of differences in unemployment and income growth rates by race and income in each metropolitan area.

CRA Effect Variables

Two measures of CRAregulatory effects are used in this analysis. One is the share of CRAlender originations to LMI borrowers and areas that are made inside CRA assessment areas in a metropolitan area. The other is the presence or absence of lending agreements between lenders and community groups to promote LMI lending.

Assessment Area Lending

The principal measure of CRA impact used here is the proportion of CRAlender and affiliate lending that takes place in the institution's performance assessment areas. As a proxy for detailed definitions of performance areas, a loan here is considered assessment area lending if it is originated in an MSA where the lender has a branch office. If CRA is having an effect, it is reasonable to expect that LMI origination shares will be higher in MSAs where a greater proportion of the lending takes place inside assessment areas, because it is only in these areas that they receive credit for LMI lending. In addition, growth may also be faster for those MSAs where a greater proportion of all lending takes place inside assessment areas. Therefore, we expect this variable to be positively associated with CRA origination share levels.

The proportion of all CRA-lender lending inside assessment areas varies across MSAs, and, in general, trends downward over the 1993 to 1999 time period. For example, in Akron, Ohio, the assessment area share of lending declines from 47 percent to 36 percent over the 1993 to 1999 time period. In Las Vegas, the share is much lower, averaging only about 11 percent over the time period. In contrast, the share of assessment area lending is much higher in Bloomington, Indiana, declining from 61 percent in 1993 to a still large 43 percent of all CRA-lending in 1999.

Presence of Lending Agreements

The National Community Reinvestment Coalition publishes *CRA Commitments*, which documents known agreements between CRA lenders and local community groups. For modeling purposes, any MSAwhere there was evidence of a lending agreement in place during part or all of the 1993 to 1999 time period was flagged as having an agreement presence. In such cases the variable is set to 1, and it is set to set to zero for all other MSAs. One would expect that MSA's with lending agreements to have better CRA performance as measured both by higher LMI loan origination shares. Whether or not the agreements are cause or effect of this performance, one would expect the sign on this variable to be positive in both equations.

Lending agreements are more likely to be in place in larger MSAs rather than smaller MSAs. For example, Baltimore, Boston, Houston, and Washington, D.C. had agreements in place, while Muncie, Oklahoma City, and Mobile did not. However, not all large MSAs had agreements: Oakland, San Diego, and Nassau-Suffolk all had this variable coded as zero for all years.

These variables are not ideal measures of the effects of CRA, and are fairly weak in some respects. The lending agreement variable, in particular, has deficiencies because it does not capture the timing or size of agreements in place. In addition, and even more importantly, it is possible that lenders sign CRA agreements in places where they know they can meet these commitments. Therefore it is possible that signed agreements are an effect rather than a cause of CRA performance. Nevertheless, for reasons discussed below, a plausible case can be made that agreements are signed as a result of pressure brought to bear or the threat of a problem when applying to merge or acquire another bank or thrift.

Measures of merger activity in each MSA over the relevant time period would be another way to test for CRA treatment effects, since the greater the number of mergers and acquisitions the greater the number of opportunities for CRA performance to have a direct impact on bank and thrift plans. However, creating such a measure is difficult and was beyond the scope of this study. A measure that would perhaps be even more desirable would be the number or share of merger applications from institutions doing business in each MSA that were challenged or conditioned over the period. This would be a direct measure of demonstrated effect of CRA-related merger and acquisition problems in the metropolitan area. Such measures were unavailable, however.

Economic Variables

The economic variables used to model CRA lending performance are the average levels of median household income and unemployment.

Median Household Income

Median household income is postulated to influence the LMI origination share variable because the credit scores of higher income borrowers are generally higher than those of lower income borrowers. Because LMI cutoffs are defined with reference to metropolitan-wide median incomes, higher median incomes may well translate into lower mortgage risks without leading to smaller proportions of borrowers falling below LMI cutoffs. Therefore, in the origination share equation one would expect median household income to come in with a positive sign. Galster (1992) suggests using median household income in cross-sectional models of geographic credit flows and Megbolugbe and Cho (1993) use it in their models of variations in conforming loan credit flows across MSAs.[14] We control for cost of living by using a housing affordability proxy.

Local Unemployment Rate

One would expect , all other things equal, CRA lenders in MSAs with lower prevailing unemployment rates will have higher CRA loan origination shares because more LMI borrowers are likely to apply and more are likely to be approved. In general, high unemployment as well as rising unemployment typically hit those in lower wage and salary positions harder and has a more significant impact on their capacity to qualify for a mortgage because they are closer to the margin of qualification anyway.

Housing Market Variables

The housing market variables used to model CRA lending performance are the average of National Association of Home Builders' (NAHB) Housing Opportunity Index over the 1993 to 1999 period and the homeownership rate in 1990.

Housing Affordability

LMI loans are easier to originate in areas where housing is more affordable. LMI borrowers, who are closer to the margins of qualifying for a mortgage than other borrowers, would find it easier to qualify for loans to buy homes that are less expensive relative to their lower incomes. Consequently, affordable MSAs should exhibit higher LMI loan origination shares. The specific measure of housing affordability used is NAHB's estimate of the share of homes in an MSA that are affordable to a median income household.

Home Ownership Rates

Home ownership rates tend to increase as a higher fraction of low and moderate income households become owners. Accordingly, we expect a positive relation between home ownership rates and the demand for mortgages on the part of lower income households. This increased demand for mortgages will make it easier for lenders to meet CRA goals and raise the proportions of CRA lending.

Demographic Variables

The demographic variables used here to model CRA lending performance are measures of the proportion of MSA-wide lending to black and Hispanic borrowers. Both Megbolugbe and Cho (1993) and Perle, Lynch and Horner (1993) suggest including the proportion of the population that is young and therefore might be more likely to have low incomes and be in the market to buy their first homes. However, including the share of the population aged 25-34 in the models tested revealed miniscule effects on the dependent variables that were not statistically significant. As a result, they were dropped from the models.

Minority Population Share

The expected influence of minorities' shares of the population and their geographic concentration within metropolitan areas on CRA lending performance is ambiguous because, among other things, minority shares are correlated with many of other independent variables, such as unemployment rate. Thus, estimates of the race effects may be biased and priors about the direction of its effects difficult to establish. It may be the case that, because of the locations of minority populations or loan offices, or because of product differences in the loans minorities select, CRA lenders and their affiliates will have differential success serving minority and white populations. In particular, these effects could lead to in inverse relationship between the measures of minority share and concentration, and the CRA lending performance measure.

It may also be the case that, because minority populations have historically been underserved, relatively large or concentrated minority populations in an MSAcreate opportunities for LMI loan expansion. It is important to note that this effect will not necessarily be related to the overall minority population of the MSA, and could instead be related to the degree to which the minority population is concentrated and segregated, suggesting greater historical discrimination in housing markets. In either case, these effects could lead to a positive relationship between the minority demographics and the CRAlending performance measure.

Some effort was made to test for different specifications of the racial and ethnic variables because, as Galster (1992) persuasively argued, the effects of these variables may be nonlinear.[15] It may be, for example, that only as the population proportions reach threshold levels do the effects on CRAlending performance come into play. Since there is no *a priori* method for establishing cutoffs for categorical dummies to capture these nonlinearities, models were run with squared and cubic forms of the race and ethnic variables. The specification that used squared terms had the greatest statistical significance and is reported below.

Market Organization and Control Variables

The market organization and control variables used to model CRA lending performance include the MSA-wide proportions of non-conventional lending (FHA, VA, RHS) and loans resold to Fannie Mae and Freddie Mac.

FHA/VA/RHS (non-conventional) lending

The proportion of lending that is non-conventional (principally FHA lending) is used as an explanatory variable because in MSAs where the non-conventional percentage is higher, one might expect higher CRA loan origination shares because the government insurance programs reduce the riskiness of originating LMI loans. However, it is less likely but it could also be argued that the effect could be a negative one, because non-CRA lenders use FHA insurance more intensively than CRA lenders. Indeed, where FHA's presence is greater so too are the market shares of mortgage companies. Consequently, higher FHA shares across the MSA could result in weaker CRA lender origination share performance.

Resold Loans

Lenders have the option of reselling the loans they originate to other institutions, primarily to Fannie Mae and Freddie Mac for prime, conventional conforming loans and to private label companies for subprime loans. The existence of a secondary market should increase originations, as the sale of the loans can free up capital for the originator.[16] Beginning in 1993, the Department of Housing and Urban Development (HUD) established affordable housing and central city goals for the purchase of mortgages by the GSEs. In 2000, HUD revised and increased these goals in an attempt to encourage the GSEs to purchase more loans made to low- and moderate-income borrowers and in low- and moderate-income neighborhoods.

Time Dummy Variables

The model in Figure 5 includes dummy variables for all years except 1993 that reflect the effect of individual year factors other than those that have been explicitly modeled. To the extent that CRAexamination and consequences of a less favorable CRA rating have become more important over time, we would expect the estimated coefficients of these dummy variables to become larger over time.

Results

The results set forth in Figure 5 are consistent with the hypothesis that, other things equal, CRA has increased the flow of credit to LMI borrowers and areas by CRA-covered lenders and their affiliates over the period studied. In addition, the model suggests that most factors that one might expect to drive CRA lending do influence it in the expected directions. Specifically the economic, housing market, market organization and control variables all the expected signs and are statistically significant. This suggests that the model is well specified. The econometric results give further weight to the proposition that CRA made a difference to lenders during this period.

More specifically, the model has positive and statistically significant coefficients for the CRAvariables: the lending-agreement dummy and the variable describing the share of all lending qualifying as assessment area lending. Taken literally MSAs that have lenders with lending agreements in place have overall LMI loan shares which are one percentage point higher than MSAs whose lenders do not have agreements in place. Since the average LMI share over the period was 31 percent, the loan shares in MSAs with lending agreements in place were three percent higher than loan shares in other MSAs. Similarly, LMI loan shares were three percentage points (or about ten percent) higher inside assessment areas than outside assessment areas. The expectation that increasing CRA enforcement over the period would lead to larger estimated coefficients for the time dummies reflecting recent years was not met. While there was an increase in LMI lending after the reference year of 1993, the effect of passing years was essentially zero thereafter.

Conclusions from the Analysis

Taken literally, the econometric analysis produces very specific quantitative estimates of how changes in factors directly related to the CRA affect lending to LMI individuals and communities. However, such a literal interpretation does not appropriately recognize that attempting to assess and control for the relevant factors (variables) is fraught with difficulty and subject to measurement, variable, and other errors. Thus, it seems more important to recognize simply that the most comprehensive evidence on lending patterns thus far analyzed is consistent with the proposition that CRA does have a positive effect on low and moderate income lending by depository institutions.

At the same time, however, it is important to note that the test presented here does not address the question of whether lending to low and moderate income borrowers and communities is increased overall: it is possible that the expanded effort on the part of CRA lenders is at the expense of non-CRA lenders, and that overall there was no increase in the number of loans originated. On the other hand, it is equally possible that all financial institutions, including mortgage companies, Fannie Mae, and Freddie Mac, have benefited from financial innovations designed by and for banks and thrifts as they have strived to comply with CRA. Thus, it is possible that the statistical analysis systematically understates the effects of CRA.

Eric Belsky is Executive Director of the Joint Center for Housing Studies at Harvard University and Adjunct Lecturer in Public Policy at Harvard's John F. Kennedy School of Government. Belsky has more than 17 years' experience conducting research on a wide range of housing and urban topics. Prior to his Harvard appointments, Belsky led the Housing Finance and Credit Analysis Group at Price Waterhouse LLP. Before that, he was Director of Housing Finance Research for Fannie Mae. He has also served as Senior Economist at the National Association of Home Builders and Assistant Professor of Urban Geography at the University of Massachusetts at Amherst. Belsky is the author of dozens of articles on housing economics and finance that have appeared in trade publications and academic journals. He currently serves on the editorial board of the Journal of Housing Research and as a Research Associate at the Center for Economic Studies at the U.S. Bureau of the Census. Belsky earned a master's degree in international development and a Ph.D. in economic geography from Clark University.

Michael H. Schill is Professor of Law and Urban Planning at New York University School of Law and Wagner School of Public Service. Schill is also Director of the Center for Real Estate and Urban Policy at NYU. Prior to joining the faculty of NYU in 1994, Schill was a tenured professor of law and real estate at the University of Pennsylvania. He has written or edited three books and a number of articles on housing policy, deregulation, finance, and discrimination. Schill is co-principal investigator of studies on removing impediments to housing construction, on the housing and neighborhood conditions of immigrants, and on the impact of public in vestments on housing values. He is also the principal investigator of an evaluation of the Fair Housing Act election

process. Schill is vice chair of the New York City Loft Board and member of the housing task forces of the New York City Council Speaker and the Manhattan Borough President. He is a board member of Neighborhood Restore, New York City Fannie Mae Partnership Office, and Housing Policy Debate.

Anthony Yezer is a member of the Department of Economics of The George Washington University where he teaches courses in regional economics, urban economics, money and banking, and microeconomic theory. He has been a Fellow of the Homer Hoyt School of Advanced Studies in Real Estate and Urban Economics since 1991. His research interests include the measurement and determinants of credit risk in lending, the effects of regulations on credit supply, and models of the demand and supply of credit to households. His articles have appeared in numerous journals including the Journal of Finance, Journal of Real Estate Finance and Economics, Economic Inquiry, Journal of Law and Economics, and Real Estate Research. He edited the monograph Fair Lending Analysis: A Compendium of Essays on the Use of Statistics, currently serves on the editorial boards of four journals, and is editor of the American Real Estate and Urban Economics Association monograph series. Yezer received a Bachelor's degree from Dartmouth College, earned an M.Sc. degree at the London School of Economics and Political Science, and holds a Ph.D. from the Massachusetts Institute of Technology. He was also a Rhodes Scholarship finalist.

Figure 1: CRA lenders' and affiliates' loans to LMI borrowers and areas were much more likely than non-CRA lenders to be made by prime lending specialists, 1993 to 1999.

Note: Non-prime loans are defined here as loans made by lenders classified by HUD as subprime or manufactured home lending specialists.

Figure 1

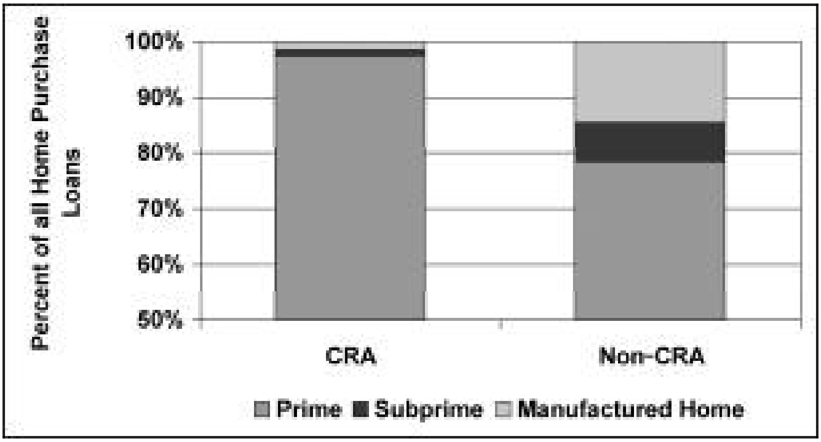

Figure 2: Benchmarking CRA Lenders at the National Level leads to Ambiguous Results. Some Categories of CRA-Lender LMI Loan Originations Grew Faster than non-CRA Lender LMI Originations, while Others Grew More Slowly.

Figure 2

Lending Source	Prime Lenders	Subprime and Manufactured Home Lenders	Prime, Subprime, and Manufactured Home Lenders
	Average Annual Growth Rate of LMI Home Purchase Loan Originations 1993 to 1999		
Non-CRALenders	6.7%	36.6%	11.0%
CRALenders	10.4%	84.7%	11.6%
CRALenders Inside Assessment Areas	6.0%	83.1%	6.7%
CRALenders Outside Assessment Areas	15.7%	85.3%	17.6%
CRALenders Inside Assessment Areas with Lending of Known Acquired Affiliates Netted Out	5.9%	66.1%	6.3%

Figure 3:
The LMI loan origination share ranges from less than 25% to over 40%

Figure 3

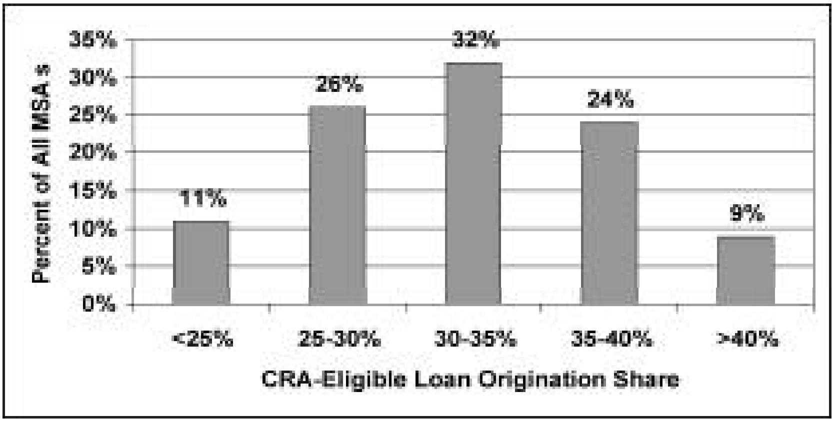

Figure 4
Variable Definitions and Descriptive Statistics

Independent Variable Name	Mean Value for 1993 to 99 Time Period	Std Deviation for 1993 to 99 Mean Values	Expected Sign in Origination Share Model
CRA Variables			
Presence of Lending Agreement During Part or All of the 1993 to 99 Time Period	0.285	0.452	Positive
Share of CRALender Loans which Are Inside Performance Evaluation Assessment Areas in Time Period t	0.590	0.157	Positive
Economic Variables			
Median Household Income (000's) in Time Period t	44.359	8.437	Positive
Average Unemployment Rate in Time Period t	0.054	0.027	Negative
Housing-Market Variables			
Average Level of Housing Affordability in Time Period t	69.367	13.621	Positive
1990 Average Level of Homeownership	0.638	0.066	Positive
Demographic Variables			
Proportion of Loans to Black Borrowers in Time Period t	0.055	0.049	Ambiguous
Proportion of Loans to Hispanic Borrowers in Time Period t	0.068	0.111	Ambiguous
Proportion of Loans to Black Borrowers in Time Period t Squared	0.006	0.010	Ambiguous
Proportion of Loans to Hispanic borrowers in Time Period t Squared	0.017	0.069	Ambiguous
Industrial Organization and Control Variables			
Share of MSALoans Repurchased by GSEs in Time Period t	0.256	0.075	Positive
Proportion of Nonconventional Loans (FHA, VA, FMHA) in Time Period t	0.244	0.117	Positive

Figure 5
Model Coefficients and T-Ratios for
CRA Lender's LMI Home Purchase Loan Share Regression

	Coefficient	T Ratio
Intercept	-.117	-5.31
Existence of Lending Agreements	**.01243**	**3.83**
Share of Lending Inside Assessment Area	**.03102**	**3.29**
Average Housing Affordability 1993 to 99	.00169	14.04
Household Income	.00234	11.89
Unemployment	-.392	-6.09
Home Ownership Rate in 1990	.19143	8.28
Loan Resell Rate	.18032	8.69
Existence of Lending Agreements	.01243	3.83
Share of Lending inside Assessment Area	.03102	3.29
Share of FHA Lending	.14818	10.52
Percentage of Loan Originations to Black Borrowers	-.403	-4.95
Percentage of Loan Originations to Hispanic Borrowers	-.176	-5.04
Percentage of Loan Originations to Black Borrowers Squared	1.922	4.92
Percentage of Loan Originations to Hispanic Borrowers Squared	.39749	8.83
Dummy Variable for 1994 Observations	.02888	5.70
Dummy Variable for 1995 Observations	.03711	7.08
Dummy Variable for 1996 Observations	.02324	4.49
Dummy Variable for 1997 Observations	.01289	2.49
Dummy Variable for 1998 Observations	.00604	1.20
Dummy Variable for 1999 Observations	.02863	5.26
Adjusted R-Squared	.49	
Observations	1,260	

Notes

[1] Assessment areas are those geographic regions (typically MSA's) that regulators focus on when evaluating CRAlending performance. CRAlenders may also originate loans outside their assessment areas, but this portion of lending is not included in the formal assessment process.

[2] Low- and-moderate-income borrowers are those who have incomes less than 80 percent of the MSA median. Similarly, low- and-moderate-income neighborhoods are those where median income is less than 80 percent of the MSA median.

[3] There are more complicated explanations, as well. Independent mortgage companies not covered by CRA sell loans to Fannie Mae and Freddie Mac, which faced new obligations during this period to purchase loans extended to CRA-eligible borrowers and areas as well. Therefore it may be that the CRA had an impact on the depositories, and affordable housing and the GSE goals had an impact on mortgage companies.

[4] However, these observations about CRA's potential positive effects may in part have reflected acquisitions of independent mortgage companies (with sizable LMI loan originations) by banks and thrifts. In addition, the authors did not control for the fact that during the 1990s banks and thrifts were required to report on the activities of affiliates even in areas where they did not have branch office, whereas they were permitted not to report on these activities during the 1980s. Finally, the authors also did not control for other possible influences on the changing mix of loans made by CRA-regulated lenders, though they did use a time-series regression to try to control for economic cycle effects.

[5] CRA-covered institutions generally have the option of reporting their affiliate activities under HMDA under a single filing. In some cases they do so and other cases they do not. Avery and his colleagues managed to create a robust file linking mortgage company affiliates to their bank or thrift parent, as well as information about geographic lending patterns by obtaining data on branch office locations. The new analysis presented here benefits from the Federal Reserve's file linking affiliates to their parent companies.

[6] Belsky, Lambert, & von Hoffman, 2000.

[7] Avery and his colleagues (1999) estimate that HMDAdata from 1993 to 1997 contain about 80 to 87 percent of home purchase loans in metropolitan areas, which is broadly consistent with Bunce and Scheessele's (1996) finding that HMDA data covers about 75 to 80 percent of GSE purchases in metropolitan areas.

[8] Evanoff and Segal (1996) are the only authors to publish a study modeling a direct measure of CRAlending performance. They hypothesize that one effect of increased regulatory enforcement would be to increase the overall volume of lending, as lenders, responding to CRAand related legislation, target and service borrowers that they were previously passing over. They construct a series of models of the quar-

terly change in mortgage originations as a function of economic variables and dummy variables intended to capture any structural shifts in lending patterns occurring after 1990 and subsequent years. None of their year dummies suggest that statistically significant changes in lending patterns occurred after any of the cutoff years they tested. This study, however, did not have the advantage of the additional years of data that we were able to use in the analysis report here.

[9] Including the known acquired affiliates makes the modeling more difficult, since the growth rate and origination shares would then reflect a "relabeling" of lending as well as behavioral changes of existing institutions.

[10] This is bias introduced by using too large or small a spatial unit of aggregation to capture the process being modeled. Because mortgage markets are segmented by neighborhoods at the metropolitan level, using metropolitan areas as the unit of aggregation averages values of the variables in the model across variations in neighborhood mortgage markets, potentially biasing estimates of model coefficients.

[11] The 1,260 observations in the origination share dependent variable result from looking at origination share over seven time periods (1993, 1994, 1995, 1996, 1997, 1998, and 1999) in a pooled cross section time series framework. Theoretically, there would be 306 observations for each of the seven time periods (1 for each MSA for each year), resulting in 2,142 observations. However, use of a potent housing affordability measure in the models restricted the number of metropolitan areas to 180 and the observations to 1,260.

[12] This stronger performance could either indicate an overall expansion of credit to low and moderate income borrowers and neighborhoods or a diversion of originations from non-CRAlenders.

[13] In a methodological contribution on the modeling of credit flows across spatial units (census tracts), Galster (1992) concludes that both linear and double-logarithmic regression models are consistent with some "minimal theory" of geographic variations in homes-sales and lending processes. Following this guidance, the econometric models presented here are linear. Hula (1992) also uses a linear model, though his variable specifications are criticized by Galster (1992), who also critiques the semi-log models of Shlay, Goldstein, & Bartelt (1992). Furthermore, it is important to note that, while Galster additionally suggests standardizing by some measure of the number of properties that could be bought with a mortgage when modeling variations in loan volumes, because the models presented here are of variations not in levels but in the ratio of LMI loans to other loans and within-areas rates of increase, they are not directly subject to this caution. While it is important to control for variations in homeownership opportunities, these variations are controlled for by including the metropolitan area homeownership rate as an independent variable, rather than by dividing the dependent and several of the independent variables by the potential number of for-sale homes as Galster suggests.

[14] They do not find median household income to be a significant determinant of the flow of what they call "low conventional loans" — conventional loans below the conforming loan limits. Modeling at the tract level in Detroit, Perle, Lynch & Horner

(1993) find median income significant in a variety of models where the dependent variable, lending volume, is specified as the total for the tract and as the log of the total.

[15] Because there is reason to believe that the influence of race might be different from ethnicity, Black and Hispanic shares of home purchase loan originations were entered separately into the model.

[16] The complex relationships between the primary and secondary markets, and the difficulty making causal attributions about them is underscored by a recent study by Hueson, Passmore and Sparks (2000) on mortgage interest rates. While some have argued that higher levels of securitization decreases the mortgage interest rate, Hueson, Passmore, and Sparks argue the reverse, that lower mortgage rates drive higher levels of securitization.

References

Ahlbrandt, Jr., R.S. 1977 Exploratory Research on the Redlining Phenomenon. *AREUEA* J. 5: 473-81.

Avery, R.B. & T.M. Buynak. 1981. Mortgage Redlining: Some New Evidence. *Economic Review*. Federal Reserve Bank of Cleveland (Summer), 18-32.

Avery, Robert B., Raphael W. Bostic, Paul S. Calem and Glenn B. Canner, "Trends in Home Purchase Lending: Consolidation and the Community Reinvestment Act," *Federal Reserve Bulletin*, 85: 81-102 February, 1999.

Belsky, E., N. Retsinas, R. Litan, G. Fauth, P.Leonard, M. Kennedy. 2001. The Community RETreasury.

Belsky, E., Matthew Lambert, Alexander von Hoffman, *Insights Into the Practice of Community Reinvestment Act Lending: A Synthesis of CRA Discussion Group*, Community Reinvestment Act Working Paper Series CRA00-1, Joint Center for Housing Studies, Harvard University, Cambridge, August, 2000.

Bradbury, K.L, K.E. Case & C.R. Dunham. 1989. Geographic Patterns of Mortgage Lending in Boston, 1982-1987. *New England Economic Review* (Sep/Oct): 3-30.

Bunce, Harold L., and Randall M. Scheessele, "The GSE's Funding of Affordable Loans," Housing Finance Working Paper Series No. HF-001, U.S. Department of Housing and Urban Development, December, 1996.

Canner, Glenn B., and Dolores S. Smith. 1991. "Home Mortgage Disclosure Act: Expanded Data on Residential Lending." *Federal Reserve Bulletin* 77: 859-81.

Evanoff, Douglas D. and Lewis M. Segal. 1996. "CRA and Fair Lending Regulations: Resulting Trends in Mortgage Lending." *Federal Reserve Bank of Chicago Economic Perspectives* 20(6):19-46.

Galster, George C., "Research on Discrimination in Housing and Mortgage Markets: Assessment and Future Direction," *Housing Policy Debate* 3(2): 639-83, 1992.

Holmes, A. & P. Horvitz. 1994. Mortgage Redlining : Race, Risk, & Demand. *J. of Finance* 49: 81-99.

Hula, Richard C. 1991. "Neighborhood Development and Local Credit Markets." *Urban Affairs Quarterly* 27(2): 249-67.

Hutchinson, P.M., J.R. Ostas, & J.D. Reed. 1977. A Survey & Comparison of Redlining Influences in Urban Mortgage Lending Markets. *AREUEA Journal* 5: 463-72.

Megbolugbe, I.M. & M. Cho. 1993. An Empirical Analysis of Metropolitan Housing & Mortgage Markets. *J. of Housing Research* 4(2): 191-224.

Perle, E.D., K. Lynch, & J. Horner. 1993. Model Specification & Local Mortgage Market Behavior. *J. of Housing Research* 4(2): 225-43.

Pogge, Jean. 1992. Reinvestment in Chicago Neighborhoods: A Twenty-Year Struggle. In Gregory D. Squires, ed. *From Redlining to Reinvestment: Community Responses to Urban Disinvestment*. Philadelphia: Temple University Press.

Schwartz, Alex. 1998. "Bank Lending to Minority and Low-Income Households and Neighborhoods: Do Community Reinvestment Agreements Make a Difference?" *Journal of Urban Affairs* 20(3):269-301.

Shlay, Anne B. 1989. "Financing Community: Methods for Assessing Residential Credit Disparities, Market Barriers, and Institutional Reinvestment Performance in the Metropolis." *Journal of Urban Affairs*. 11: 210-23.

Shlay, Anne B. 1988. "Not in That Neighborhood: The Effects of Population and Housing on the Distribution of Mortgage Finance within the Chicago SMSA." *Social Science Research* 17:137-163.

Shlay, Anne B., I Goldstein, and D. Bartlett, "Racial Barriers to Credit: Comment on Hula." *Urban Affairs Quarterly* 28(1): 126-40, 1992.

Assessing the Impact of the CRA on Banking Institutions

Robert B. Avery
Raphael W. Bostic
Glenn B. Canner
Board of Governors of the Federal Reserve System

The Community Reinvestment Act (CRA) was enacted in 1977 to encourage federally insured commercial banks and savings associations (banking institutions) to help meet the credit needs of their local communities, including lower-income areas, in a manner consistent with their safe and sound operation. The legislative history indicates that CRA arose out of concerns that banking institutions were accepting deposits from households and businesses in those areas while lending elsewhere and overlooking qualified loan applicants from the local community.

There are two polar views about how CRA may affect banking institutions. In one view, lending markets are perfectly competitive and operate with full information. Under this view, if CRA has an effect, it is to force banking institutions to extend loans to borrowers at prices not commensurate with the risks they pose, an activity that would result in the banks incurring losses. A second view holds that lending markets are either not perfectly competitive or have informational imperfections. Under this view, CRA helps to alleviate credit rationing and results in the extension of loans to creditworthy borrowers that had not previously had access to credit, an activity that does not result in losses.

In the analysis that follows, we search for evidence to support either of these views of how CRA affects the market. Using data from

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Contact information: (1) Avery: 202-452-2906, ravery@frb.gov, (2) Bostic: 202-452-2711,rbostic@frb.gov, (3) Canner: 202-452-2910,gcanner@frb.gov.

a recently conducted survey of the performance and profitability of CRA-related lending activities, we first determine whether banking institutions are engaged in marginal lending activities, here defined as loans extended solely as a consequence of CRA. We next determine whether there is evidence that banking institutions have experienced losses associated with these activities. We then determine whether there is evidence that banking institutions experienced gains on these marginal activities. In conducting this exercise, we consider each view and determine the extent to which there is support of that view versus an alternative, including no response to CRA or the other perspective.

Background on CRA

CRA calls upon the federal banking supervisory agencies to use their authority to encourage each banking institution to help meet local credit needs in a manner consistent with safe and sound operation by: (1) assessing the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods; and (2) considering the institution's CRA performance when assessing an application for a charter, deposit insurance, a change in branching, or a merger or acquisition.[1]

Implementation and enforcement of CRA has evolved through a series of regulatory and legislative actions. Most significantly, the banking agencies issued joint regulations in April 1995 to revise the CRA evaluation process and make it more objective and performance-oriented. The 1995 regulations provide distinct performance evaluation tests for three categories of banking institutions — large retail, small retail, and wholesale or limited-purpose institutions. To promote consistency of assessments, the statute and implementing regulations establish a uniform set of ratings criteria and four ratings categories: “Outstanding,” “Satisfactory,” “Needs to Improve,” and “Substantial Noncompliance.”

For large retail banking institutions, the regulations establish three performance tests — lending, investment, and service. The discussion focuses on the regulations for large retail institutions, as the analysis focuses only on such institutions. Under this scheme, lending is more heavily weighted than investments or services, so that an institution may not receive a “Satisfactory” or “Outstanding” rating unless it is rated at least “Satisfactory” on lending. The regulations do not establish specific lending, investment, or service thresholds for obtaining a particular CRA performance rating. The lending test involves the measurement of CRA-related lending activity for a variety of loan types, including home mortgage, small business and small farm, and community development loans.[2]

The Economics Underlying the CRA Debate

The current debate about CRA centers on whether the market would serve all creditworthy borrowers absent CRA, which is essentially a debate about whether lending markets are perfectly competitive and involve full information. Consider a very simple market with a single loan product and many interchangeable lenders, each with the same cost structure. If the market is perfectly competitive and all information is known, then all lenders are price takers and the equilibrium is such that the price of each loan equals the marginal cost associated with extending the loan. This is an unconstrained, full information equilibrium. In this market, every creditworthy borrower gets a loan from the lender that can best provide the loan.

A second possibility is that the market does not operate at the unconstrained full-information equilibrium, in which case some creditworthy borrowers might not receive credit. This could theoretically arise for a number of reasons. For example, the market may not be perfectly competitive. That is, some firms in the market could have market power and be price setters, perhaps due to regulatory restrictions or other barriers to entry. Alternatively, the market might not feature full information. In this regard, lenders could lack important information on the credit quality of borrowers or could find obtaining information for borrowers from certain groups or areas particularly costly. Previous research has shown that either condition can lead to credit rationing, in which borrowers who would be viewed as creditworthy in a full-information environment do not receive credit.[3] Essentially, the information imperfection results in a marginal cost curve for the lender that is higher than in a full-information environment. Finally, discrimination may also lead to an equilibrium in which creditworthy borrowers do not receive credit.

Critics of CRA argue that lending markets are essentially perfectly competitive with full information. In this view, CRA forces banks to extend additional loans for which the marginal cost associated with these loans exceeds the prevailing market price. Alternatively, proponents of CRA allege that the market is more accurately described in non-perfectly competitive terms. In both the market power and market imperfection cases, some creditworthy borrowers do not receive credit;

the market has some credit-rationing. In this view, CRA induces an increase in lending that moves the market closer to the competitive, full-information equilibrium.

It should be noted that both of these perspectives implicitly assume that all institutions take some action in response to CRA. This need not be the case, however, as some institutions might not find it necessary to respond to CRA. These institutions may find it possible to meet CRA objectives through their normal course of business or may choose to not be concerned about the consequences of a poor CRA performance rating. Moreover, for those institutions that do take some action in response to CRA, the degree of action may vary according to their particular situation.

In the analysis that follows, we search for evidence to support these contrasting views of how CRA affects the market. In conducting this exercise, we consider each view and determine the extent to which there is support of that view versus any alternative, including no response to CRA or the other perspective.

Data

The data used for the empirical analysis are drawn from the "Survey of the Performance and Profitability of CRA-Related Lending" recently conducted by the Federal Reserve Board.[4] The survey focused on the largest banking institutions and had two parts. Part A focused on an institution's total lending and its CRA-related lending in the four major loan product areas in which CRA lending activity is tracked: one-to four-family home purchase and refinance lending, one-to-four-family home improvement lending, small business lending, and community development lending. Respondents were asked to provide qualitative and quantitative profitability information for both overall and CRA-related lending (as appropriate) within each of the product categories along with various contextual data.

Part B gathered extensive information on the experiences lenders had in 1999 with their CRA special lending programs.[5] Because special lending programs may have been established for many reasons, the survey asked respondents to provide information on the full range of reasons these programs were developed and the benefits they currently receive from them. The survey also collected information on many other aspects of each program, including its loan volume, the type of loans it involved, the populations it was intended to serve, the role of any third party involved in the program, program features offered by the participating institutions, and information on the performance and profitability of the loans extended under the program.

Of the 500 institutions asked to participate in the voluntary survey, 143 institutions provided responses (Table 1, top panel). Respondent institutions accounted for about one-half of the assets of all U.S. banking institutions as of the end of 1999, and between 39 percent and 53 percent of all CRA-related lending for a given product in that year (bottom panel). The 143 respondents offered or participated in 622 CRA special lending programs in 1999 (Table 2). About 72 percent of the responding institutions offered at least one CRA special lending program; on average the institutions with programs offered about six programs. Because the survey sought detailed information on only the five largest of a banking institution's CRA special lending programs (measured by lending dollar volume in 1999), detailed information was obtained for only 341 programs.[6]

Identification of Marginal Loans

Because the theories underlying the debate about CRA highlight the marginal activities of banking institutions, the ideal test would identify those loans (if any) extended as a result of CRA(that is, marginal loans) and then observe their profitability. A finding that these loans were unprofitable would support those who argue that lending markets are perfectly competitive with full information; a finding of profitability (or not losing money) would support those that argue that such markets are not.

The survey did not ask institutions to explicitly identify those loans made as a result of CRA. Thus, although the survey provides a wealth of information about the profitability of CRA-related lending and CRA special lending programs, no single survey response can be used to conduct this ideal test. However, the survey does offer profitability information for a number of potential proxies for the loans made in response to CRA. Conditioned on certain assumptions being true, these indirect proxies may provide a reasonable estimate of the profitability of the "true" marginal CRA loans extended by a banking institution and thus provide a reasonable approximation of the ideal test.

There are a number of possible ways to identify marginal loans. In the presentation here, we restrict discussion to a broad and narrow definition of marginal lending activity. The broad definition categorizes marginal loans as all CRA-related loans originated or purchased and all loans extended under a CRAspecial lending program in any of the four loan product areas covered in the survey (referred to here as "All Proxies"). The narrow definition of marginal lending includes only loans extended under CRA special lending programs established or needed to achieve a "Satisfactory" CRA performance evaluation ("SAT" programs). This narrower category is more closely aligned with the notion of what is needed to meet the minimum CRA requirements. Any program established in part to obtain a "Satisfactory" rating was included in this group, regardless of whether other reasons were cited.

The weakness of using the broad definition is that many CRA-related loans likely would have been made even if the law did not exist and thus are not truly marginal.[7] The weakness of using the narrow definition is that it may exclude marginal loans that banking institutions may have extended that are not under any special program.

The analysis was conducted by choosing a particular definition of marginal lending, and then classifying institutions according to whether they extended marginal loans under this definition. Institutions were classified for each individual product and then at a composite level, which assesses whether the institution extended marginal loans in any product category. Once institutions were classified in this manner, we examined the experiences of the institutions regarding the profitability of their marginal lending and used this experience as a basis for estimating the percentage of the 500 sampled institutions that experienced losses or gains (defined below) in their marginal lending activities. Those institutions that extended no marginal loans were deemed to have neither losses nor gains. This process was done separately for each definition of marginal lending activity.

The survey collected detailed qualitative information on the profitability of lending activities, and this formed the basis of our assessment of the losses and gains associated with an institution's marginal lending activities. Banking institutions were asked if each individual CRA special program was "profitable," "marginally profitable," "break even," "marginally unprofitable," or "unprofitable."[8] The profitability distribution for overall CRA-related lending and CRA special lending programs for survey respondents is given in Table 3. An institution was considered to have experienced losses if *any* of its marginal lending activities (in a particular product area) were reported to be marginally unprofitable or unprofitable.[9] Similarly, an institution was considered to have experienced gains if *any* of its marginal lending activities were reported to be at least break even.

Importantly, the evaluations of losses and gains were conducted separately. Thus, a single institution could have some marginal activities that experienced losses and others that did not. This could even occur within a single loan product area.

Results of the Analysis

Using the broad definition of marginal lending, our estimates suggest that 35 percent of the institutions sampled experienced at least some loss associated with their marginal lending (Table 4, top panel). This is largely driven by the experiences banking institutions had in home mortgage lending, particularly in their home purchase and refinance lending activities. Few institutions (about 5 percent) reported a loss associated with their marginal small business and community development lending as defined here.

When marginal lending activities are narrowly defined as loans extended under SAT programs, the estimate of the proportion of institutions that are classified as having experienced at least some loss associated with their marginal lending activity is greatly reduced. Overall, 13.6 percent of institutions are estimated to have experienced a loss under this narrow definition. Again, most of the losses occur in marginal lending activity associated with home purchase and refinance lending.

We estimate that the 35 percent of the largest retail banking institutions judged to have some loss associated with their marginal lending activity using the broad definition would, on average, have had an annual loss of $865,000. Most of this loss (96 percent) is estimated to stem from home purchase and refinance lending. When expressed as a share of its overall equity, this implies a reduction in their overall bank return on equity of only .05 percent. The typical large retail bank in 1999 had a return on equity of 27 percent.

One reason this estimate of loss is small is that the loan dollar volumes for those marginal lending activities that had losses tended to be relatively minor. Many CRA special lending programs had only small losses. In addition, those institutions that reported losses on their overall CRA-related lending activities tended to have only a relatively small portion of their assets in CRA-related lending.

The bottom panel of Table 4 shows the proportion of institutions estimated to have had marginal lending activities that did not experience a loss. When marginal lending activities are broadly defined, virtually every institution (99 percent) is projected to have some marginal lending activities that were break even or better. This finding is not altogether unexpected, given that nearly all institutions reported that their small business and community development lending activities were profitable. However, even for home purchase and refinance lending, which was the loan product category responsible for most of the losses associated with marginal lending, 81.7 percent of institutions reported having some marginal lending activity that did not incur losses.

Using the narrow "SAT program" definition of marginal lending activities reduces the proportion of institutions projected to have had marginal lending activities that did not incur losses. Under this definition of marginal lending, 55.3 percent of the institutions would have had some marginal lending activity that was profitable.

In assessing the significance of these estimates, an important metric for assessing the "winners" (institutions that engaged in marginal lending activities that did not incur losses) is loan quantity. Recall that the view of CRA that asserts that CRA expands profitable lending opportunities focuses on greater volumes of lending as opposed to greater returns from lending. Thus, the assessment of the significance of marginal lending that did not incur losses focuses on the volume of such lending as a more appropriate measure of the significance of these activities.

Starting with the narrow SAT program definition of marginal lending activities, the data show that the 55.3 percent of institutions in the sample that reported that at least some of its marginal lending activities did not incur a loss extended loans totaling nearly $6.5 billion through those non-losing activities in 1999. Much of this lending occurred as community development lending, although a significant fraction was also home purchase and refinance lending. With the broad definition of marginal lending, the dollar volume of lending associated with non-losing marginal activities expands to $124 billion. As a point of contrast, the loan volumes of marginal activities that incurred losses were $0.8 billion using the narrow definition of marginal lending activities and $13.6 billion using the broad "All Proxies" definition of marginal lending activity.

Between the broad "All Proxies" and narrow "SAT program" definitions of marginal lending there are many alternatives, each with a different set of operating assumptions. The full paper provides some flavor of this by presenting results using a variety of definitions of marginal lending activities.[10] Estimates using these alternate definitions generally fall between those presented in Table 3.

We also conducted additional tests, using the framework established above and economic theory to test predictions as to which institutions should have incurred losses. Economic theory suggests that, all else equal, large institutions or those with large market shares should be less likely to show losses as a consequence of CRA. Similarly, institutions actively engaged in mergers and acquisitions or those seeking an "Outstanding" CRA performance rating might be expected to be more likely to show losses. We test these conjectures using the implied categorization of institutions as "winners" or "losers" (institutions that engaged in marginal lending activities that incurred losses) under our various definitions of marginal lending. We find very little support for any of these conjectures. Merger activity and CRAperformance ratings are unrelated to whether an institution is classified as a "loser" or not. Institution size is important. However, it is middle-sized and, to a lesser extent, the largest institutions that seem most likely to be adversely affected by CRA, not the smaller institutions predicted by the theory (although no truly small institutions were included in the survey).

Summary

Assessments of CRAhave historically been hampered by an inability to identify those loans extended exclusively as a consequence of the law and by a lack of data on the performance and profitability of such loans. The recent survey undertaken by the Federal Reserve on the performance and profitability of CRA-related lending provides a unique opportunity to overcome these difficulties. Using survey responses, one can assess the profitability of the various classifications of marginal lending activities and, in this way, potentially make an assessment of how CRA affects the profitability of banking institutions.

In this paper, we undertake this exercise. Our results provide some support for two polar views about how CRA may affect banking institutions. In one view, lending markets are perfectly competitive and operate with full information. Under this view, if CRA has an effect, it is to force banking institutions to extend loans to borrowers at prices not commensurate with the risks they pose, an activity that would result in the banks incurring losses. A second view holds that lending markets are either not perfectly competitive or have informational imperfections. Under this view, CRA helps to alleviate credit rationing and results in the extension of loans to creditworthy borrowers that had not previously had access to credit, an activity that does not result in losses.

Our estimates suggest that a significant minority of institutions that engaged in marginal lending activities experienced at least some loss associated with those activities. On the other hand, even large percentages of institutions are estimated to have conducted marginal lending activities that did not incur losses. Importantly, even using narrow proxy definitions, we never found a case in which either the number of institutions that experienced at least some loss or the number that experienced at least some gain was zero. This suggests that, at the very least, there are institutions that operate in each of these environments. Further, it suggests that a blanket characterization of an entire lending market may not be appropriate.

Further, the results suggest that an evaluation of the overall effect of CRAon a banking institution is complex. For a given institution, the extent of losses and non-losses associated with marginal lending activities often varied significantly across loan product areas and even within a loan product area. Thus, CRA might result in gains and losses for an institution. In general, the data show that home purchase and refinancing lending was more likely to show losses than other product areas. On the other hand, community development lending, because it is almost always profitable and contributed significantly to marginal lending under all of our definitions of such lending, contributes disproportionately to the share of institutions considered "winners."

Pinpointing the specific shares of institutions that are "winners" and "losers" is difficult, with the estimate highly dependent upon which definition is used to identify marginal lending. The estimate of the proportion of institutions that are "losers" is particularly sensitive to the inclusion of special lending programs that were established to give benefits that go beyond meeting the minimal standard of the CRA – a "Satisfactory" rating – in the definition of marginal lending. This sensitivity occurs not so much because such programs are more unprofitable than others, but because they account for a relatively large share of the special lending programs.

In considering these findings, there are a number of issues that may bear on the results in significant ways. The losses that an institution experienced in its marginal lending activities might have been understated for a number of reasons. First, many of the lending activities that we define as marginal, particularly CRA special lending programs, often include the participation of third parties that may shield the banking institution from exposure to losses. Second, as discussed above, the framework for identifying marginal loans is imperfect, which could lead to the inappropriate inclusion of profitable non-marginal loans.

Third, institutions were asked to report information on their experiences with lending in 1999, a year marked by strong economic growth and relatively few credit problems.

Similarly, the gains associated with marginal lending may have been understated for a number of reasons. First, some programs reported to be unprofitable might be relatively new and not have had an opportunity to generate sufficient loan volumes to cover start-up costs. Second, a small number of institutions that reported losses for their marginal lending activities in a loan product area also reported losses for their overall lending activity in that area, implying that these losses are likely not due to CRA. Third, because nearly all programs were established for a multitude of reasons and very few were established only for CRA-related reasons, it could be appropriate, depending on the circumstance, to attribute the profits or losses associated with a program to one of the other reasons and not to CRA.

It should be kept in mind that the survey focused only on large retail banking institutions. The experiences of smaller institutions, which account for most of the institutions covered by CRA and about half of the CRA-related lending, may differ substantially.

Finally, it bears emphasizing that the preceding analysis focuses on the effect of CRA on individual banking institutions and not on markets. The fact that an institution would not have undertaken marginal lending without CRA does not necessarily mean such lending would not have been undertaken by another institution absent the law. Further, our analysis does not provide a complete accounting of the effect of CRA on banking institutions. For example, it does not consider investment or service activities institutions undertake to meet their responsibilities under the law. Finally, even a complete enumeration of the costs and benefits to banking institutions would not constitute a full cost-benefit assessment of CRA, as it does not consider the benefits of CRA-related activities to the local community.

Robert B. Avery is a Senior Economist in the Division of Research and Statistics at the Board of Governors of the Federal Reserve System. Avery began his career as Assistant Professor at Carnegie Mellon University. From 1981 to 1988, he served as a Senior Economist with the Board of Governors. He then was a professor at Cornell University until rejoining the Board of Governors in 1994. His work at the Federal Reserve focuses on supervisory issues related to community affairs and bank supervision. Most recently, he was a coauthor of the Federal Reserve's report to the Congress on the performance and profitability

of CRA-related lending. He also designed the Federal Reserve's fair lending screening program and developed a pilot program for statistical sampling of the loan review portion of safety and soundness examinations of small banks. Avery served as director or codirector of the 1983, 1986, and 1989 Surveys of Consumer Finances. He received his undergraduate degree from the University of Pennsylvania and his Ph.D. in economics from the University of Wisconsin.

Raphael W. Bostic is a Senior Economist with the Federal Reserve Board and is currently conducting research on the ways in which the Community Reinvestment Act has influenced the behavior of lenders and credit markets. His work has also focused on consumer banking issues, with an emphasis on mortgage and small-business lending and bank branching patterns. Bostic has done extensive research on issues surrounding credit scoring and automated underwriting. His broad research interests include financial markets and institutions, with a particular focus on banks in community development, the role and effects of regulation in banking, urban economic growth, and wage and earnings profiles. Bostic was a coauthor of the Board's report to Congress on the performance and profitability of CRA-related lending. He received his B.A. in psychology and economics from Harvard College and his Ph.D. in economics from Stanford University.

Glenn B. Canner is a Senior Advisor to the Federal Reserve Board of Governors in the Division of Research and Statistics. Canner joined the Board in 1979 as an economist and was promoted to his present position in 1996. His current areas of specialization are home mortgage and consumer lending, with a strong focus on fair lending laws and community reinvestment. He also oversees the activity of the Board economists working in these areas. During his tenure, Canner has been author and coauthor of numerous articles and research studies. Most recently, he was a coauthor of the Federal Reserve's report to the Congress on the performance and profitability of CRA-related lending and of "CRA Special Lending Programs," published in the November 2000 issue of the Federal Reserve Bulletin. He holds a bachelor's degree in economics from Lake Forest College and earned his master's and doctoral degrees from Brown University.

Table 1
Profile of Unsampled, Sampled, and Responding Institutions, by Number and by Proportion of Assets or Type of Lending

Item	Less than 950	950-4,999	5,000-29,000	30,000 or More	Overall
By Number of Institutions Not Sampled					
Small Institutions	9,576	0	0	0	9,576
Large Institutions[1]	0	61	22	4	87
Total	9,576	61	22	4	9,663
Sampled					
Respondents	0	72	44	27	143
Nonrespondents	18	273	60	6	357
Total	18	345	104	33	500
Memo					
Response rate (percent)	0.0	20.9	42.3	81.8	28.6

Assets or Type of Lending (Table 1 continued)

	Assets	1-4 Family Mortgage Loan Outstandings	Small Business Loan Outstandings[2]	CRA 1-4 Family Mortgage Loan Originations[2]	CRA Home Improvement Loan Originations[2]	CRA Small Business Loan Originations[2]	Community Development Loan Originations[2]
By Percent of Assets Held, Loans Outstanding, or Loans Originated[3]							
Not Sampled							
Small Institutions	18	23	43	19	25	24	12
Large Institutions[1]	10	3	3	2	3	4	8
Total	28	26	46	21	28	28	20
Sampled							
Respondents	52	47	31	53	45	39	44
Nonrespondents	21	27	23	26	27	33	36
Total	72	74	54	79	72	72	80

[1] Includes large wholesale banks, special purpose banks, banks headquartered outside the United States, and banks that were acquired after December 31, 1999.

[2] Estimated. Figures for CRA lending are estimates based on preliminary 1999 HMDA data and on CRA data for small business, small farm, and community development lending; estimation of the extent of lending in a banking institution's local community draws on information on bank office location or reported CRA assessment areas.

[3] Percent of assets held: Assets held as of December 31, 1999, as a proportion of assets held by all U.S. banking institutions at that date; Percent of outstanding loans: Dollar amount of loans outstanding at the end of 1999 as a proportion of dollar amount of loans held by all U.S. banking institutions at that time; estimated for small business loan outstandings by extrapolating data from the June 30, 1999, Bank Call and Thrift Financial Reports; Percent of loan originations: Dollar amount of loans originated during 1999 as a proportion of dollar amount of loans originated by all U.S. banking institutions reporting loan origination data pursuant to the HMDA or CRA during the year.

Table 2
Banking Institutions and CRA Special Lending Programs Covered in Survey, by Size of Institution, 1999

Item	All Reporting Institutions	950-4,999	5,000-29,999	30,000 or More
Institutions				
Number Responding to Survey[1]	143	72	44	27
Offering at Least One Program				
Number	103	48	31	24
Percent	72	67	70	89
Number of Programs				
Among the Five Largest At Each Institution[2]	341	138	116	87
Smaller than the Five Largest At Each Institution	281	31	139	111
Total Number	622	169	255	198
Mean Number Per Institution Offering at Least One Program	6.0	3.5	8.2	8.3
Number of Programs Among the Five Largest at Each Institution, by Type of Loan Offered				
One- to Four-Family Home Purchase and Refinance Only[3]	247	98	83	66
Small Business Only	27	17	4	6
Other	67	23	29	15
One- to Four-Family Home Home Improvement Only	17	7	6	4
Multi-Family Only	16	6	8	2
Consumer Only	5	1	3	1
Commercial Only	4	1	3	0
Other[4]	25	8	9	8

[1] Excludes one institution (in the middle size category) that did not respond to the special lending portion of the survey.

[2] Institutions were asked for detailed information on only the five largest of their programs (measured by dollar volume of 1999 originations).

[3] Programs reported in this row and the remaining rows of this table are from among the 341 reported by all institutions to be among their 5 largest.

[4] Programs identified as such by survey respondents and programs that offer more than one type of loan.

Table 3
Profitability Distribution for Overall CRA-Related Lending and CRA Special Lending Programs
(Percent distribution of institutions or programs)

	Home Purch.		Home Improv.		Sm. Bus.		Comm. Devel.[1]	
Overall CRA-Related Lending								
Profitability Data Given	74.8		61.1		65.5		75.7	
Profitable		46.5		65.2		83.3		54.8
Marginally Profitable		33.4		20.7		13.7		38.8
Break Even		4.0		5.0		1.5		3.6
Marginally Unprofitable		9.6		7.2		0.7		2.0
Unprofitable		6.6		1.9		0.7		1.3
Total		100.0		100.0		100.0		100.0
Missing Profitability	20.1		20.5		27.1		8.8	
No Lending	5.0		18.4		7.5		15.5	
Total	100.0		100.0		100.0		100.0	
CRASpecial Lending Programs								
SAT Only Programs								
Profitability Data Given	65.2		100.0		100.0		61.2	
Profitable		23.9		10.6		3.1		51.7
Marginally Profitable		32.0		44.0		12.9		40.3
Break Even		24.5		45.4		6.3		4.9
Marginally Unprofitable		9.2		0.0		51.8		3.2
Unprofitable		10.4		0.0		25.9		.0
Total		100.0		100.0		100.0		100.0
Missing Profitability	34.8		0.0		0.0		37.2	
Total	100.0		100.0		100.0		100.0	
Memo: Number of Programs	96		6		10		70	
All Programs								
Profitability Data Given	77.5		100.0		93.3		90.0	
Profitable		28.9		4.9		55.7		54.8
Marginally Profitable		31.7		43.5		10.2		38.3
Break Even		13.5		44.2		2.5		3.6
Marginally Unprofitable		15.7		4.9		21.6		2.0
Unprofitable		10.2		2.5		10.2		1.3
Total		100.0		100.0		100.0		100.0
Missing Profitability	22.5		0.0		6.7		10.0	
Total	100.0		100.0		100.0		100.0	
Memo: Number of Programs	226		14		27		122	

[1] For community development lending, the breakdown on use of CRAspecial lending programs includes all community development lending.

Table 4
Estimates of Institutions With Losses and Gains, by Product Area and Definition of Marginal Lending Activity
(percent of 500 sampled institutions)

	Marginal Lending Activity Definition	
Product Area	All Proxies	SAT Programs
Estimate of Losses		
Composite (All Products)	35.0	13.6
Home Purchase	27.1	9.1
Home Improvement	7.6	0.0
Small Business	4.9	3.0
Community Development	5.5	4.5
Estimate of Gains		
Composite (All Products)	99.0	55.3
Home Purchase	81.7	26.3
Home Improvement	74.3	4.0
Small Business	88.3	1.5
Community Development	79.0	45.4

Notes

[1] The federal banking supervisory agencies are the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision.

[2] For the survey and the current research, CRA-related lending refers to loans extended to low- and moderate-income borrowers (regardless of neighborhood income) and to low- and moderate-income neighborhoods (regardless of borrower income) in a banking institution's CRA assessment area(s). A low- and moderate-income neighborhood (typically a census tract) is one where the median family income of the neighborhood is less than 80 percent of the median family income for the metropolitan statistical area (MSA). Borrower income categories follow the same groupings as those for neighborhoods but rely on the borrower's income relative to that of the concurrently measured median family income of the MSA. For small business lending, the size of the firm, instead of the income of the borrower, is used to define CRA-related lending. All community development loans are considered to be CRA-related lending.

[3] For examples, see William C. Gruben, Jonathan A. Neuberger, and Ronald H. Schmidt, "Imperfect Information and the Community Reinvestment Act," Federal Reserve Bank of San Francisco Economic Review, (Summer 1990), pp. 27- 46; William W. Lang and Leonard I. Nakamura, "A Model of Redlining," Journal of Urban Economics, vol. 33 (1993), pp. 223-234; and Joseph E. Stiglitz and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information," American Economic Review, vol. 71, no. 3 (1981), pp. 393-410.

[4] The survey was a response to Section 713 of the Gramm-Leach-Bliley Act of 1999 (P.L. No. 106-95). For more information about the survey and its findings, see the report prepared by the Board of Governors of the Federal Reserve System and submitted to the Congress in July 2000. The report and the survey questionnaire are available on the Federal Reserve Board's web site at www.federalreserve.gov/boarddocs/surveys/CRAloansurvey. For more detailed information about the survey findings regarding CRA special lending programs in particular, see Robert B. Avery, Raphael W. Bostic, and Glenn B. Canner, "CRA Special Lending Programs" Federal Reserve Bulletin, vol. 86 (November 2000), pp. 711-31.

[5] A program would meet this definition only if one of the program's documented purposes was to enhance the institution's CRAperformance.

[6] The 341 programs are estimated to account for about 97 percent of the lending that responding institutions extended under special lending programs in 1999.

[7] The fact that a great number of loans are extended each year to lower-income borrowers or in lower-income neighborhoods by lenders not covered by CRAsupports the proposition that lenders covered by CRA would also extend many such loans without the impetus of the law. See, for example, Table 4, p. 92 in Robert B. Avery, Raphael W. Bostic, Paul S. Calem, and Glenn B. Canner, "Trends in Home Purchase Lending: Consolidation and the Community Reinvestment Act," Federal Reserve Bulletin, vol. 85 (February 1999) pp. 81-102.

[8] For the survey, respondents were asked to compute a profitability measure based on "all revenues and costs associated with origination, servicing, pricing, delinquency, default and losses, prepayment, loan sales and purchases, and related customer account business." This characterization was intended to represent economic profits, although the survey did not state this explicitly.

[9] If an institution reported more than one special lending program in a given loan product area that satisfied the definition of marginal lending, the institution was categorized as unprofitable in that product area if any such programs were reported to be unprofitable.

[10] In the full paper, we explore a number of other options in which we vary the definition of marginal lending. For example, one definition includes all special programs that institutions reported that they believed were needed to obtain a "Satisfactory" or "Outstanding" CRA performance rating or were established to *minimize* the likelihood of adverse public comment on their CRA record ("SOM" programs).

The Impact of Bank Consolidation on CRA Business Lending

Katherine A. Samolyk
Federal Deposit Insurance Corporation

Christopher A. Richardson
U.S. Department of Justice

Summary

The Community Reinvestment Act (CRA) of 1977 was intended to encourage insured depository institutions to meet the credit needs of the communities where they are chartered to accept deposits. The primary focus of CRA evaluations by bank regulatory agencies has traditionally been on the provision of home mortgage credit, in part because of the availability of data pursuant to the Home Mortgage Disclosure Act (HMDA – 1975). However, 1995 revisions to the CRA regulations re-emphasized and clarified the treatment of lending to small businesses and small farms. One goal of these revisions was to make CRA evaluations more reflective of actual outcomes rather than on bank lending policies and procedures (Canner, 1999). To this end, the revised CRA regulations require an annual reporting of geographic data on small business and farm lending by larger banking institutions (these data are referred to as the CRA data).

The 1995 CRA regulations raise important questions about how commercial banks and savings institutions, — hereafter referred to as "banks" — choose to serve their communities, particularly in light of the

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† Contact Information:Katherine Samolyk:202-898-3655,ksamolyk@fdic.gov; Christopher A. Richardson:202-305-2959,christopher.richardson@usdoj.gov.

ongoing trend towards bank consolidation. Although concerns have been raised that bank mergers adversely affect small business credit availability, no one has specifically studied the types of small business lending likely to qualify for the purposes of CRA evaluations — such as loans to businesses in low- and moderate-income (LMI) neighborhoods. In this study, we use the relatively new CRA data to examine how bank merger activity has affected CRA business lending.

Since 1996, independent banks with assets of at least $250 million and bank affiliates of holding companies that control at least $1 billion in assets have been required to report data on the number and the dollar volume of small business and farm loans originated during the calendar year. By "small," the CRA data refer to loans of less than $1 million going to nonfarm businesses of any size ($500,000 for loans to farms). The data also include detail on the small loans extended to "small" firms, referring to businesses having gross annual revenues of less than $1 million. The CRA loan data are aggregates classified by the census tract location of the borrowing business or farm, and they include separate figures for nonfarm businesses and farms and for three size categories of small loans. Finally, since 1998, each bank also reports which census tracts are included in its service area for the purposes of CRA evaluations (its assessment area).

Using these data, we examine how bank merger activity is related to CRA business lending by the bank as a whole as well as how it affects a bank's lending in the particular markets where it operates bank branches. The latter approach allows us to test whether merger-related effects differ for within-market versus out-of-market merger activity and for rural versus urban markets. The goal of this study is not to assess the costs or benefits of CRA for any particular constituency. Rather, our goal is to conduct a careful and rigorous analysis of the relatively new CRA data to see whether bank merger activity has been systematically related to CRA business lending during the late 1990s.

Our results indicate that banks experiencing merger activity — including banks that did not merge themselves, but were part of holding companies that acquired new banks — had systematically lower CRA business loan growth than banks experiencing no merger activity. These merger-related effects appear to be associated with a general decline in small business lending, rather than a shift away from LMI areas or very small businesses. At the local level, the evidence suggests that merger-related effects depend on how the merger activity affects the local market. For example, in Metropolitan Statistical Area (MSA) markets we find that negative merger-related effects are larger when the merger *activity is associated with an increase in the concentration of the local banking market. Here, we summarize this effort to quantify changes in CRA business lending and relate these changes to bank merger activity in multivariate statistical tests.*

Background

A broad concern associated with the continuing bank consolidation trend is that the merging of banks into larger, more complex organizations may adversely affect the provision of basic banking services to the smaller customers that are more costly to serve. Small business lending has been advanced as a banking product likely to be affected by bank consolidation (Berger and Udell, 1996; Avery and Samolyk, 2000) because, traditionally this type of lending has been local in nature, often to firms with idiosyncratic credit needs and risks tied to the prospects of the local economy.

Researchers have identified two basic channels by which bank consolidation may adversely affect small business lending. First, there is the notion that small banks have a comparative advantage in meeting the less-standardized credit needs of small businesses, while large banks have a comparative advantage in providing standardized credit products such as home mortgages and credit cards. Hence, as banks grow to be larger, more complex organizations, they may shift away from small business lending to more standardized loan products or larger commercial customers. In addition, reduced competition in local markets is more likely to affect small business borrowers who have fewer alternatives to local banks.

The implications for CRA business lending follow from the general bank consolidation story in that the adverse consequences for small business credit availability are more likely to affect the more marginal small business customers — those that are the smallest or those having more modest economic prospects. Thus, a continuation of the bank consolidation trend could reduce the extent to which banks satisfy CRA regulations through their small business lending activities. On the other hand, because of CRA considerations, banks may be less likely to reduce their focus on small business customers that "count" in terms of CRA evaluations.[1]

Numerous studies have examined how mergers and acquisitions affect a bank's overall small business lending.[2] Most of these studies use bank-level small business loan data reported since 1993 in mid-year Reports of Condition and Income.[3] They compare lending by "merging" banks to lending by "nonmerging" banks and test whether there are systematic differences associated with merger activity. The results of these studies depend on how changes in small business lending are measured, the time period studied, and how bank merger activity is defined.[4] But the evidence broadly indicates negative merger-related effects associated with mergers involving larger banks or more concentrated markets; while acquisitions by smaller or more active small business lenders have been associated with more small business lending by the surviving banks. Prior to the fairly recent availability of the CRA data, it has been difficult to assess the implications of bank consolidation for CRA business lending, particularly lending to LMI neighborhoods. To our knowledge, no one yet used the CRA data to study this specific issue.[5]

Empirical Overview

Our empirical strategy follows much of the bank consolidation literature in analyzing small business lending at the bank level. We use multivariate regression analysis to test whether banks involved in mergers and acquisitions have systematically different CRA business loan growth than other institutions. In the taxonomy developed by Berger and Udell (1998), our study is "dynamic" in that we compare changes in CRA business lending over time by merging banks to lending by comparable institutions that were not involved in merger activity. Although our empirical strategy seems straightforward, the nature of the data collected and the inherent geographic dimension of the lending being studied pose formidable issues in the execution of a study of this type.

The most obvious limitation of the CRA data for any analysis of small business lending patterns is that only a subset of banks must report these data.[6] It is difficult to study overall credit availability using the CRA small business loan data because many small banks do not report these data.[7] The exemption of small banks from CRA-reporting affects the samples of banks that we study here since we cannot include banks for which we do not have complete CRA data for a given study period. Hence, our study samples exclude non CRA-reporting banks and new CRA reporters — those who reported at the end of a given study period but not at the beginning. More importantly, to accurately measure changes in CRA business lending by banks that have acquired other banks, we also must exclude CRA-reporting banks that acquired non CRA-reporting banks during a given study period.

Measuring CRA Business Lending

We study the growth of CRA business lending during two, two-year study periods (comparing 1998 loan originations to 1996 loan originations and 1999 loan originations to 1997 originations, respectively). We chose to use these two-year study intervals because we believe they are long enough for the effects of merger activity on lending to manifest themselves in the calendar-year CRA loan origination data. Of course, the relative newness of the CRA data limits the temporal scope of our study, and although our study periods overlap, we feel it is important to compare results for the two periods, particularly because of data integrity questions associated with any new data set.

We construct several measures of the types of small business lending (SBL) likely to count for the purposes of CRA evaluations. *Assessment Area SBL* includes small loans (less than $1 million) to businesses located in the markets where the bank operates branches. *Assessment Area LMI SBL* includes small loans to businesses located in LMI neighborhoods in markets where the bank operates branches. And, *CRA-Type SBL* includes Assessment Area LMI SBL plus SBL to small firms (gross annual revenues of less than $1 million) located in non LMI parts of a bank's deposit market. The latter two measures attempt to capture lending to the more "marginal" small business borrowers that, according to the bank consolidation story, are more likely to be adversely affected by merger activity.

We use the geographic detail in the CRA data and U.S. Census Bureau data to quantify these types of CRAbusiness lending.[8] We also examine two broader measures of small business lending to more fully interpret observed patterns in the CRA data: 1) a bank's *Total SBL*, both within and outside of its assessment area, and 2) a bank's *Total LMI-area SBL* (both within and outside of its assessment area). We use these measures to assess how observed changes in CRA business lending compare to changes in a bank's overall small business lending.

However, an issue important in any study of CRA business lending is how one deals with changes in a bank's assessment area over time in measuring changes in CRA-related lending over time. Banks change their assessment areas as they change the geographic markets they serve, and this can affect which of their small business loans "count" for the purposes of CRA evaluations. For example, if a bank expands its branching network to areas where it already makes small business loans, then there can be an increase in the bank's "reported" assessment area SBL simply because it has broadened its assessment area. On the other hand, when a bank exits a market as a deposit-taker (as part of a divestiture or otherwise), the bank may continue to make small business loans to the area that will no longer count as CRA business lending if the market is dropped from its assessment area. It is important to point out that changes in a bank's assessment area may be associated with a bank merger, but nonmerging banks also change their geographic branching patterns over time.

In this study, we consider two types of Assessment Area (AA) loan growth measures. What we refer to as changes in "reported AA" lending simply compares what a bank (and any bank it acquires) reported as assessment area lending at the beginning of the period with the assessment area lending it reports two years later.[9] Reported AAloan growth measures do not attempt to net out changes in lending associated with assessment area changes. However, one might want to net out loan growth associated with changes in a bank's assessment area markets, so as to study how merger activity affects lending to the markets served by a bank (or its acquisitions) at the beginning of the period. What we refer to as changes in "proforma AA" lending measure loan growth in the markets where a bank (or any bank that it subsequently acquired) operated deposit-taking branches at the beginning of the period.

Classifying Bank Merger Activity

Another issue, one that must be addressed in any bank consolidation study, is how to characterize bank merger activity. There are a range of legal changes in bank structure that are associated with increasing concentration of banking-sector assets, including consolidations of holding company affiliates, mergers of unaffiliated banks, and bank acquisitions by holding companies that do not involve a merger into a holding company affiliate. The important consideration for credit availability is simply that different types of mergers may have very different implications for the behavior of the surviving banks. For example, consolidations of holding company affiliates are sometimes thought to have little effect on bank behavior since the parties were already part of the same holding company.

In this study, we are examining CRA lending by individual banks, even if they are part of a holding company, because CRA ratings are assigned at the bank level. However, we take a broad perspective in defining bank merger activity. We consider merger activity at the bank level; but for holding company (HC) affiliates, we also identify if the parent HC is actively acquiring new banks, since broader structural changes within a holding company may affect the behavior of affiliates, even if they do not merge. Hence our measure of *any merger activity* includes the following six distinct "types" of merger activity:

1) *Unaffiliated merger(s)*: The bank merges with at least one previously unaffiliated bank.

2) *Affiliate merger(s)/active HC*: The bank acquires only previously affiliated banks, but it is part of a HC that acquires at least one unaffiliated bank.

3) *Affiliate merger(s)/inactive HC*: The bank acquires only HC affiliates and the only merger activity within the parent HC involves the consolidation of affiliates.

4) *No merger/but new HC*: The bank does not merge with another bank, but it is acquired by a new HC (the HC is therefore active by our definition).

5) *No merger/but HC is active*: The bank is not involved in merger activity, but it is part of a holding company that acquired at least one unaffiliated bank.

6) *Inactive*: The bank is not involved in merger activity and its HC parent has not acquired any previously unaffiliated banks.

For each study sample, we classify the merger activity of each surviving bank during a two-year interval (year-end 1996 through year-end 1998 and year-end 1997 through year-end 1999, respectively). Inactive banks serve as the base group that we compare with "active" banks. Table 1 reports the distributions of our bank-level study samples classified by the nature of their merger activity. Below, we summarize the results of multivariate regressions that relate CRAbusiness loan growth to these types of bank merger activity.[10] We ran all tests for study samples that included both savings institutions and commercial banks and for study samples including only commercial banks. All regressions are estimated using Ordinary Least Squares (OLS).

Bank-Level Tests

In the bank-level tests, we control for a bank's characteristics and its financial conditions at the beginning of the period being studied. For banks that acquire others during the study period, control variables are measured on a merger-adjusted basis where appropriate.

The panels in Table 2 report merger-related loan growth differentials measured for banks experiencing any type of merger activity. As indicated in this table, we find some evidence that merger activity is negatively associated with the growth of CRAbusiness lending. At the bank-level, merger-related effects appear to be associated with an overall decline in small business lending, rather than a shift away from the types of lending likely to qualify for CRA purposes. To more fully understand the results for our broad definition of merger activity, we also estimated merger-related differentials for the specific types of merger activity.[11] These tests indicate negative loan growth differentials for merging banks as well as for banks that did not merge themselves but were part of holding companies involved in mergers. Finally, as indicated in Table 2, we find that the relationships between merger activity and CRA business lending for commercial banks are broadly consistent with those evident for samples that include both savings institutions and commercial banks.

We do advise caution, however, in focusing on the precise magnitude of estimated merger-related growth differentials. The manner in which one deals with extreme values of observed loan growth rates can affect the averages measured for different groups and hence the differentials across groups.

By-Bank/By-Market Tests

Bank-level tests may obscure differences in CRA business lending that are associated with the characteristics of, and conditions in, the particular markets where a bank operates. Here we summarize multivariate tests that examine how bank merger activity is related to CRA business loan growth in the particular markets that comprised a bank's assessment area at the beginning of the period.[12] These tests allow us to control for the characteristics of, and the conditions in, local markets where a bank operates (as well as the bank's characteristics and its condition) in measuring merger-related effects. The by-bank/by-market tests also allow us to study whether the effects of merger activity depend on whether it affects the concentration of the local banking market — that is, whether the merger activity is occurring within a given market versus whether it is out-of-market activity.[13]

For these tests, we constructed measures of CRA business lending for a given bank in each of its proforma AA markets, defined at the beginning of a given study period. We use MSAs and rural counties to approximate urban and rural banking markets, respectively. Because related research suggests that merger-related effects can differ for urban and rural markets, we also split our by-bank/by-market samples into urban and rural subsamples. In testing for merger-related effects, we use the same bank-level merger classifications as in the bank-level tests. However, for each of the by-bank/by-market observations, we also classify a bank's merger activity by whether it increases the concentration of that particular banking market (within-market merger activity). Table 3 reports the distribution of our by-bank/by-market samples across these classifications of merger activity.

The panels in Table 4 report the coefficients measuring the average loan growth differentials associated with *any type of merger activity*, classified by whether it is *within-market* versus *out-of-market* merger activity. As this table indicates, we find evidence that banks experiencing merger activity had significantly lower CRA business loan growth in the markets where they (or their acquisitions) operated branches at the beginning of the period. We also find that merger-related effects depend on how the merger affects the concentration of the local banking market. In MSAs, we find significantly larger differentials associated with within-market merger activity than with out-of-market activity. Again, as Table 4 suggests, our results for commercial banks are broadly comparable to those obtained for all institutions.

Conclusion

To our knowledge, this paper is the first to use CRA data to explicitly examine how bank consolidation was related to CRA business lending during the late 1990s. As we discuss, the limited reporting of these data complicated this examination and represents an important caveat in interpreting the evidence presented here. Nonetheless, our bank-level multivariate tests yield some evidence that banks experiencing merger activity — including banks, not directly involved in a merger or an acquisition that are part of an active holding company — had systematically lower CRA-related loan growth than inactive banks. These merger-related effects, however, appear to be associated with an overall decline in small business lending, rather than a shift away from lending to LMI areas or very small businesses within a bank's service area. The evidence yielded by examining specific banking markets suggests that bank-level analyses can obscure merger-related effects associated with how merger activity affects the concentration of the local marketplace.

We do, however, advise caution in extrapolating the evidence presented in this study of CRA-filing institutions to all banks. In using the CRA data to study the effects of bank merger activity, we had to drop institutions from our study samples if they merged with non-CRA reporters (or if they themselves were not a CRA-reporter at the beginning of a given study period). Because non-CRA reporters are smaller banks, our study samples are not representative of all banks or all bank mergers. Since we had to exclude any bank that acquired a small non CRA reporter, our results are less likely to characterize affects associated with mergers involving small banks.

Finally, this study does not imply that banks ignore, or take more lightly, CRA obligations in their post-merger environments. The next step in this research project is to examine whether the merger-related effects reported here may reflect a shift in CRA-related lending from business lending to home mortgage lending. Such a shift would be consistent with conjectures regarding bank scale and bank product mix.

Katherine A. Samolyk is an Economist in the Division of Research and Statistics at the Federal Deposit Insurance Corporation. Her research focuses on the study of banking and broader financial sector conditions, the linkages between credit markets and the performance of the economy, small-business financing issues, and the competitive analysis of bank merger activity, including the implications of bank consolidation for the provision of small-business lending. Prior to joining the FDIC Research Division in 1996, she spent two years as a visiting economist at the Board of Governors of the Federal Reserve System and five years as an economist at the Federal Reserve Bank of Cleveland. While at the Federal Reserve Board, she worked on the production of the 1993 National Survey of Small Business Finance public use database and developed a methodology to utilize the microbusiness data to improve Flow of Funds account estimates for unincorporated firms. She received her B.S. in economics at the University of Wisconsin–Milwaukee and her Ph.D. in economics from the University of Wisconsin–Madison.

Christopher A. Richardson is an Economist in the Department of Justice's Civil Rights Division: he is the first staff economist in the division's history. From 1997 to January, 2001, Richardson was a financial economist in the Federal Deposit Insurance Corporation's Division of Research and Statistics. He did work in various areas at FDIC, including offsite monitoring systems, international transmission of financial

crises, CRA, and discrimination in credit markets. He received his B.B.A. in economics from Mississippi State University and his Ph.D. in economics from Indiana University.

Table 1
Distribution of Banks by Type of Merger Activity
percent of sample

	1996-1998		1997-1999	
	All Institutions	Commercial Banks	All Institutions	Commercial Banks
Any Merger Activity	43.3	48.5	43.5	50.5
Merged With Unaffiliated Bank	4.3	4.2	4.3	4.2
Affiliate Merger; Active HC	2.7	3.3	1.3	1.6
Affiliate Merger; Inactive HC	1.3	1.7	1.4	1.7
No Merger; New HC	7.7	6.1	6.8	6.4
No Merger; But Active HC	27.3	33.2	29.7	36.5
No Merger Activity	56.7	51.5	56.5	49.5
Number of Observations	967	755	948	745

Table 2
Merger-Related Differentials in Bank-Level CRA Business Loan Growth

A. Commercial Banks and Savings Institutions

	1996-1998					1997-1999				
Dependent Variable:	SBL	LMI SBL	AA SBL	AA LMI SBL	CRA-Type SBL	SBL	LMI SBL	AA SBL	AA LMI SBL	CRA-Type SBL
Any Merger Activity	-0.164***	-0.143**	-0.142**	-0.151**	-0.153**	-0.144**	-0.126*	-0.111*	-0.101	-0.104*
	(0.053)	(0.060)	(0.060)	(0.063)	(0.060)	(0.063)	(0.071)	(0.061)	(0.066)	(0.060)
Mean Dependent Variable	0.217	0.191	0.188	0.163	0.184	0.192	0.176	0.161	0.147	0.155
Adjusted R Squared	0.098	0.066	0.082	0.076	0.080	0.077	0.071	0.095	0.094	0.094

B. Commercial Banks Only

	1996-1998					1997-1999				
Dependent Variable:	SBL	LMI SBL	AA SBL	AA LMI SBL	CRA-Type SBL	SBL	LMI SBL	AA SBL	AA LMI SBL	CRA-Type SBL
Any Merger Activity	-0.117**	-0.121**	-0.109**	-0.124**	-0.117**	-0.158***	-0.138*	-0.114**	-0.109*	-0.112**
	(0.049)	(0.056)	(0.049)	(0.057)	(0.050)	(0.060)	(0.073)	(0.057)	(0.066)	(0.056)
Mean Dependent Variable	0.122	0.111	0.109	0.094	0.103	0.114	0.097	0.073	0.061	0.070
Adjusted R Squared	0.083	0.075	0.071	0.062	0.063	0.058	0.045	0.053	0.052	0.056

Notes: ***, **, *: Significant at the 1%, 5%, 10% level, respectively. Standard errors are in parentheses.

Table 3
Distribution of By-Bank/By-Market Observations by Type of Merger Activity
percent of sample

	1996-1998				1997-1999			
	All Institutions		Commercial Banks		All Institutions		Commercial Banks	
	Non-MSA Counties	MSAs	Non-MSA Counties	MSAs	Non-MSA Counties	MSAs	Non-MSA Counties	MSAs
Out-of-Mkt. Merger Activity	67.9	45.3	70.7	50.0	69.9	46.1	73.2	51.2
Out-of-Mkt; Unaffiliated Merger	23.4	14.1	25.2	16.6	16.3	9.9	17.5	10.4
Out-of-Mkt; Affiliate Merger; Active HC	10.4	3.6	11.3	4.2	2.5	1.5	2.8	1.9
Out-of-Mkt; Affiliate Merger; Inactive HC	3.2	4.1	3.5	5.1	11.8	8.2	12.7	10.0
Out-of-Mkt; No Merger But New HC	5.9	8.0	5.1	5.8	7.6	7.8	7.3	7.2
Out-of-Mkt; No Merger But Active HC	24.9	15.4	25.6	18.3	31.6	18.7	32.8	21.7
Within-Mkt Merger Activity	3.9	11.2	3.8	11.9	2.4	10.3	2.5	10.7
Within-Mkt; Unaffiliated Merger	1.6	5.3	1.7	5.4	0.6	5.6	0.6	5.2
Within-Mkt; Affiliate Merger; Active HC	0.3	0.9	0.3	1.0	0.0	0.3	0.0	0.4
Within-Mkt; No Merger But New HC	0.5	2.0	0.5	2.3	1.0	1.4	1.1	1.5
Within-Mkt; No Merger But Active HC	1.5	3.0	1.3	3.2	0.8	3.0	0.8	3.6
Within-Mkt Merger Activity	28.2	43.5	25.5	38.1	27.7	43.6	24.3	38.1
Number of Observations	1629	1683	1498	1365	1964	1876	1812	1536

Table 4
Merger-Related Differentials in Local CRA Business Loan Growth
proforma assessment area markets

A. 1996-1998 Study Period

	Non-MSA Counties			MSAs		
Dependent Variable: SBL	All SBL	LMI SBL	CRA-Type SBL	All SBL	LMI SBL	CRA-Type
All Institutions						
Out-of-Mkt Merger Activity	-0.156*	-0.231**	-0.131	-0.196***	-0.199***	-0.167**
	(0.090)	(0.097)	(0.092)	(0.070)	(0.077)	(0.073)
Within-Market Merger Activity	-0.273	-0.296	-0.278	-0.377***	-0.441***	-0.405***
	(0.195)	(0.211)	(0.200)	(0.102)	(0.112)	(0.106)
Mean Dependent Variable	-0.373	-0.405	-0.396	-0.052	-0.090	-0.073
Adjusted R Squared	0.104	0.093	0.113	0.104	0.091	.100
Commercial Banks Only						
Out-of-Mkt Merger Activity	-0.219**	-0.272***	-0.180*	-0.152**	-0.156**	-0.132*
	(0.092)	(0.099)	(0.094)	(0.071)	(0.078)	(0.075)
Within-Mkt Merger Activity	-0.250	-0.240	-0.250	-0.321***	-0.409***	-0.354***
	(0.194)	(0.210)	(0.198)	(0.102)	(0.111)	(0.108)
Mean of Dependent Variable	-0.373	-0.407	-0.399	-0.107	-0.142	-0.137
Adjusted R Squared	0.125	0.111	0.134	0.106	0.091	0.096

Table 4 *(continued)*
Merger-Related Differentials in Local CRA Business Loan Growth
proforma assessment area markets

B. 1997-1999 Study Period

	Non-MSA Counties			MSAs		
Dependent Variable:	All SBL	LMI SBL	CRA-Type SBL	All SBL	LMI SBL	CRA-Type SBL
All Institutions						
Out-of-Mkt Merger Activity	-0.155*	-0.196**	-0.149	-0.001	-0.027	-0.011
	(0.092)	(0.098)	(0.094)	(0.078)	(0.082)	(0.078)
Within-Mkt Merger Activity	-1.722***	-1.750***	-1.725***	-0.716***	-0.711***	-0.708***
	(0.242)	(0.257)	(0.246)	(0.119)	(0.126)	(0.119)
Mean Dependent Variable	-0.467	-0.499	-0.483	-0.183	-0.201	-0.180
Adjusted R Squared	0.135	0.132	0.137	0.117	0.104	0.115
Commercial Banks Only						
Out-of-Mkt Merger Activity	-0.170*	-0.211**	-0.164*	-0.002	-0.053	-0.028
	(0.096)	(0.104)	(0.098)	(0.081)	(0.087)	(0.081)
Within-Mkt Merger Activity	-1.761***	-1.788***	-1.766***	-0.884***	-0.884***	-0.882***
	(0.246)	(0.265)	(0.250)	(0.126)	(0.135)	(0.126)
Mean Dependent Variable	-0.469	-0.505	-0.487	-0.238	-0.255	-0.234
Adjusted R Squared	0.155	0.146	0.158	0.126	0.108	0.125

Notes: ***, **, *: Significant at the 1 percent, 5 percent, 10 percent level, respectively. Standard errors are in parentheses.

Notes

[1] In both of these scenarios, there is also the potential for merging banks to shift the composition of CRA business lending from borrowers in LMI neighborhoods to small businesses in higher-income parts of their assessment area.

[2] For discussions of these studies, as well as related research about small business financing issues, see Berger, Demsetz, and Strahan (1999), Berger and Udell (1998), and Samolyk (1997).

[3] Since 1993, commercial banks and savings institutions have been required to report mid-year data on the number and outstanding balances of their small loans to businesses and farms (on the June Reports of Condition and Income). These bank-level data do not include information about the location of the borrowers, but they do break down lending into loan size categories that are comparable to those reported in the CRA data on calendar-year loan originations. Small nonfarm business loans include loans of less than $1 million and small farm loans include loans of less than $500,000.

[4] Bank-level small business lending studies have tended to examine changes in small business lending as a proportion of total bank assets (or total commercial loans). Studies of credit availability at the market level have tended to examine changes in the amount of small business lending (or loan growth rates). Examples include Peek and Rosengren (1998), Strahan and Weston (1998), Berger, Saunders, Scalise, and Udell (1998), and Avery and Samolyk (2000).

[5] Canner (1999) examines the relationship between bank CRAnonfarm business lending patterns and neighborhood characteristics using data from the 1990 Census of Population and Housing on tract-level income and racial/ethnic composition and Dun & Bradstreet data on the geographic distribution of large and small businesses. It does not, however, investigate how factors, such as bank mergers, are related to changes in CRA business lending patterns over time. CRA business loan data has also been used to study the competitiveness of local banking markets and the importance of out-of-market lenders (see, for example, Cyrnak, 1998). But these studies generally do not explicitly test conjectures about the effects of mergers; nor do they focus on the types of business lending likely to count for the purpose of CRAevaluations.

[6] Studies of small business credit availability generally face this problem, as bank regulatory agencies do not collect information from nonbank sources of small business financing, such as finance companies.

[7] At the broader market level, bank deposit data have been used to estimate local small business lending by small banks that do not report the CRA data (see for example Cyrnak, 1998). These estimates have been used to analyze the competitive structure of local markets and how proposed bank mergers and acquisitions would affect market concentration. However, changes in the CRAreporting status of banks over time make it difficult to use these estimates to study changes in geographic lending patterns over time. When a nonreporting bank becomes a CRA reporter (through a merger, acquisition, or internal growth), it is difficult, if not impossible, to separate

out true changes in its local lending from changes due solely to the change in its CRAreporting status. Aside from problems posed by changes in the CRAreporting population, it is also unlikely that a bank's deposit-taking patterns are a good proxy for its lending activities at the submarket level. Deposit-based small business loan estimates of CRAlending would assume that a bank lends only to businesses in the same census tracts or zip codes where it operates branches.

[8] Banks were not required to include information about their assessment areas in their CRA filings for 1996 and 1997. Hence, to measure CRA business lending, we approximate bank assessment areas using geographic Summary of Deposit (SOD) data on bank branch locations (and local deposits) reported by banks each year. Although banks were required to report their assessment areas after 1997, we must use our method of approximating bank assessment areas for the entire study period so that we are measuring CRAbusiness lending consistently for a given sample period. We did validate the accuracy of using branching patterns to approximate bank assessment areas and found that the median share of a bank's small business lending accurately classified by this method is more than 95 percent. Nonetheless we still chose to exclude banks for which the bank branching data do not classify at least 70 percent of the bank's loans correctly (as either in-assessment area or out-of-assessment area loans).

[9] Changes in "reported AA" loan growth measures include: 1) changes in AAlending to assessment area markets that remain in a bank's assessment area; 2) increases in AA lending associated with the addition of new assessment area markets and 3) decreases in AAlending as existing assessment area markets are dropped.

[10] Here we discuss results for loan growth rates measured in dollars, however, we also analyzed comparable growth measures using the number of loan originations. For measures of CRA business lending, we compared results for "reported" CRA business loan growth with results for growth rates of CRA business lending within a bank's proforma assessment area. These comparisons will be summarized more fully in a forthcoming FDIC working paper.

[11] We estimated specifications that included a dummy variable for each of the five types of merger activity. The "types" of merger activity, described in Table 1, are defined to be mutually exclusive, so a single type can classify the merger activity experienced by a given bank.

[12] As Cyrnak (1998) discusses, most bank SBLis within-market, that is, banks tend to lend to borrowers in the markets where they operate their branches.

[13] We classify merger activity as being within-market if it is associated with an increase in the banking organization's (referring to a holding company or an independent bank) share of the local deposit market as measured using Summary of Deposit data.

References

Avery, R.B., Bostic, R.W., Calem, P.S., and Canner, G.B., 1999, "Trends in Home Purchase Lending: Consolidation and the Community Reinvestment Act," *Federal Reserve Bulletin*, Vol. 85, pp. 81-102.

Avery, R.B., and Samolyk, K.A., 2000, "Bank Consolidation and the Provision of Banking Services: The Case of Small Commercial Loans," *Federal Deposit Insurance Corporation Working Paper*, No. 2000-01.

Berger, A.N., Demsetz, R., and Strahan, P.E., 1999, "The Consolidation of the Financial Services Industry: Causes, Consequences, and Implications for the Future," *Journal of Banking and Finance*, Vol. 23, pp. 135-194.

Berger, A.N., Saunders A., Scalise, J.M., and Udell, G.F., 1998, "The Effects of Bank Mergers and Acquisitions on Small Business Lending," *Journal of Financial Economics*, Vol. 50, pp. 187-229.

Berger, A.N., and Udell, G.F., 1998, "The Economics of Small Business Finance," *Journal of Banking and Finance*, Vol. 22, pp. 613-673.

Berger, A.N., and Udell, G.F., 1998, "Universal Banking and the Future of Small Business Lending," In Saunders, A., Walter, I. (Eds.), *Financial System Design: The Case for Universal Banking, Burr Ridge*, Irwin, Homewood, IL, pp. 559-627.

Canner, G.B., 1999, "Evaluation of CRA Data on Small Business Lending," *Proceedings of the Federal Reserve System Conference on Business Access to Capital and Credit*, pp. 53-84.

Cyrnak, A.W., 1998, "Bank Merger Policy and the New CRA Data," *Federal Reserve Bulletin*, Vol. 84, pp. 703-715.

Keeton, W.R., 1997, "The Effects of Mergers on Farm and Business Lending at Small Banks: New Evidence from Tenth District States," Working paper, Federal Reserve Bank of Kansas City.

Peek, J., and Rosengren, E.S., 1998, "Bank Consolidation and Small Business Lending: It's Not Just Size That Matters," *Journal of Banking and Finance*, Vol. 22, pp. 799-819.

Samolyk, K.A., 1997, "Small Business Credit Markets: Why Do We Know So Little About Them?" *FDIC Banking Review*, Vol. 10, No.2, pp. 14-32.

Strahan, P.E., and Weston, J., 1998, "Small Business Lending and the Changing Structure of the Banking Industry," *Journal of Banking and Finance*, Vol. 22, pp. 821-845.

Whalen, G., 1995, "Out-of-state Holding Company Affiliations and Small Business Lending," Office of the Comptroller of the Currency, Economic and Policy Analysis Working Paper, No. 95-4.

COMMUNITY ORGANIZATION AND COMMUNITY REINVESTMENT ACT LENDING IN WASHINGTON, D.C.

Thomas T. Holyoke
The George Washington University

This study looks for evidence of a Community Reinvestment Act (CRA)-induced effect in bank mortgage and small business lending in Washington, D.C. Previous research on bank lending patterns has emphasized economic explanations, such as income levels, property values, and loan-to-value (LTV) ratios. The Community Reinvestment Act, however, permits political influences to impact bank lending. By emphasizing bank partnerships with community-based organizations, and providing an opportunity for local activists to lay claims of discrimination against a bank during its application for a merger or acquisition, CRA has provided an incentive for banks to lend in those poor, minority communities that are better able to organize themselves for political action. Drawing on mortgage and small business lending data in the District of Columbia for 1998, I develop and test variables measuring the influence of community-based nonprofit organizations and community activism on bank lending. I find evidence in support of the influence of community organizations but not of community activism. I conclude that, to an extent, there is a recognizable CRA effect on bank lending. This means that it is important to carefully consider how changes in CRA by the Gramm-Leach-Bliley Act, and other major banking reform bills, will impact access to credit for poor and minority communities across the nation.

Enactment of the Gramm-Leach-Bliley Act (GLB) in 1999 was widely considered as a watershed event in the history of national banking policy across a number of different dimensions. After decades of chipping away at legal constraints, banks, insurance companies, and investment firms now have the green light to freely enter each other's

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lines of business through the acquisition of existing companies or the de novo establishment of subsidiaries. Although financial modernization promises new opportunities for this collective financial industry, critics fear it may also result in raising new barriers to credit access by minorities and residents of poor, inner-city neighborhoods. Interest groups advocating for a stronger CRA argued that Gramm-Leach-Bliley actually guts CRA by allowing banks to move significant portions of assets out of the bank and into subsidiaries not covered by the law. Proponents countered that the new law in no way hamstrings CRA and that, in fact, it enhances it by applying a new compliance test that financial firms must pass in order to convert to the new, multipurpose financial holding companies. They further point out that CRA's requirements on depository institutions have not been touched, and the opportunities open to recourse for communities discriminated against under the old CRA will be just as applicable in the GLB era.

This argument is predicated, however, on the belief that the current mechanisms for enforcing CRA on depository institutions have been effective, a claim that has not been subjected to extensive empirical testing. In this paper, I identify several tools that communities have under CRA to either lever or entice more loans from banks. I test the effectiveness of these mechanisms with a data set I developed on bank lending in Washington, D.C., combining data on loans and demographic characteristics at the census tract level. In my analysis, I find evidence that neighborhoods able to organize themselves through the establishment of community development organizations are more likely to attract mortgage and small business loans. Little evidence, however, is found that neighborhoods able to mobilize residents to engage in political protest pushed banks to step up their lending.

Bank Lending and the Post-1995 Community Reinvestment Act

The history of the Community Reinvestment Act, and the larger issue of discrimination in mortgage lending, are long and controversial and need not be discussed here (see Litan, 2000; Haag 2000; and Squires 1992). Suffice to say that CRA has been, and continues to be, characterized by bankers as needlessly stringent and by community activists as not stringent enough. Instead of outlawing discrimination in lending, as the fair lending laws do, the 1977 Community Reinvestment Act requires banks to make loans and provide services in every community in which they solicit deposits, regardless of race or income. Yet there have been few studies on the influence of CRA on bank lending (Dahl, 2000).

One explanation for this may be that many of the mechanisms CRA depends on to be effective are more political than economic. Absent compulsion through public policy, lending decisions are modeled as a function of borrower characteristics and a set of indicators measuring aspects of the neighborhood the borrower is from, such as median income and property values. The post-1995 version of CRA changes the equation not through punitive sanctions on banks but by creating incentives to encourage bank compliance. In 1995, responding to criticisms that the original CRA created more paperwork than loans, federal banking regulators issued a completely revised set of implementing regulations. These rules shifted the focus of the law from requiring banks to demonstrate compliance through paperwork to an evaluation of institutions' actual lending performance in their geographic service areas. Under this new system, banks with total assets in excess of $250 million have their CRAperformance evaluated under a tripartite requirement made up of a lending test, an investment test, and a service test.[1] With the new rules only five years old, analysts are still trying to evaluate the impact the new CRA has had on bank lending and investing in low- and moderate-income (LMI) and minority communities.

Organized Communities and Bank Lending

Absent other external incentives or constraints, the decision to originate a loan is an assessment by the lender of the probability of default by the applicant, plus any biases against the applicant that the lender may have, resulting in discrimination. The fair lending laws impose constraints by making such discrimination illegal. The Community Reinvestment Act creates further constraints by requiring banks to have "Satisfactory" or "Outstanding" records of meeting the credit needs of their service communities in order to engage in merger and acquisition (M&A) activity. The review process undergone by each bank involved in a merger has created opportunities for community activists to bring complaints on lending performance and possible discrimination to the attention of regulators. Combining diligent research on the bank's performance and grassroots activism to generate publicity, communities can bring political power to bear on a bank. Furthermore, CRA as implemented in the 1995 rules provides incentives to encourage lending by depository institutions in low- and moderate-income (LMI) communities. Now more than ever, banks have incentives to improve their CRA performance by working in tandem with community development corporations (CDCs) in ways benefiting both the bank and the LMI neighborhood. Of course, the benefits of this incentive go to those neighborhoods with the motivation and capacity to establish and support such local development organizations.

From the bank's perspective, what CRA has done to the lending decision is to incorporate political incentives into what has otherwise been a largely economic decision on the part of the lender. It has also shifted some of the focus of the lending decision from the applicant coming to see the lending officer to a greater interest on the particular neighborhood in which the applicant lives. Is that community likely to cause trouble for the bank during a merger application by staging a protest or laying a set of well researched lending discrimination charges against the bank before regulators? Is this LMI community truly a dead loss on the balance sheet, or does it possess a network of community development organizations providing the stability necessary to the neighborhood to ensure the emergence of a viable market? By adding these considerations, CRA allows the exertion of political pressure at the grassroots level to change the calculus of the lending decision.

Local Development Organizations as Manifestations of Community Empowerment

Historically focusing on affordable-housing issues, community-based nonprofit organizations have recently emerged with more financial and economic development-oriented missions (Schill, 1997). Many of these organizations have chosen to specifically focus on increasing the level of wealth within the community by bringing in greater numbers of home-mortgage and small business loans from banks. Particularly, the emergence of community development financial institutions (CDFIs) have marked an emergence of local-level interest in finding ways to attract bank money to LMI neighborhoods and build financial infrastructures (McLenighan, 1997; Lento, 1994).

The investment and service tests under the new CRA do much to support the efforts of CDCs (Santiago, *et al* 1998), and the partnerships that result from these efforts should stimulate the level of overall mortgage and small business lending in LMI neighborhoods. The investment and service tests encourage banks to develop relationships with CDCs through equity investments in the organization or by providing investment advice or other similar services to both CDC staff and customers. Through such investments and services, a bank makes a commitment to that neighborhood that should influence its direct lending decisions. After all, it is logical for bank officers to prefer making loans in communities they have experience with and have a stake in over those they do not know as well. In other words, lending in communities with CDCs, particularly ones specializing in financing such as CDFIs, makes the probability of default by the applicant less likely. Finally, investing in an LMI community by making loans may be the stimulus needed to create a much stronger lending market in the future.

This yields the following hypothesis: depository institutions covered by CRA are more likely to make mortgage and small business loans in those neighborhoods where one or more CDCs specializing in financing and economic development are present.

Neighborhood Mobilization and CRA Protests as Manifestations of Community Empowerment

Apart from activism in the form of establishing local development organizations to provide grassroots solutions to neighborhood problems, CRA indirectly provides a protest mechanism through which pressure may be brought on banks to increase their lending. When a depository institution covered by CRA is entering into a merger or acquisition, federal regulators are required by law to consider the efforts of that institution in meeting the credit needs of the community. Part of this investigation takes CRA performance into account and another part examines the overall distribution of loans through Home Mortgage Disclosure Act (HMDA) data. Many LMI neighborhoods have become very sophisticated in the art of bringing charges against banks serving their communities when these institutions desire to engage in M&A activity. Often spearheaded by local activists, CDCs, and even politicians, research is developed and presented to regulators on loan distributions, bank branch closings, and lack of other essential financial services, implying discrimination.[2] Overall, this is part of a growing community reinvestment-oriented outgrowth of the Civil Rights Movement that has begun appearing in cities, and even some rural communities, across America (Squires, 1992). Some groups, such as Inner City Press in the South Bronx or Association of Communities Organized for Reform Now (ACORN) nationally, have made names for themselves based on their ability to engage in protests when banks file M&A applications.

Under no circumstance would a bank like to have its name smeared with charges of discrimination, but the threat of the protest is particularly troublesome when mergers are being planned. Enactment of GLB is expected to increase the likelihood of merger activity, making a clean

CRA record even more important for a bank to maintain. Since LMI neighborhoods that are highly politically organized are the ones most likely to protest a bank's M&Aapplication, it is in these neighborhoods where the banks have an incentive to lend heavily without discrimination in an attempt to head off the possibility of protest.

This yields a second hypothesis: the more politically active a neighborhood is, the more likely a bank desiring to engage in M&A activity will increase the number of mortgage and small business loans in that neighborhood.

Research Design and Data

Much of the literature on mortgage lending examines the binary decision of the lender between approval and denial of an application. In other words, the unit of analysis is the individual loan application. This study, however, is primarily concerned with aggregate lending patterns at the urban neighborhood level, so I use census tracts as my units of analysis as proxies for neighborhoods. I focus on Washington, D.C. for my analysis. As with many urban centers, the District of Columbia contains a large number of distinct communities within its boundaries. The majority population is African-American, but both White and Other minority populations are also growing, and there is considerable disparity in median income levels and property values around the District. Such variation within the District provides an excellent opportunity to study variation in bank lending patterns.

My dependent variables are drawn from various types of bank lending activity in each census tract for the year 1998. The Home Mortgage Disclosure Act requires depository institutions to report data on conventional, refinancing, home improvement, FHA-backed, and other types of mortgage loans at the tract level.[3] Furthermore, CRA requires banks to report small business and community development loans, also at the tract level. As there should be additional variation in lending patterns between banks engaging in merger and acquisition activity and those banks not choosing to engage in such activities, explanatory variables capturing the number of loans made will have to make this distinction.

The explanatory variables that I use to test my hypotheses come from two very different sources. In the case of community development corporations, the vast majority of these are nonprofit organizations with a primary purpose of finance and/or economic development. I use the nearly exhaustive data on nonprofits collected by the National

Center for Charitable Statistics at the Urban Institute from IRS reporting files to identify the locations and types of nonprofits in the District of Columbia in 1998.[4] From this data I am able to determine which nonprofits are focused on improving the financial stability, or the economic enhancement, of particular communities in the District and their tract locations.[5] In the case of some tracts, there is more than one nonprofit identified as a financial or economic-developmental oriented local organizations.[6] More information on how these variables are developed from the raw NCCS data files is presented in Appendix A.

I measure the potential for organized political activism in a tract through voter registration and turnout data available from the District of Columbia Board of Elections.[7] This data comes at the precinct level, but through the application of geographic information software, conversion to the tract level is possible and, in the case of the District, has been used successfully in other research (see Henig 1993, 1994).[8] I use data from the 1998 general elections to calculate voter turnout as well as data on the number of residents registered to vote at the time of the election. Political activism runs deep in many District communities, not only in terms of elections, but also as a solution to many problems of urban decay. Therefore, communities that are more organized to register larger numbers of residents, and to turn out these voters on election day, are also more likely to stage protests against banks over lending discrimination.

In order to capture the impact of these variables on lending, I make use of a variety of independent variables that figure prominently in other studies on bank lending and reflect the demographic compositions of urban neighborhoods as controls. Data on median income, racial composition of the population, and educational levels of the population per tract are available for 1998 from an assessment made by the District government.[9] Additional variables on the number of family households per tract and the size of the labor force are available from the Census Bureau for 1990. Utilizing 1990 Census data on race and median income levels of tracts with equivalent 1998 data, it is also possible to derive the level of change in each tract over the course of the eight years. Communities that are increasing in wealth may be more attractive to bank lenders, and communities with considerable change in minority concentrations may indicate a shifting population that may decrease the likelihood of lending. Table 1 presents summary statistics on each of the variables.

Analysis and Discussion

The dependent variables in my analysis are event count data, or data recording the number of times an event occurs in a particular geographic location. As this type of data is restricted to only a positive value, it follows a Poisson distribution making ordinary least squares (OLS) regression estimation inappropriate (Long, 1997). In order to properly estimate event count data with a large amount of variance, I use a Negative Binomial Regression procedure following the Poisson distribution.[10]

Conventional and Refinancing Mortgage Lending

The first cut at the data makes use of the total number of conventional and refinancing mortgage loans in each census tract in the District of Columbia. Explanatory variables describing a set of characteristics regarding the census tract potentially related to home-mortgage loans are selected. In particular, the number of nonprofit organizations in the tract, the level of voter turnout, the number of minorities, the number of families, median family income, and the percentage of the population with at least a high school degree are used. In addition, changes in the characteristics of the tract over time may make a particular area more or less attractive to a bank lending officer. I subtract 1990 data on median income and the number of minorities from comparable data for 1998. This procedure generates two variables indicating change in the tract area over the span of eight years. I then use the Negative Binomial Regression procedure to estimate the impacts of these variables on the total number of conventional and refinancing mortgage loans made by CRA-covered depository institutions in each tract in 1998. The results are displayed in Table 2. In addition to the estimated coefficient, its level of statistical significance, and the robust standard errors, the marginal effects are presented for each explanatory variable. As maximum likelihood estimations do not use a direct linear procedure, the coefficients do not necessarily present a clear indication of the magnitude of the change. Finding the individual impact of each variable on the predicted number of events, while holding the impacts of all of the other explanatory variables at their mean, by increasing the single variable by one standard deviation, provides a more straightforward method of showing real impacts of each variable (King, 1998). The difference in the predicted number of events due to the movement of each explanatory variable is expressed as a percentage.

For both conventional and refinancing loans, the variables appearing to have the greatest explanatory power are minority population, number of families, and percentage of tract population with a high school degree. In the case of minority population, the negative sign of the coefficient indicates that the greater the concentration of minorities in a tract, the less likely conventional and refinancing loans will be made in that tract. This variable reduces the predicted number of conventional loans by 35 percent and the number of refinancing loans by 47 percent. Although I have not tested enough alternative variables to draw any conclusions regarding discrimination, this result should at least raise a red flag and prompt a more thorough investigation. In terms of the variables of interest for this research, neither the presence of nonprofits nor voter turnout had any statistically significant impact on the predicted number of conventional loans. Furthermore, the first differences' effect of each variable was small. The presence of nonprofits was statistically significant in the case of refinancing loans, but the effect remains fairly small with a one standard deviation increase in the number of nonprofits producing only a 17 percent increase in the predicted number of loans.[11] At this level of analysis there is little evidence to support my community organization hypothesis.

Yet looking at total conventional and refinance lending may not be the ideal place to find such an effect. If an increase in bank lending due to community organization is largely a CRA-induced effect, then it is those banks to whom CRA is of greater concern that should be the most responsive. Since CRA is most likely to have teeth during the review process for a merger or acquisition, then those banks acquiring, or being acquired, by another institution are more likely to respond to a community organization than banks not engaging in such activity.[12] Using the Federal Reserve's National Information Center, I was able to identify which banks operating in the District of Columbia acquired another institution, or were acquired by another institution between 1996 and 2000.[13] I then separated out the number of conventional and refinancing loans made by banks engaging in M&Aactivity from those not engaging in such activity to create two separate dependent variables. The same explanatory variables are used in the estimation, and the results for conventional loans either engaging or not engaging in mergers and acquisitions are presented in Table 3. Results for refinancing loans are in Table 4.

Looking at conventional loans produces no substantial evidence in support of either of my hypotheses. Neither the number of nonprofits nor voter turnout variables are statistically significant, and the only marginal effect of any real substance is voter turnout on conventional loans made by banks not engaging in M&A activity at 23 percent. The results from the estimations on refinancing loans are somewhat more supportive of my hypothesis. The number of nonprofits in a census tract does have a statistically significant impact on the number of loans made by banks engaging in M&A activity and no significant impact on banks not merging or acquiring. This result is what I would expect, given that the first types of institutions are more concerned about their CRA records than the latter types. Furthermore, although not as strong as the number of families and high school degree variables, the number of nonprofits variable does increase the predicted number of refinancing loans in a tract by 22 percent.[14] Unfortunately, once again there is little evidence to support the hypothesis that communities with higher voter turnout are more likely to attract more loans through the threat of protest. This explanatory variable is not significant in either estimation, although in the case of banks not engaging in M&A activity, there is a first difference effect of 20 percent.

Small Business Lending

In search of further evidence to test my hypotheses, I turn from mortgage loans to small business loans. Since lack of access to credit by small businesses may be evidence of redlining or a lack of desire to lend in low-income communities, the 1995 CRA regulations emphasized the need for banks to make small business loans in such communities and report data on these loans. Immergluck (1999) notes in his study of small business lending in Chicago that there may be differences in lending patterns to very small businesses, those with an annual revenue of $1 million or less. Smaller firms, he points out, may be considered a greater risk by lending officers because they do not have as deep resources to draw on to repay loans, and very small firms owned by minorities have a harder time leveraging their equity for the same value as comparable firms owned by Whites. CRA attempts to correct such forms of discrimination by encouraging banks serving LMI and minority neighborhoods to make loans to very small businesses. Therefore, a CRA-induced influence may emerge more prominently in an analysis of loans to firms with $1 million or less in annual revenue than to larger businesses. In order to make this comparison, I subtract out the number of loans made to firms with $1 million or less in annual revenue from the total number of small business loans made in the District of Columbia and use both sets of data as dependent variables.

Since the small business lending decision is more likely to be made by the lending officer with a different set of neighborhood criteria in mind than mortgage loans, I use a somewhat different set of explanatory variables in my analysis. I retain the variables on the number of nonprofits, voter turnout, minority population, median income, change in median income, and change in minority population, but add in two new control variables. The size of the local labor force should be conducive to the creation of businesses, and those neighborhoods with a larger labor force are more likely to see more firms spring up and, therefore, attract more loans. Therefore, I use census data on the size of the labor force as a control variable.

I also will continue to investigate the differences in behavior between banks engaging in mergers and acquisitions and those that are not. Unfortunately, limitations in the small business data have not permitted me to accurately identify which loans are coming from banks recently engaging in M&Aactivity.[15] I develop a rough proxy measure by finding the number of bank offices in a census tract that are connected to an institution engaging in M&Aactivity under the assumption that the more branches of such banks are found in a tract, the more loans will be made. The results of my estimations are presented in Table 5.

Unlike mortgage lending, the small business data analysis provides clear evidence in support of my hypothesis regarding community development organizations but still fails to produce any evidence to support my community action hypothesis. The number of nonprofits variable is highly significant for both total small business lending and lending to very small firms. Interestingly, the first difference effects for the total number of loans is larger than for loans to very small firms, although both effects are quite substantial at 61 percent and 45 percent, respectively.[16] The voter turnout variable fails to be statistically significant in either model and produces virtually no change in the predicted number of loans. Also of interest is that the variable indicating the number of offices of banks engaging in M&A activity between 1996 and 2000 is statistically significant, although the effect on the predicted number of loans is not as strong in either model as the nonprofits variable. This suggests that banks that are, or are considering, engaging in M&Aactivity are more likely to be responsive to the small business credit needs of their service community than banks not planning to engage in such activity.

Overall, my analysis of mortgage and small business lending data provides support for my hypothesis of community organization through community development nonprofit organizations, but not for the potential for community activism as measured by voter turnout. The impact of the presence of nonprofits appears to be greater for small business loans than for mortgage loans, but there are certainly some signs of an effect in both types of loans. The disappointing results from the voter turnout data may be due to the possibility that this measure may not be a good proxy for community activism. In fact, activism may be more likely in communities that feel alienated from the traditional political process of voting. With little faith in the system, residents of such communities may feel their votes are a waste of time.[17] But because these types of communities feel excluded from the process, they may also be inclined to engage in non-traditional, “outsider" politics such as protests and demonstrations, similar to the types of community mobilization tactics activists might take against a bank.

Conclusion

We are only just beginning to witness the changes in the financial industry as a result of the Gramm-Leach-Bliley Act, and it will be many years before we know with any degree of certainty what the far-reaching impacts of such a complex piece of legislation will be. This will certainly be true of the Community Reinvestment Act and bank lending in LMI and minority communities. Unfortunately, if pro-CRA forces are correct, and GLB has blunted CRA's teeth during the merger and acquisition review process, then this may be bad news for LMI and minority neighborhoods. This research provides some evidence that there is indeed a CRA effect on bank lending stemming from the 1995 regulations in the form of working with local intermediary organizations such as community development financial institutions or other types of community development corporations. Therefore, diluting the power of CRA at the time a merger is considered may have a detrimental impact on poor, minority urban communities.

On the other hand, banks may be inclined to continue working with local development organizations apart from trying to fulfill CRA requirements. Banks may desire to make long-term investments in communities they feel can be developed into strong markets, incurring a near-term loss for long-term gain. Certainly, the results I found for small business lending do not clearly show that only banks contemplating M&A activity were making more loans, although these institutions were making more loans overall in the District.

As with determining whether or not redlining and discrimination against lending in LMI communities is truly taking place, it is difficult to clearly separate out the influence of the Community Reinvestment Act from lending activities a bank would have engaged in anyway. Research into this area is still relatively young as good mortgage-lending data have only existed since changes in HMDA took effect in the early 1990s and the release of small business data beginning in 1996. Only a few studies have been able to closely examine the influence of CRA. But in order to truly evaluate the impact of CRA on the availability of credit, and therefore evaluate the long-term impacts of related laws such as GLB and the Riegle-Neal Interstate Banking Act, it is important to have as clear an understanding as possible of how CRA works.

Thomas T. Holyoke is the Banneker Research Fellow at the Center for Washington Area Studies and a Ph.D. student in the Department of Political Science at The George Washington University. He has also served as legislative director for New York State Senator Nellie Santiago, Ranking Member of the Senate Banks Committee and Chair of the Senate Democratic Task Force on Banking and Community Reinvestment. Holyoke's research focuses on interest group lobbying and group mobilization, with a particular focus on the role of such groups in banking policy and education policy. His recently published articles include "The Battle Is Over, But the War Goes On: Unraveling the Illusion of the Financial Modernization Act" (2001) and "Turning David and Goliath into the Odd Couple: How the New Community Reinvestment Act Promotes Community Development Financial Institutions" (1998), with Nellie Santiago and Ross Levi.

Table 1
Dependent and Explanatory Variables

Variable Name	Mean	Standard Deviation	Minimum Value	Maximum Value
Dependent Variables				
Total Conventional Loans	3.417	6.110	0	55
Conventional Loans Made by Banks Engaging in Mergers and Acquisitions	1.942	5.198	0	50
Conventional Loans Made by Banks Not Engaging in Mergers and Acquisitions	1.474	2.304	0	9
Total Refinancing Loans	4.910	7.532	0	40
Refinancing Loans Made by Banks Engaging in Mergers and Acquisitions	3.372	5.924	0	33
Refinancing Loans Made by Banks Not Engaging in Mergers and Acquisitions	1.538	2.453	0	15
Total Small Business Loans	25.942	48.700	1	345
Total Loans to Small Businesses	10.538	15.758	0	106
Independent Variables				
Nonprofits	1.282	2.946	0	20
Voter Turnout	1098.36	561.27	247	3556
Minority Population	1793.15	1205.91	1	4560
Number of Families	657.28	349.10	0	1784
Percentage of Population with at Least a High School Education	71.88	18.79	0	100
Change in Median Income from 1990 to 1998	0.441	0.275	0.193	2.33
Change in Minority Population from 1990 to 1998	-414.05	673.77	-3555	2207
Labor force	1796.39	897.19	0	4210
Number of Banks Engaging in Merger and Acquisition Activity Lending in Tract	0.487	1.10	0	7

Table 2
Negative Binomial Regression Estimates of Total Conventional and Refinancing Loans

Explanatory Variables	Total Number of Conventional Bank Loans Coefficient	Robust Standard Error	First Differences Marginal Effect	Total Number of Refinancing Bank Loans Coefficient	Robust Standard Error	First Differences Marginal Effect
Constant	-2.0025**	0.7262	-	-1.3234*	0.5871	-
Number of Nonprofit Organizations	0.0185	0.0309	0.0559 (6%)	0.0531*	0.0236	0.1700 (17%)
Voter Turnout	0.0002	0.0002	0.1504 (15%)	0.0002	0.0001	0.1204 (12%)
Minority Population	-0.0004***	0.0001	-0.3517 (-35%)	-0.0005***	0.0001	0.4741 (47%)
Number of Families	0.0015***	0.0004	0.6842 (68%)	0.0018***	0.0003	0.8598 (86%)
Median Family Income	-0.0001	6.1806	-0.2105 (-21%)	8.7606*	3.7406	0.2005 (20%)
Percent with at least a High-School Degree	0.0317***	0.0091	0.8132 (81%)	0.0189***	0.0057	0.4291 (43%)
Change in Median Income	0.9136*	0.4496	0.2855 (28%)	0.4046	0.2741	0.1204 (12%)
Change in Minority Population	0.0004*	0.0002	0.3512 (35%)	0.0002	0.0002	0.1585 (16%)
Wald X2	126.42***			324.75***		
Log-Likelihood	-306.44491			-321.12805		

* $p < 0.05$
** $p < 0.01$
*** $p < 0.005$

N = 153

Table 3
Negative Binomial Regression Estimates of Conventional Loans by Banks Engaging and Not Engaging in Mergers and Acquisitions

	Total Number of Conventional Loans by Banks Engaging in Mergers and Acquisitions			Total Number of Conventional Loans by Conventional Banks Not Engaging in Mergers and Acquisitions		
Explanatory Variables	Coefficient	Robust Standard Error	First Differences Marginal Effect	Coefficient	Robust Standard Error	First Differences Marginal Effect
Constant	-2.8307	1.0308	-	-2.8548	0.9823	-
Number of Nonprofits	0.0400	1.037	0.1265 (12%)	-0.0089	0.0363	-0.0262 (-3%)
Voter Turnout	0.0001	0.0003	0.0789 (8%)	0.0004	0.0002	0.2346 (23%)
Minority Population	-0.0003	0.0002	-0.3059 (-31%)	-0.0002*	0.0002	0.3470 (35%)
Number of Families	0.0018***	0.0006	0.8873 (89%)	0.0010*	0.0004	0.4366 (43%)
Median Household Income	-0.0001	9.1706	-0.2210 (-22%)	-0.0001	8.2206	-0.1885 (-19%)
Percent with at Least a High School Degree	0.0288*	0.0140	0.7166 (71%)	0.3700***	0.0104	1.000 (100%)
Change in Median Income	1.6411*	0.7645	0.5702 (57%)	0.1981	0.4595	0.0482 (5%)
Change in Minority Population	0.0007***	0.0002	0.5893 (59%)	0.0001	0.0002	0.0712 (7%)
Wald X2	67.83***			97.45***		
Log-Likelihood	-237.92472			-219.14954		

* $p < 0.05$
** $p < 0.01$
*** $p < 0.005$
N = 153

Table 4
Negative Binomial Regression Estimates of Refinancing Loans by Banks Engaging and Not Engaging in Mergers and Acquisitions

	Total Number of Refinancing Loans by Banks Engaging in Mergers and Acquisitions			Total Number of Refinancing Loans by Refinancing Banks Not Engaging in Mergers and Acquisitions		
Explanatory Variables	Coefficient	Robust Standard Error	First Differences Marginal Effect	Coefficient	Robust Standard Error	First Differences Marginal Effect
Constant	-1.9545**	0.7574	-	-2.1711**	0.8366	-
Number of Nonprofits	0.0659*	0.0304	0.2152 (22%)	0.0266	0.0254	0.0812 (8%)
Voter Turnout	0.0002	0.0002	0.0900 (9%)	0.0003	0.0002	0.1987 (20%)
Minority Population	-0.0007***	0.0001	-0.5487 (-55%)	-0.0003**	0.0001	-0.3330 (33%)
Number of Families	0.0021***	0.0005	1.070 (107%)	0.0013***	0.0004	0.5513 (55%)
Median Household Income	0.0001*	4.4706	0.2341 (23%)	3.8106	6.3306	0.0821 (8%)
Percent with at least a High School Degree	0.0202**	0.0074	0.4614 (46%)	0.0195*	0.0093	0.4422 (44%)
Change in the Median Income	0.4664	0.3694	0.1367 (14%)	0.1368	0.4612	0.0382 (4%)
Change in Minority Population	0.0003	0.0002	0.2483 (25%)	-3.2306	0.0003	-0.0028 (0%)
Wald X2	231.15***			119.86***		
Log-Likelihood	-268.46211			-226.49105		

* $p < 0.05$
** $p < 0.01$
*** $p < 0.05$
N = 153

Table 5
Negative Binomial Regression Estimates of Small Business Loans

	Total Number of Small Business Loans			Loans to Businesses with Revenues of $1 Million or Less		
Explanatory Variables	Coefficient	Robust Standard Error	First Differences Marginal Effect	Coefficient	Robust Standard Error	First Differences Marginal Effect
Constant	1.936***	0.323	-	1.117***	0.317	-
Number of Nonprofits	0.161***	0.026	0.6081 (61%)	0.125***	0.023	0.4450 (45%)
Voter Turnout	-0.001	0.001	-0.0152 (-2%)	-0.001	0.001	-0.0101 (-1%)
Minority Population	-0.001***	0.001	-0.2273 (-23%)	-0.001***	0.001	-0.2912 (-29%)
Median Household Income	7.310	4.100	0.1634 (16%)	8.440*	4.230	0.1912 (19%)
Banks Engaging in Mergers and Acquisitions	0.219***	0.060	0.2728 (27%)	0.205***	0.049	0.2541 (25%)
Size of Labor Force	0.001***	0.001	0.3104 (31%)	0.001***	0.001	0.3771 (38%)
Change in Median Income	0.435	0.370	0.1269 (13%)	0.394	0.294	0.1146 (11%)
Change in Number of Minorities	0.001*	0.001	0.2516 (25%)	0.001	0.001	0.0948 (9%)
Wald X2	218.39***			234.69***		
Log-Likelihood	-558.348			-438.857		

* $p < 0.05$
** $p < 0.01$
*** $p < 0.005$
$N = 153$

Notes

[1] Alternatively banks may design their own lending and investing plan setting benchmarks by which regulators would rate their performance. Very few institutions have opted for this test. Smaller banks with $250 million in assets or less are now evaluated by a streamlined community development lending test.

[2] Richard Marsico (1993) has even developed a guide to assist local activists and organizations in the planning of a successful CRAprotest.

[3] All of this data may be obtained from the Internet site of the Federal Financial Institutions Examination Council (FFIEC) at http://www.ffiec.gov.

[4] A great deal of information about how this data is collected and its availability can be found on the Internet site of the National Center for Charitable Statistics at the Urban Institute, http://www.nccs.urban.org.

[5] The tract location is obtained by entering the address of the nonprofit into the geocoding system made available by the FFIEC at http://www.ffiec.gov.

[6] The data representing the final calculations are available from the author upon request.

[7] The data is available from the Board of Elections at http://www.dcboe.org/.

[8] A conversion table is available from the author upon request.

[9] This data is available from the District's State Data Center Internet site at http://www.dclibrary.org/sdc/.

[10] Under many circumstances, event count data can be estimated through an Exponential Poisson Regression procedure (see King, 1988). However, this form of estimation makes the assumption that the mean of the distribution is equal to the average of the variance. In many cases, however, this assumption is not met, variance is so large that the two values are not equal and overdispersion occurs. The Negative Binomial Regression procedure takes this overdispersion into account.

[11] Specifically raising the predicted number of loans per tract from 2.624 to 3.070.

[12] The idea that banks being acquired would pay attention to their CRArating is based on two assumptions. First, that many banks acquired desire to be acquired and have made it known that such a partnership would be acceptable. Over the last few years, as banks have come into greater competition with investment firms and brokerages, turning a profit through lending has become more difficult. In order to meet the demand by shareholders in a tightening market, many banks have been forced to offer themselves up to larger bank or nonbank holding companies. Second, I also assume that banks interested in acquiring will be more attracted to those institutions with a superior CRAperformance to ward off potential trouble in the application process. Although the recent acquisition of Associates by Citigroup is a contrary example, it is logical to assume that banks would prefer to

reduce potential troubles in a merger by acquiring institutions with better CRA performance ratings.

13 The National Information Center is the Federal Reserve's on-line database of depository institutions and holding companies at http://www.ffiec.gov/nic/.

14 Shifting the predicted number of loans from 1.478 to 1.796.

15 This is not necessarily an inherent problem in the data. At this time I have simply been unable to accurately disaggregate all of the small business loans I have found for the District of Columbia.

16 In the case of the total number of loans, when the nonprofits variable is increased by one standard deviation, the predicted number of loans per tract increases from 14.702 to 23.642. Loans to very small businesses increase as the number of non-profits in a tract shifts the prediction from 6.711 to 9.697.

17 Such feelings are almost certainly true in the District of Columbia when it comes to national issues. Deprived of most voting rights in the House of Representatives and all of such rights in the Senate, and appearing late in the progression of national presidential primaries, District voters almost certainly feel that their votes are meaningless at the national level. On the other hand, local elections can be quite competitive, even in poorer neighborhoods.

References

Dahl, Drew, Douglas D. Evanoff, and Michael F. Spivey, "Does the Community Reinvestment Act Influence Lending? An Analysis of Changes in Bank Low-Income Mortgage Activity," Working Paper, WP-00-6, 2000, Federal Reserve Bank of Chicago.

Haag, Susan White, "Community Reinvestment and Cities: A Literature Review of CRA's Impact and Future," Discussion paper prepared for the Center on Urban and Metropolitan Policy, The Brookings Institution, 2000.

Henig, Jeffrey R., "Continuity and Change in the District of Columbia," *Urban Affairs Quarterly 28*, June 1993, pp. 544-570.

Henig, Jeffrey R., "To Know Them is to...? Proximity to Homeless Shelters," *Social Science Quarterly 75*, December 1994, pp. 741-754.

Immergluck, Daniel, "Intrametropolitan Patterns of Small Business Lending: What Do the New Community Reinvestment Act Data Reveal?" *Urban Affairs Review, vol. 34*, July 1994, pp. 787-804.

King, Gary, *Unifying Political Methodology: The Likelihood Theory of Statistical Inference*. Ann Arbor, MI; University of Michigan Press.

King, Gary, "Statistical Models for Political Science Event Counts: Bias in Conventional Procedures and Evidence for the Exponential Poisson Regression Model." *American Journal of Political Science 32,* August 1998, pp. 838-863.

Lento, Rochelle E, "Community Development Banking Strategy for Revitalizing our Communities," *University of Michigan Journal of Law Reform, 27*, 1994, pp. 773-808.

Litan, Robert E., Retsinas, Nicolas, Belsky, Eric S., and Haag, Susan White, "The Community Reinvestment Act After Financial Modernization: A Baseline Report," *U.S. Treasury Department Report, 2000.*

Long, J. Scott, *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks, CA; Sage Publications, 1997.

Marsico, Richard, "A Guide to Enforcing the Community Reinvestment Act," *Fordham Urban Law Journal XX*, Winter 1993, pp. 165-279.

McLenighan, Valjean and Tholin, Kathryn, *Partners in Community Building: Mainstream and Community Development Financial Institutions.* Woodstock Institute Report. Chicago, IL; Woodstock Institute, 1997.

Santiago, Nellie R., Holyoke, Thomas T., and Levi, Ross D., "Turning David and Goliath Into the Odd Couple: How the New Community Reinvestment Act Promotes Community Development Financial Institutions." *Journal of Law and Policy, VI*, 1998, pp. 571-651.

Schill, Michael H., "Assessing the Role of Community Development Corporations in Inner City Economic Development," *Review of Law and Social Change XXII*, 1998, pp. 753-781.

Squires, Gregory D., ed., "Community Reinvestment: An Emerging Social Movement." *From Redlining to Reinvestment: Community Responses to Urban Disinvestment.* ed., Philadelphia: Temple University Press, 1992.

Appendix A

Developing the Nonprofit Variable

The number of nonprofits variable I use in this analysis is developed from raw data on nonprofits collected by the National Center for Charitable Statistics at The Urban Institute, http://www.nccs.urban.org/. Specifically, I make use of information collected on 501(c)(3) nonprofits from the Return Transaction Files (IRS Form 990), 1998, for the District of Columbia. These files provide information on charitable nonprofits, including a series of codes defining the activities of each nonprofit. The first code I use to identify the small, community-oriented nonprofits I am interested in is the AFDC code, an affiliation code indicating whether or not the nonprofit is part of a larger organization. Since it is reasonable to assume that most local development organizations are not part of large regional or national organizations, I select only those nonprofits coded as independent. For readers familiar with AFDC codes, I selected those organizations coded as "3."

In order to identify the nonprofits oriented towards community development, I make use of the core codes representing a classification from the National Taxonomy of Exempt Entities (NTEE). These codes provide detailed information regarding the activities of each nonprofit organization. Although my primary interest is in nonprofits primarily engaged in financial and economic development activities, I decided to cast a somewhat wider net. Other types of nonprofits might also contribute to the overall financial health of a community, such as public safety and affordable housing nonprofits, or might otherwise be appealing to bankers. There are 26 general classifications NTEE uses to identify nonprofits, labeled conveniently from A to Z. I dropped all nonprofits with the following codes: B, D, E, G, H, K, M, N, P, Q, T, U, V, W, X, Y, and Z. The NTEE codes become more specific by subdividing each letter code by assigning a numerical value, providing very precise information on the activities of each nonprofit. Activities that I deemed to be clearly related to the financial health of a neighborhood were retained and the rest of the nonprofits with other codes were dropped. Specifically, I retained the following codes: A01, A02, A03, A11, A20, A23, 25, A26, A51, A52, A60, A70, A80, A90, C01, C11, C12, C20, C27, C30, C32, C34, C35, C41, C42, C50, F01, F12, F20, F21, F22, F32, F33, F40, F42, I01, I11, I12, I20, I31, I40, I43, I44, I71,

I72, I73, I80, I83, J01, J02, J12, J20, J21, J22, J30, L01, L02, L11, L12, L20, L21, L25, L30, L40, L50, L80, L81, L82, O01, O11, O12, O20, O31, O50, O51, O53, R61,R62, R63, R67, R99, and all S codes.

Finally, I read through the names of each organization and eliminated those that were clearly not of a community orientation, normally groups that had the word “national” or “American” in their name. These files also contain the address of each nonprofit, enabling me to use geocoding software to find the exact census tract location of each nonprofit in the District of Columbia.

Boston's Soft Second Program: Reaching Low-Income and Minority Home Buyers in a Changing Financial-Services Environment

James T. Campen
University of Massachusetts/Boston

Thomas M. Callahan
Massachusetts Affordable Housing Alliance

Although Boston's Soft Second Mortgage Program (SSP) was viewed with skepticism when it emerged in 1990 after a tumultuous year of struggles over community reinvestment issues, it has become Boston's largest and most successful homeownership program. The paper begins by summarizing the history and major features of the SSP, explaining how the program's structure, below-market interest rate, and public subsidies combine to produce monthly mortgage payments for qualifying home buyers that are up to 33 percent below those of a conventional, market-rate mortgage. Our claim that the program is a remarkably successful one is justified by an examination of the SSP's performance with respect to five criteria: affordability, sustainable homeownership, reaching minority homebuyers, serving traditionally underserved neighborhoods, and reproducibility. To show how the evolution of the SSP has reflected several of the most important developments in the changing financial system, we review the program's relationship to: banking-industry consolidation, secondary-market expansion, the need to extend CRA-type obligations beyond banking, the growth of public-private partnerships, and the expansion of predatory and subprime lending.

On January 29, 1991, Florence Hagins, an African-American single mother with a moderate income who had been denied a mortgage once before, became the first person to purchase a home with the assistance of Boston's new Soft Second Mortgage Program. Almost exactly 10 years later, in early February 2001, she stood before 350 people as co-chair of a black-tie "gala" held at the John F. Kennedy Library to celebrate the Soft Second Program's tenth anniversary.

Between those two dates, Hagins, still the proud owner of the same two-family house in Boston's Dorchester neighborhood, had been followed by more than 2,100 other lower-income, first-time homebuyers. She had become the Director of Housing Education for the Massachusetts Affordable Housing Alliance (MAHA), the community-based organization that was primarily responsible for the Soft Second Program's creation and growth. And the Soft Second Program (SSP) had become the city's largest and most successful homeownership program.

What follows is a detailed case study of this program, a program that some bankers dismissed as a "one-shot deal" when it originally emerged from almost two years of confrontation and finger-pointing, but that is regarded in Boston today as both unusually comprehensive and remarkably successful. We make no attempt to compare the Boston SSP's design or outcomes with those of the many other innovative and important targeted mortgage programs that exist throughout the country.[1] Nor do we offer a survey of the entire spectrum of CRA-related programs and activities in Boston that provided the local context for the history and operation of the SSP.[2]

The paper begins with an account of the program's background, a description of its design and operation, and an overview of its growth. It then turns to an examination of several dimensions of the Boston SSP's performance that we think justifies our belief that it has been a particularly successful program.[3] Its third section discusses the evolution of the SSP in the context of the last decade's installment of what former Fed Chairman Arthur Burns called "the ongoing revolution in American banking" (Burns, 1988). The paper concludes with some brief observations on lessons learned and challenges ahead.

The Soft Second Program: Description and History

Boston's Soft Second Mortgage Program emerged at the end of a tumultuous year of struggle over community-reinvestment issues that began on January 11, 1989. The lead story in that day's *Boston Globe* reported that a draft study by researchers at the Federal Reserve Bank of Boston had found that there was a pattern of "racial bias" in Boston's mortgage lending, that the number of mortgage loans in the predominantly black neighborhoods of Roxbury and Mattapan would have been more than twice as great "if race was not a factor," and that "this racial bias is both statistically and economically significant." [4]

A year before the leak of the Boston Fed's draft study, the Massachusetts Affordable Housing Alliance had organized a new community group in Boston: the MAHA Homebuyers Union. Most of its members were women of color with incomes between $15,000 and $30,000 who felt both priced and redlined out of buying a home in Boston. They wanted to own their own homes in a city where home prices had been rising rapidly and banks had a reputation for avoiding minority neighborhoods. The group had been asking the city, the state, and the banks for programs that would make homeownership possible for people at their level of income.

In the aftermath of the *Boston Globe's* story, MAHA joined with other community-based groups to form the Community Investment Coalition. While supporting the broad range of demands made by the coalition, MAHA maintained its focus on the need for affordable mortgages. When Bank of Boston jumped out in front of other banks in mid-1989 with the launching of its own "First Step" mortgage program, MAHA and other community groups identified it as limited to borrowers with incomes above $40,000, and they continued to press for substantially greater affordability.

As the year progressed, banks announced a series of plans to open more branches and ATMs, finance the construction of affordable rental housing, and increase lending to minority-owned businesses. By year-end, affordable mortgage lending was the only issue on which community groups and banks had not crafted an agreement. MAHA's members wouldn't drop the issue and continued to insist on a mortgage program with below-market interest rates; the banks continued to insist that such a program would not be sustainable. Finally, a full year after the *Globe's* story, Mayor Ray Flynn facilitated an end to the impasse — an agreement to make $30 million of below-market mortgage loans to low- and moderate-income Boston home buyers.

It took six additional months before MAHA, together with city and state officials, had hammered out the details of agreements with three banks — Bank of Boston, BayBanks, and Shawmut Bank — that called for $12 million of loans and launched Boston's Soft Second Mortgage Program. The negotiations also resulted in commitments from the city of Boston and the Massachusetts Housing Partnership (a quasi-public agency that had proposed using the soft second structure and that was subsequently selected to administer the program) to provide subsidy dollars to further reduce interest rates, establish a loan loss reserve, and fund down-payment and closing-cost assistance. The program was — and remains — strictly limited to low- and moderate-income buyers (those with incomes less than 80 percent of the median family income of the Boston metropolitan statistical area (MSA), as determined annually by HUD).

Boston's "Soft Second" program gets its name from the fact that participating homebuyers receive two mortgages rather than one: a first mortgage for 75 percent of the purchase price and a second mortgage for 20 percent (the program requires a 5 percent down payment). The interest rate on both mortgages is 50 basis points below the bank's two-point rate. The second mortgage is "soft" for the first ten years in two ways: payments are interest-only, i.e., there is no repayment of principal during this period and payments may be further reduced for qualifying home buyers by public subsidies. The city and state also fund loan loss reserves for each bank equal to 10 percent of the total value of the second mortgages that the bank has originated. The existence of the reserve fund makes it possible for borrowers to avoid the costs of private mortgage insurance while banks are still protected from credit losses. Affordability is further increased by no payment of points (even though, as noted above, borrowers receive their loans at 50 basis points below the *two*-point interest rate) and the provision of down-payment and closing-cost assistance.

The way that these features each contribute to greatly reduced monthly payments is illustrated in Table 1. In this table, the monthly payments of a buyer of a $150,000 house[5] who receives a Soft Second mortgage loan from Citizens Bank are compared to the monthly payments of a buyer of the same-priced house who receives a conventional loan from the same bank. The payments are calculated assuming that the zero-point interest rate is 7.375 percent, the rate offered by Citizens Bank in late February 2001. Any Soft Second borrower would save $93 per month by avoiding the cost of private mortgage insurance, $118 per month because of her reduced interest rate, and $29 per month during the first 10 years by paying only interest on the second mortgage. These savings combine to reduce the monthly payment from $1,077 to $837 — a total reduction of $240, or 22 percent.

Many, but not all, Soft Second program borrowers will experience additional savings from public subsidies. In our example, a qualifying home buyer could receive an interest-rate subsidy up to $115 per month for the first five years, with the subsidy then phased out in equal steps during the second five years.[6] (In 2000, interest rates subsidies were received by 42 percent of Boston SSP homebuyers; the average subsidy for these borrowers was approximately $93 per month.) A borrower receiving the maximum subsidy would pay $722 monthly for the first five years, 33 percent less than the monthly payment of $1,077 for the conventional loan.

Furthermore, public assistance can reduce the amount needed up-front for down payment and closing costs, by up to $4,000 in our example. Regardless of the price of the home they are buying, all SSP borrowers receive a grant toward closing costs from the city of Boston — $500 for a single-family home, $750 for a two-family, and $1,000 for a three-family home. In addition, the majority of buyers will qualify for a down-payment grant of up to two percent of the price of their home ($3,000 in the case of a $150,000 house).[7]

Members of the MAHA Homebuyers Union have now negotiated Community Reinvestment Act agreements with 14 banks for over $500 million in below-market Soft Second loans in Boston, including two banks that had not yet made their first loan by year-end 2000. Between the first SSP loan closing in January 1991 and year-end 2000, there were 2,112 SSP loans in the city. (Table 2.) This record calls for an examination of how the SSP evolved from being a one-shot deal, regarded as incapable of being sustained, to being the largest targeted program in the city.

Throughout the SSP's history, MAHA has asked banks to renew and expand their lending commitments at well-attended community meetings. MAHA members believed that in order for the program to survive and grow, it was necessary to continue the grassroots pressure that led to its creation. A key early sign of grassroots support for increased bank involvement in the city's low-income and minority neighborhoods was a meeting at the Trotter elementary school in Roxbury (Boston's lowest-income and most heavily minority neighborhood) in September 1989. At this meeting, hosted by the Community Investment Coalition at a time when it was uncertain whether there would be any agreement on affordable mortgage lending, the 300 people in attendance enthusiastically supported the speakers' requests that the banks, all of which had representatives in the room, come to the negotiating table.

An important principle was established within a year of the program's launch when Fleet Bank entered the Boston market for the first time by acquiring the failed Bank of New England in late 1991. MAHA members decided that new banks entering their neighborhoods should participate in SSP along with those banks that had previously signed agreements. Fleet made an initial $8 million commitment to the program before the end of that year and originated its first loan in 1992. This principle would come into play again in 1994 when MAHA negotiated an agreement for the SSP participation by Citizens Bank following the acquisition of the Boston Five Cents Savings Bank by that Rhode Island-based institution.

Another principle established in those early years was that banks that publicly received poor evaluations for their performance in meeting the needs of Boston's neighborhoods would become the subjects of MAHA campaigns. The Boston Company (the parent of Boston Safe Deposit and Trust), under fire from city officials for receiving a failing grade in the initial report of the city's Linked Deposit Program, took advantage of the opportunity to improve its record by negotiating an SSPagreement with MAHAin 1992. The next year, USTrust joined the program in the wake of federal regulators awarding the bank a "Needs to Improve" Community Reinvestment Act (CRA) performance rating and MAHA's filing of a CRA challenge to a proposed branch acquisition.

In 1994, seven banks were invited to make long-term commitments to the program at a MAHA-sponsored community meeting in Roxbury. At this meeting of over 300 people, senior bank officials from all seven banks announced agreements to originate a total of $93 million in SSP loans during the next five years. These were the first multi-year commitments to the program, and it marked the first time that the banks were asked to make their commitments at a large public meeting. The Memorandums of Understanding that MAHA and the banks subsequently signed added a purchase and rehabilitation option to SSP and included, for the first time, a requirement for homebuyer counseling.

In 1996, Bank of Boston and BayBanks increased their commitment from $25 million to $40 million at a 200-person community meeting that followed their merger announcement. The next year, executives from eight banks announced SSP commitments totaling another $70 million at a 500-person meeting at Roxbury Community College. At that same meeting, Savings Bank Life Insurance became the first insurance company to invest in the program by committing itself to purchase $20 million in below-market securities backed by SSP loans.

The largest and most recent community meeting was held in May 1999 at the Reggie Lewis Athletic Center, where a crowd of 1,200 listened to Boston Mayor Thomas Menino tell them: "What you have in this room tonight, that's power." They then cheered as top executives from eight banks confirmed the Mayor's observation by declaring their commitments to make a total of 2,171 loans during the 2000-2004 period — almost 200 more loans than they had agreed to before the beginning of the meeting.[8]

This meeting marked a shift in MAHA's strategy of negotiating dollar commitments to the program. Rising home prices had meant fewer loans under the dollar-based commitments, so MAHA members decided to negotiate instead for specific numbers of loans. The goal of this shift was to slow or reverse a downward trend in the number of SSP loans, but it has yet to have the desired impact. In spite of the banks' increased commitments, the number of new SSP loans has fallen each year since reaching a peak of 409 loans in 1996. Bankers, public officials, and MAHA agree that the primary cause of the decline has been Boston's rapidly escalating home prices.

The Soft Second Program: Dimensions of Its Success

Boston's Soft Second Mortgage Program has not only survived and grown. It has done so in a way that has exceeded the goals of its founders. In this section, we review the performance of the SSP with respect to five criteria: affordability, reaching minority borrowers, serving traditionally underserved neighborhoods, sustainable homeownership, and reproducibility. The quantitative analysis makes extensive use of two databases with data on SSP loans. One was provided to the authors by the Massachusetts Housing Partnership (MHP) and is referred to in this paper as the MHP database; the other was constructed by one of the authors from Home Mortgage Disclosure Act (HMDA) data and is referred to as the HMDA-SSP database.[9]

Affordability

As emphasized above, affordability was the primary goal of MAHA members from the beginning. They sought a mortgage-lending program that would make homeownership possible for those with incomes as low as $15,000. the SSP's remarkable success in achieving this goal can be viewed from four perspectives.

First, an examination of the income levels of all SSP borrowers during the ten-year history of the program, grouped in intervals of $5,000, shows that 32.0 percent of all SSP homebuyers had incomes of $25,000 or less, 60.2 percent had incomes of $30,000 or less, and 94.2 percent had incomes of no more than $40,000 (Table 3). The dollar levels of affordability targets were initially set at the end of the 1980s, but even after a decade of modest general inflation and substantial increases in Boston housing prices, the portion of loans going to people at these income levels has remained high. During the last three years, 20.5 percent of SSP homebuyers had incomes of $25,000 or less, almost one-half (46.7 percent) had incomes of $30,000 or less, and 86.1 percent had incomes of no more than $40,000. Even the ambitious stated goal of making homeownership possible with an income of $15,000 was met; 24 SSP homebuyers, four of these in the last three years, had incomes between $10,000 and $15,000.

Second, over half of all Boston SSP loans during the ten-year period — 1,098 loans, or 52.4 percent of the total — have gone to *low-income* homebuyers (Table 4). (Low-income borrowers are those with incomes at or below 50 percent of the median family income (MFI) of the Boston MSA, as determined annually by HUD; the low-income ceiling has risen from $25,100 in 1991 to $32,750 in 2000.) The percentage of loans going to low-income borrowers has been dramatically higher for SSP than for the other two targeted mortgage programs in Boston that were negotiated by community groups early in the 1990s. During the last five years, low-income borrowers received 58 percent of SSP loans, compared to 28 percent of Association of Community Organizations for Reform Now (ACORN) mortgage-program loans and just 18 percent of the loans from the mortgage program of the Neighborhood Assistance Corporation of America (NACA). The percentage of loans going to low- and moderate-income borrowers — that is, to borrowers with incomes at or below 80 percent of the MFI of the Boston MSA — was 100 percent for the SSP, 79 percent for ACORN, and 61 percent for NACA.

A third perspective on the extent of housing affordability made possible by the Boston SSP is provided by examining the maximum priced homes that could be purchased by borrowers at specific income levels (Table 5). For example, given the conservative assumptions specified in that table, an SSP borrower with an annual income of $15,000 could afford a single-family house or condominium costing up to $64,700. An income of $35,000 is sufficient to purchase a three-family house priced as high as $245,700. (The calculation of these maximum prices depends on applying the SSP's complicated rules concerning maximum interest-rate subsidy, treatment of rental income, and other factors.)

A fourth and final perspective on the remarkable affordability provided by the SSP comes from comparing the monthly payments required to buy a $150,000 single-family house under each of the four major targeted mortgage programs operating in Boston. Three of the four programs have features that result in different monthly payments for different borrowers, depending on income levels and other circumstances. Therefore, Table 6 reports both the basic monthly payment that would be paid by a borrower taking advantage of none of these special features and the "minimum monthly payment" required from a homebuyer receiving the maximum possible benefits from them. The SSP is by far the most affordable mortgage program in the city, with even its basic monthly payment from $92 to $196 lower than the "minimum" monthly payments required by the other targeted mortgage programs. The SSP's minimum payment is from $207 to $311 lower than those required by the other programs.

Sustainable Homeownership

Although affordability was their primary goal, MAHA's Homebuyers Union members have always recognized that there are no real benefits to home*buyers*, and their neighborhoods, unless they are able to remain home*owners*. The priority that the group has attached to sustaining homeownership is evidenced by its early decision (reaffirmed on several occasions) that homebuyers must make a significant down payment. MAHA's low-income members believe strongly that potential buyers must demonstrate some ability to save money to adequately prepare themselves for the expense of owning and maintaining a home, especially an older home in an urban neighborhood. Consequently, the SSP requires that at least 3 percent of the total 5 percent down payment come from the buyer's own funds. In addition, MAHA members have resisted proposals to increase affordability at the expense of sustainability by increasing maximum debt-to-income ratios.

In 1996, MAHA established its HomeSafe Resource Center (HomeSafe) to help low- and moderate-income families succeed as home owners. MHP and participating banks have provided funding for HomeSafe by using a portion of the loan loss reserves for the second mortgages. When SSP homebuyers become homeowners, they are automatically enrolled as members of HomeSafe and encouraged to participate in free homeowner-education classes. Since 1996, more than 2,100 homeowners have graduated from the three-session "Homeowner 201" course, co-sponsored by the city of Boston, thereby becoming eligible for discounts from property-insurance companies, oil suppliers, home-supply centers, and alarm companies. All HomeSafe members are encouraged to take advantage of assistance with rehab, repair, and maintenance matters and consultation on landlord/tenant issues. SSP homeowners are especially encouraged to make use of MAHA's comprehensive foreclosure-prevention program if and when they experience, or even anticipate, difficulties in making their monthly mortgage payments.[10]

The effectiveness of these measures to sustain homeownership for SSP borrowers is reflected in the program's low delinquency rates. Since 1996, the Massachusetts Community & Banking Council (MCBC), MHP, and MAHAhave carefully monitored these rates, using data collected from participating banks by MHP. (MCBC is a collaborative effort between community and bank representatives to encourage investment in lower-income and minority neighborhoods.) Delinquency rates for SSP loans have generally been somewhat lower than the rates for all Massachusetts mortgages. For example, at year-end 2000, the SSP delinquency rate was 2.5 percent in Boston and 2.9 percent statewide, compared with a delinquency rate of 4 percent for all mortgages in the state (Table 7). The only other targeted mortgage program in Massachusetts with available delinquency data is that of the Massachusetts Housing Finance Agency (MHFA), which sets its income limit at 120 percent of the MSA's median income rather than the limit of 80 percent adopted by SSP. The MHFA statewide delinquency rate of 5.4 percent at year-end 2000 was well above that of SSP. Furthermore, foreclosures on SSP loans have been rare. By the end of 2000, only five of the 2,112 loans originated by the Boston SSP had ended in foreclosure, a rate of 1 in 422, or 0.24 percent.

Reaching Minority Homebuyers

In addition to its record in reaching low-income borrowers, SSP has also been successful in providing homeownership opportunities for the other major category of traditionally underserved borrowers — minorities. Both banks and community groups have targeted their marketing and outreach efforts in neighborhoods of color. These efforts may have contributed to that fact that minority homebuyers, who constituted just one-third of Boston's households according to the 1990 census, received three-quarters (74.3 percent) of all the SSP loans in the city during the program's first nine years[11] (Table 8). When the period is divided into three sub-periods of equal length, it can be seen that the percentage of the SSP loans going to minority borrowers has risen steadily, from 70.6 percent in 1991-93 to 78.0 percent in 1997 to 99.

Since the SSP's inception, the percentages of Black and Latino households who received SSP loans have been more than twice their respective percentages of Boston households. Blacks received 44.5 percent of the city's loans while accounting for 20.6 percent of Boston households, while Latinos, who made up 8.1 percent of the city's households, obtained 21.0 percent of all loans. These overall percentages resulted from very different patterns over time: while the Black loan share was falling from 57.1 percent in 1991-93 to 41.2 percent in 1997-99, the loan share of Latinos was rising from 11.1 percent in the earlier period to 26.3 percent in the latter.

Serving Minority and Lower-Income Neighborhoods

An examination of the geographical distribution of Boston's SSP loans shows that the program has been successful in financing affordable homeownership in the city's traditionally most underserved neighborhoods. Low- and moderate-income census tracts with more than 50 percent Black and Latino residents, which contained just 15.6 percent of the city's mortgageable housing units in 1990, have received a much higher share of Boston's SSP loans. This share rose from 27.7 percent of all loans in 1991-93 to 45.9 percent of loans in 1997-99; for the entire nine-year period, the loan share of these neighborhoods was 37.1 percent (Table 9).

At the same time, however, many minority buyers have been provided with the opportunity of moving out of predominantly minority neighborhoods into primarily White moderate-income neighborhoods such as Hyde Park and Roslindale. These two neighborhoods had 28.8 percent and 21.0 percent minority residents, respectively, and had the fifth and sixth highest income levels among Boston's sixteen major neighborhoods. Although they were home to only 11.0 percent of Boston's population in 1990, 20.3 percent of the city's SSP loans were for homes located within their borders. Of these loans, 74.4 percent went to Black or Latino borrowers.[12]

Reproducibility

Regardless of how successful a program is in one locality, its value is limited unless it can be replicated elsewhere, with appropriate modifications in response to variation in local circumstances. The success of the Boston Soft Second Program in serving as a model for Soft Second Programs in many other cities and towns across Massachusetts suggests that it may be reproducible on a broader scale as well.

By year-end 2000, a total of 2,812 loans had been made through Soft Second programs operating in 116 of the 350 Massachusetts cities and towns outside of Boston. These loans were originated by a total of 40 banks, 25 of which were active lenders during 2000. The other

SSPs, also administered by the MHP, have almost all features of the Boston SSP, although in some communities loans are made at the market interest rate rather than below. MAHA has worked with nonprofit organizations on Cape Cod and in the cities of Brockton, Lynn, and Springfield to expand the program to those areas. MHP has played a leading role in expanding the program by educating city and town officials, bankers, and community groups in every region of the state.

In addition, statewide Soft Second lending commitments have been a key subject of a series of negotiations between the state's largest banks and representatives from MAHA and the Massachusetts Association of Community Development Corporations. Starting with the Fleet/Shawmut merger in 1995 and continuing with the BankBoston/BayBanks, Fleet/BankBoston, and Citizens/USTrust mergers, each statewide agreement has included significant commitments to Soft Second programs outside of Boston. Fueled by these agreements and by the generally lower home prices outside of the Boston area, communities other than Boston have accounted for almost three-quarters (73.2 percent) of all Massachusetts SSP loans during the last three years. This is a major change from the program's first five years, when only one-third (32.6 percent) of all SSP loans in the state were made outside of Boston (calculated from data in Table 10).

Two areas of the state, Hampden and Hampshire counties in western Massachusetts and Cape Cod in the east, have been particularly active. In both areas, the SSP benefits from the same type of nonprofit sponsorship that it enjoys in Boston. In the Springfield area, effective advocacy by the Hampden-Hampshire Housing Partnership (HHHP) resulted in its SSP program originating more loans than the Boston SSP during the year 2000. On the Cape, the Cape Cod Commission (CCC) and the Hyannis-based Housing Assistance Corporation (HAC) have embraced the program since 1992. CCC has achieved notable success in getting local Cape Cod banks to participate in SSP. In 1998, HHHP and HAC, which had long provided homebuyer education classes and post-purchase counseling, received training from MHP and MAHA that enabled them to open HomeSafe centers that now serve SSP homeowners in western Massachusetts and on Cape Cod.

The Soft Second Program: Its Evolution Within a Changing Financial System

Although the basic outline of the SSP has remained the same throughout its ten-year history, the program has also responded to and reflected several of the ongoing changes in the nation's financial system. In this section we review the relationships between the evolution of the SSP and five major changes in its financial and institutional environment: the consolidation of the banking industry, the extension of CRA-type obligations beyond banking, the continuing extension and refinement of secondary mortgage markets, the growth of public-private partnerships, and the increase in predatory lending. Table 11 offers a chronological summary of important events and initiatives in the Boston SSP's ten-year history.

Banking Industry Consolidation

Only one of the Boston SSP agreements reached between MAHA and the banks was directly tied to a bank merger (the Bank of Boston/BayBank merger of 1996). Nevertheless, all bank commitments were made in the context of a set of mergers that combined Boston's four biggest retail banks into a single institution during a decade when bank regulators were, for the first time, taking their responsibilities under CRAseriously. Of the 12 banks that have participated in the SSP, four (BankBoston, BayBanks, Shawmut, and USTrust) have been absorbed in mergers with other participating banks. Another bank, Hibernia Savings, was acquired by Eastern Bank after it had joined the program but before making any loans. Eastern, a much larger institution, first entered the program by assuming Hibernia's commitment. Finally, Sovereign Bank signed an SSP agreement with MAHA when it entered the state by acquiring most of the Massachusetts branches of Fleet that were divested during the Fleet/BankBoston merger.

While these mergers among the biggest local banks were taking place, MAHA sought to maintain options for homebuyers by expanding the number of smaller banks participating in the Boston SSP. Although agreements were successfully negotiated with a number of smaller banks, most of these new program participants have so far originated only a handful of loans. However, there is one significant exception to the generally modest performance of smaller institutions. Boston Private Bank and Trust Company, whose assets of $726 million as of June 2000 were dwarfed by those of Citizens, Fleet, and Sovereign Banks, has originated 181 SSP loans in Boston since joining the program in 1996. In 2000, it was the program's largest single lender, accounting for over one-third of all SSP loans in the city.

Secondary Market Expansion

The first banks to commit to the Soft Second program sent MAHA the message that if it wanted banks'participation over the long-term, it had to get Fannie Mae involved. MAHA began to negotiate with Fannie Mae officials in 1991, seeking revised underwriting criteria for two- and three-family properties. They were unfamiliar with the role that the area's huge stock of two- and three-family housing had played in providing starter homes to generations of Bostonians. They had recently *tightened* credit standards on two-, three-, and four-family properties nationally and were nervous about doing anything different in Boston. After extensive negotiations, Fannie Mae and MAHAreached an agreement in 1992. Homebuyers would be able to include 75 percent of their rental income when calculating the maximum monthly payments that they could afford, subject to one constraint. The monthly payment on a two-family house could not exceed 50 percent of the buyer's monthly income, excluding rental income, and the monthly payment on a three-family house could not exceed 50 percent of monthly income, including rent from one of the two rental units. Fannie Mae's stamp of approval gave banks the security of knowing that SSP first-mortgage loans would be eligible for sale in the secondary market.

Another major problem remained, however. Although the revised underwriting standards made SSP loans eligible for purchase by Fannie Mae, that agency insisted on a discounted price that was unacceptable to the banks that originated the loans. No matter how creditworthy these loans were now judged to be, the fact that they had been made at below-market interest rates made Fannie Mae unwilling to pay full price for them. On the other hand, the banks' accounting methods meant that sales at less than full price would have unacceptable impacts on their financial statements. As a result, the loans remained stuck in the originating banks' portfolios.

Confronted with this impasse between the banks and Fannie Mae, MAHA responded by working to create a local secondary market for SSP first-mortgage loans. This effort bore fruit in 1997 when the first securities backed by SSP first mortgages were sold. Packaged by Fannie Mae, the securities offered a rate of return of 50 basis points below the market level. Savings Bank Life Insurance (SBLI) committed itself to buying $20 million of these securities over the next ten years and had already fulfilled 40 percent of that commitment by the end of 2000 by purchasing $8 million of securities backed by SSP first mortgages originated by Citizens Bank. CEO Robert Sheridan equates

SBLI's investment in "affordable housing" with the company's own mission, established by its founder Louis Brandeis, of providing "affordable insurance." Subsequently, The Life Initiative, an investment entity established by Massachusetts life insurance companies, became the second buyer of SSP mortgage-backed securities with a $6 million investment.

Extension of CRA-Type Obligations Beyond Banking

It was no accident that these initial investments came from the insurance industry. Massachusetts has played a leading role in efforts to engage non-bank financial companies in CRA-like activity. For years, MAHA and other community-based organizations had been engaged in a campaign to require insurance companies to do a better job of meeting the needs of lower-income and minority communities in Massachusetts. Their efforts to establish insurance counterparts of HMDA and the CRA at the state level fell short of accomplishing this ambitious goal. Nevertheless, the campaign did result in the enactment of two more limited laws as well as increased public and industry awareness of poor insurance company performance in meeting local needs.

Both the origins and the outcomes of this initiative are closely related to Boston's Soft Second Program. MAHA's studies of property-insurance redlining and its community organizing, motivated in part by difficulties that SSP home buyers had in obtaining homeowners'insurance, set the stage for the 1996 passage of the country's most comprehensive property-insurer disclosure law.[13] In the aftermath of this legislation, property/casualty insurance companies provided start-up financial support for MAHA's HomeSafe program. In addition, MAHA has negotiated agreements with ten of the state's top property-insurance companies to offer graduates of these classes discounts of 5 percent to 15 percent on homeowner insurance premiums.

MAHAwas also heavily involved in the campaign that called attention to the Massachusetts life insurance industry's extremely limited investments in affordable housing, small businesses, and community development — either directly or through financial intermediaries that had been established for that very purpose. Although this campaign did not bring about a full insurance CRA for Massachusetts insurance companies, it did result in significant legislation. A 1998 law required, as a condition of receiving long-sought tax relief, that the state's life-insurance industry and property/casualty-insurance industry each establish an investment fund, capitalized at $100 million, to make CRA-type investments throughout the state.[14] It was one of these funds, the Life Insurance Community Investment Initiative (The Life Initiative), that made the purchase of $6 million of SSP mortgage-backed securities that was noted earlier — the fund's largest single investment to date. Since the passage of the 1998 law, life insurers have become more engaged in promoting affordable homeownership. John Hancock Financial Services became the first sponsor of MAHA's homebuyer classes that was not a mortgage lender. Savings Bank Life Insurance has supplemented its purchases of SSPmortgage-backed securities with financial support for MAHA's efforts to reach out to more low- and moderate-income homebuyers.

Growth of Public-Private Partnerships

Recent efforts to promote affordable housing or community development have almost always involved partnerships between a variety of public, nonprofit, and private entities. The SSP is no exception to this generalization and is, in fact, embedded in a particularly dense web of partnering relationships. The nature and scope of these partnerships may perhaps be best illustrated by following the path of a typical SSP homebuyer.

She would start by enrolling in a certified homebuyer counseling class. MAHA provides pre-purchase counseling to many Soft Second participants, but potential buyers can also take any one of a dozen other homebuyer classes sponsored by nonprofit organizations or by the city of Boston. The only restriction is that the class be certified by the Massachusetts Homeownership Collaborative, a statewide partnership of nonprofits, lenders, and government agencies that acts to set and maintain standards for the proliferating number of homebuyer education programs. If our homebuyer attended a MAHA class, it would be co-sponsored by Mellon New England, Fleet Bank, or John Hancock Financial Services.

Once the homebuyer selects a potential new home and chooses to work with one of the eleven banks currently offering SSP loans in Boston, the detailed paperwork necessary to prepare for closing is coordinated by the Massachusetts Housing Partnership (MHP), the quasi-public agency charged with administering SSP. On closing day, the homebuyer's down payment and closing costs are reduced by financial assistance from the city of Boston. She agrees to a schedule of monthly payments that are substantially reduced by the below-market interest rate charged by the lender and by contributions from the Massachusetts Department of Housing and Community Development, the city of Boston, and the Federal Home Loan Bank of Boston that, since she qualifies, reduce second-mortgage interest payments for the first ten years. State and city dollars also fund a loan loss reserve for her second mortgage.

The new homeowner becomes a member of MAHA's HomeSafe Resource Center (established with financial support from the property insurance industry and MHP) and then attends the center's Homeowner 201 class, co-sponsored by the city of Boston. Her incentive to attend is strengthened by the fact that course graduates are eligible for discounts offered by property-insurance companies and by her local hardware store. As a result of this class, continued contacts with the HomeSafe Resource Center, and the awareness generated by Boston's "Don't Borrow Trouble" campaign (a joint venture of the Massachusetts Community & Banking Council [MCBC], the city of Boston, Fannie Mae, and Freddie Mac that is described below), the homeowner is able to avoid falling prey to home-repair or predatory-lending scams. Meanwhile, her monthly payments join all the others that are carefully monitored for delinquency levels by MHP and MCBC. Any emerging concerns about the operation of the SSPare discussed by the representatives of the banks, community-based organizations, nonprofits, and government agencies that attend the regular meetings of MCBC's Mortgage Lending Committee.

As long as the homeowner is making regular monthly payments, her first mortgage may become part of a package of loans securitized by Fannie Mae and purchased by The Life Initiative, the fund capitalized and operated by the state's life-insurance industry. The original lender retains servicing, which facilitates continued tracking of SSP loans.

Expansion of Subprime and Predatory Lending

MAHA's continuing contacts with SSP homeowners through the HomeSafe Resource Center help the program to learn about and respond to emerging problems, such as the recent increase in subprime and predatory lending. SSP homeowners are warned about predatory lenders and unscrupulous contractors in homeowner education classes, through featured articles in *HomeSafe News* (a newsletter mailed to all SSP homeowners), and, in some cases, through early delinquency counseling. MAHA's counselors are in a position to dissuade homeowners from doing business with lenders seeking to strip the equity from their homes.[15]

MAHA collaborated with the Massachusetts Community & Banking Council and the city of Boston in developing, with the pro-bono assistance of a local advertising agency, an innovative homeowner education campaign entitled "Don't Borrow Trouble." The campaign warns homeowners about lending scams and easy, but dangerous, credit through posters, subway advertising, public-service announcements on radio and TV, brochures mailed by the city to every Boston homeowner, and a city-sponsored "hot-line" phone number for consultation and referrals. The Massachusetts Bankers Association and the state's Division of Banks have cooperated in making the program available statewide. Boston's "Don't Borrow Trouble" program has become a national model; with support from Freddie Mac, it is being replicated in numerous cities around the U.S.

Concluding Comments

For the last ten years, the Boston SSP has been a laboratory, of sorts, for community groups, banks, insurance companies, and government agencies. The experience gained suggests several important lessons. One such lesson is that success is a moving target. Accordingly, after summarizing some of the lessons learned, the paper ends by identifying challenges that are likely to confront SSP in the near future.

Lessons Learned

Grassroots involvement is crucial. From day one, the Soft Second program has benefited greatly from an extraordinary degree of involvement from low- and moderate-income members of MAHA. Members of MAHA's Homebuyers Union were intimately involved in negotiating the details of the program, and they were the guiding force in challenging bankers and government officials to increase the affordability of these loans. Since that time, large community meetings have convinced banks that there remains a large, grassroots constituency for genuinely affordable home mortgages.

You can't stand still. As the financial system has changed around the program, the SSP has changed and evolved as well. It has grown from three participating banks in 1991 to nine in 2001. A homebuyer can now get a loan from Fleet, the seventh largest bank in the country, or from Hyde Park Cooperative, an $82-million two-branch bank. The program started with banks needing to retain both first and second mortgages in their portfolios. Today, Fannie Mae and insurance companies provide an outlet for the first mortgages. The growth of predatory lending has required creative responses.

Get it in writing. Written agreements for SSP evolved from a one-page letter from the bank to a ten-page Memorandum of Understanding (MOU) that spells out many significant details. These MOUs have been useful for resolving questions that arise with the passage of time and changing bank personnel. The more formal documents have been particularly valuable in merger-related negotiations conducted by MAHA and other organizations.

When the agreement is signed, the work has just begun. That sage advice was offered to MAHAin 1990, and the last ten years have borne it out. There have been countless hours of meetings to implement, monitor, and renegotiate the agreements. MAHA has added three new programs (homebuyer counseling, HomeSafe, and foreclosure prevention) to help support SSP. It organized large community meetings focused on the program in 1994, 1996, 1997, and 1999.

Partners are essential. Bankers have spent numerous hours in boardrooms and community rooms discussing details of implementing the SSP. The Massachusetts Housing Partnership, Boston's Department of Neighborhood Development, and other government agencies have expended enormous time and energy to make the program a success. Other neighborhood-based nonprofits have promoted the program through outreach and workshops. The Massachusetts Community & Banking Council has been instrumental in monitoring delinquencies. Public officials and private companies have provided financial support. The list could go on. The program has been inclusive and a wide variety of public and private organizations should share in the credit for the SSP's achievements.

Challenges Ahead

Between 1990 and 1999, the share of Boston home-purchase loans made by mortgage companies and other lenders not subject to CRA for their Boston lending has tripled, from 21.9 percent of all loans at the beginning of the decade to 61.9 percent at the end (Campen, 2000, Table 7). During this time, however, no mortgage company has seriously explored the option of joining the Boston SSP. As barriers between different financial industries continue to crumble, consumers may soon be able to get mortgages from their insurance agents. Public comments by top officers of Boston's biggest banks have raised the possibility that some institutions might decide to get out of the highly competitive, low-margin business of making mortgage loans. Increasing, or even maintaining, lender commitments to the SSP in this changing institutional environment could be difficult.

The declining number of Boston SSP loans in the last three years reflects the impact of the sustained escalation of housing prices in the city. On the one hand, potential homebuyers find it increasingly difficult to find a house that they can afford. On the other hand, the ceilings on the prices of houses that can be purchased with SSP loans have resulted in some buyers locating houses that they could afford with the assistance of the SSP but that they cannot buy because their prices exceed SSP maximums. Early March 2001 increases in the price ceilings, the second set of increases within a year, will provide some relief from the latter problem but do nothing to address the underlying problem of the erosion of affordability by continually rising house prices.

However, under the most likely scenario leading to lower housing prices — an economic downturn — the ability of potential homebuyers to purchase new homes could be reduced more by falling incomes than it is increased by declining house prices. Furthermore, the ability of SSP homeowners to continue to make their monthly payments in a timely fashion could be seriously threatened by rising unemployment and falling household incomes. The Boston SSP's low delinquency and foreclosure rates have been achieved during the longest uninterrupted economic expansion in U.S. history. The coming of a recession would bring about the first real test of the sustainability of SSP homeownership during hard times.

While these challenges are serious, the achievements and the adaptability of the Boston Soft Second Loan Program during its first ten years provide grounds for optimism about its ability to meet these and other challenges bound to arise in its second decade.

James T. Campen is Associate Professor of Economics and former chair of the Economics Department at the University of Massachusetts–Boston. His publications include several studies of mortgage lending in Boston and surrounding cities. He serves on the boards of the Massachusetts Affordable Housing Alliance and the Fair Housing Center of Greater Boston, and he was a member of the Federal Reserve Bank of Boston's Community Development Advisory Council from 1996 to 1998. Campen has a Ph.D. in economics from Harvard University.

Thomas M. Callahan has worked at the Massachusetts Affordable Housing Alliance (MAHA) for 14 years and has been its Executive Director since 1991. During that time MAHA has established itself as the Commonwealth's lead organization in issues of private sector involvement in affordable housing; its efforts have resulted in more than $2.2 billion in public and private sector investment since 1985. Callahan is the vice chair of the Massachusetts Community & Banking Council and co-chair of its Mortgage Lending Committee. He was a Fannie Mae Fellow in the Program for Senior Executives in State and Local Government at Harvard's Kennedy School of Government in June 1998. During 1996 and 1997, he served on the Steering Committee of the Federal Reserve Bank of Boston's Greater Boston Home Purchase Process Initiative. Callahan earned his B.A. in politics from Fairfield University.

Table 1
Accounting for the Low Monthly Payments of the Boston Soft Second Mortgage Program
(Example based on purchase of $150,000 house)

	Monthly Payment	Savings	Cumulative Savings
Comparison is to: Citizens Bank loan with 5% down, private mort. insurance, and 0-point rate of 7.375%	$1,077	---	---
No private mortage insurance necessary	$984	$93	$93
2-point rate (although no points paid): 6.625%	$912	$72	$165
0.5% below this market rate: 6.125%	$866	$46	$211
Years 1-10: Second mortgage interest-only	$837	$29	$240
The above savings are received by all SSP borrowers. In addition, some qualify for subsidy of second mortgage interest payments during years 1-10. Maximum subsidy is 75% of interest payment during years 1-5, phasing out in 5 equal steps in years 6-10. In this example, the monthly payments would be:			
Years 1-5: 75% subsidy	$ 722	$ 115	$ 355
Year 6: 60% subsidy	$ 745	$ (23)	$ 332
Year 7: 45% subsidy	$ 768	$ (23)	$ 309
Year 8: 30% subsidy	$ 791	$ (23)	$ 286
Year 9: 15% subsidy	$ 814	$ (23)	$ 263
Year 10: no subsidy	$ 837	$ (23)	$ 240
Years 11-30: Second mortgage amortizes over 20 yrs.	$901	($64)	$176

Citizens Bank interest rates and PMI costs as of 2/28/01; all monthly payments calculated by authors.
See text for fuller explanation of elements of Soft Second Mortgage Program loans.

Table 2
Numbers of Loans and of Participating Banks
Boston Soft Second Mortgage Program, 1991 - 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Loans	32	83	167	221	279	409	315	242	229	135	2,112
Banks Lending											
During Year	3	5	5	6	8	9	7	7	7	9	n.a.
For First Time	3	2	0	1	2	1	1	0	0	2	12
Ever	3	5	5	6	8	9	10	10	10	12	12

Table 3
Income Levels of Borrower
Boston Soft Second Mortgage Program, 1991 - 2000

Income Level	All 10 Years: 1991-2000			Last 3 Years: 1998-2000		
	Number of Loans*	% of all Loans	Cumula-tive %	Number of Loans*	% of all Loans	Cumula-tive %
$10,001-$15,000	24	1.1%	1.1%	4	0.7%	0.7%
$15,001-$20,000	193	9.2%	10.3%	32	5.3%	6.0%
$20,001-$25,000	453	21.6%	32.0%	88	14.6%	20.5%
$25,001-$30,000	593	28.3%	60.2%	158	26.2%	46.7%
$30,001-$35,000	483	23.0%	83.3%	156	25.8%	72.5%
$35,001-$40,000	230	11.0%	94.2%	82	13.6%	86.1%
$40,001-$45,000	83	4.0%	98.2%	55	9.1%	95.2%
$45,001-$50,000	31	1.5%	99.7%	24	4.0%	99.2%
above $50,000	7	0.3%	100.0%	5	0.8%	100.0%
Total	2,097	100.0%		604	100.0%	

Note: Median borrower income was $28,143 for entire period and $30,562 for 1998-2000.

* This table excludes 9 loans (1 during last 3 years) for which no income was reported and 6 loans (1 during last 3 years) for which income of less than $10,000 was reported.

Table 4
Loans to Low-Income Borrowers
Boston Soft Second Mortgage Program, 1991 - 2000

Year	Maximum for Low-Income*	Total Loans#	Loans to Low-Income Borrowers	
			Number#	% of Total
1991	$25,100	29	4	13.8%
1992	$25,550	81	42	51.9%
1993	$25,600	167	68	40.7%
1994	$25,650	221	93	42.1%
1995	$26,550	275	145	52.7%
1996	$28,250	405	220	54.3%
1997	$29,800	315	201	63.8%
1998	$30,000	242	147	60.7%
1999	$31,350	228	132	57.9%
2000	$32,750	134	46	34.3%
Total		2,097	1,098	52.4%

* Low-Income borrowers are those with incomes no greater than 50% of the Median Family Income for the Boston MSA as determined annually by HUD.

Includes only loans to borrowers with reported incomes of $10,000 or more.

Table 5
Boston Soft Second Mortgage Program
Maximum House Price Affordable+ at Selected Income Levels
(Based on Assumptions Listed Below, rounded to nearest $100)

	Borrower Income			
	$15,000	$25,000	$35,000	$45,000
Single-Family House	$64,700	$99,100	$138,500	$175,400
Two-Family House	$91,300	$149,900	$188,200	$216,900
Three-Family House	$140,300	$194,400	$245,700	$281,600

Maximum house prices were calculated on the basis of the following *assumptions* :

- two-point market interest rate equals 7.5%
- annual property taxes are 1.4% of house price; annual property insurance cost is 0.6% of house price.
- in the two- and three-family houses, apartments are rented at $700 per month

+ Because the SSP sets ceilings on purchase prices, potential home-buyers sometimes are not *allowed* to buy houses that they could *afford* . For example, the maximum purchase price for a 3-family house was $200,000 through 1999, was raised to $230,000 in 2000, and raised again in March 2001, to $270,000.

Table 6
Monthly Mortgage Payments for $150,000 Single-Family House, Years 1-5^
Boston Soft Second Mortgage Program and Selected Other Programs
(Using the interest rates in effect on March 1, 2001)

	Soft Second Mortgage Program	ACORN* Mortgage Program	NACA* Mortgage Program	MHFA* Mortgage Program
Basic monthly payment#	$837	$1,004	$1,086	$1,033
Minimum monthly payment#	$722	$929	$998	$1,033
Required downpayment from borrowers own funds	$4,500	$1,000	$0	$4,500

* *ACORN* is the Association of Community Organizations for Reform Now. The first ACORN mortgage loan was in 1994. Through 1999, four banks made a total of 1,163 ACORN loans in Boston. Three banks are currently active.
NACA is the Neighborhood Assistance Corporation of America. The first NACA loan was in 1993. Through 1999, three banks made a total of 923 NACA loans. One bank in currently active. (NACA is a successor to UNAC.)
MHFA is the Massachusetts Housing Finance Agency. The first MHFA loan in Boston was in 1979. Between 1991 and 1999, many banks made a total of 1,292 MHFA loans in Boston. Many lenders are currently active in this program.

The first three of these four mortgage programs have features that result in lower monthly payments for borrowers who meet specified criteria — such as incomes below a certain level. The *basic monthly payment* is that of a borrower who meets none of the specified criteria. The *minimum monthly payment* is that of a borrower who meets all of the criteria.
SSP: the minimum payment is based on the maximum interest rate subsidy; basic has no interest rate subsidy.
ACORN: the interest rate is reduced by 75 basis points for a borrower with income less than 80% of the MSA median.
NACA: borrowers who receive grants to do so can use these grants at closing to buy down the interest rate.

^ For SSP loans, monthly payments lower than "basic" rise to the basic level in five equal steps during years 6-10; in year 11 and after the monthly payment for all SSP borrowers would be $901. For NACA loans, all monthly payments are $50 lower from year 6 on, when contributions to the Neighborhood Stabilization Fund are no longer required.

Table 7
Soft Second Mortgage Program
Delinquency Rates, 1996-2000, Boston and Massachusetts
(Percent of Mortgages Delinquent 30 Days or More, including Loans in Process of Foreclosure)

Date	Soft Second Program Loans		Mass. Housing Fin. Agency	All Mass. Loans
	Boston	Massachusetts		
Dec. 31, 1996	2.9%	2.4%	7.4%	4.9%
Dec. 31, 1997	4.2%	3.9%	6.7%	4.3%
Dec. 31, 1998	3.0%	3.1%	6.4%	4.0%
Dec. 31, 1999	2.3%	2.5%	5.6%	3.3%
Dec. 31, 2000	2.5%	2.9%	5.4%	4.0%

Sources: SSP -- MHP; MHFA -- MHFA; All Mass. Loans -- Mortgage Bankers Association of America

Table 8
Race/Ethnicity of Borrowers
Boston Soft Second Mortgage Program, 1991-1999

Period*	% Minority	% Black	% Latino	% Asian
1991-99	74.3%	44.5%	21.0%	4.9%
1991-93	70.6%	57.1%	11.1%	1.6%
1994-96	72.6%	44.3%	19.3%	4.8%
1997-99	78.0%	41.2%	26.3%	5.9%
For comparison:				
% of HHs#	33.6%	20.6%	8.1%	4.1%

* This table is based on HMDA data rather than MHP data. As a result, the periods end with 1999, the most recent year for which HMDA data are available.

\# Percentage of total Boston households, according to 1990 census.

Table 9
Distribution of Boston Soft Second Mortgage Program Loans by Income Level and Racial/Ethnic Composition of Neighborhoods, 1991-1999

	Total	Low- and Moderate-Income Census Tracts*				All Middle & Upper-Income Cen Tracts*
		>75% Black + Latino	50%-75% Black + Latino	All Other	>75% White	
MHUs, 1990#	97,782	11.6%	4.0%	17.1%	20.1%	47.2%
Loans, 1991-99^	1,240	25.2%	11.9%	17.6%	17.3%	28.1%
Loans, 1991-93	126	20.6%	7.1%	10.3%	19.8%	42.1%
Loans, 1994-96	669	20.2%	12.9%	17.0%	20.2%	29.7%
Loans, 1997-99^	445	34.2%	11.7%	20.4%	12.1%	21.6%

* Low- and moderate-income census tracts are those with median family incomes (MFIs) less than 80% of the MFI of the Boston Metropolitan Statistical Area (MSA). Middle- and upper-income census tracts are those with MFIs greater than 80% of the MFI of the MSA. Population and income data from 1990 census, the most recent source of consistent and reliable information.

\# "**MHUs**" are "**mortgageable housing units**" a measure of the number of real estate units that are eligible for separate mortgages; i.e., a single family house is one MHU, a building with four apartments is one MHU, and a building with 12 condos is 12 MHUs. Data source: Boston Redevelopment Authority.

^ This table is based on HMDA data rather than MHP data. Thus, periods end with 1999, the most recent year for which HMDA data are available.

Table 10
Expansion to Additional Cities & Towns and to Additional Banks
Soft Second Mortgage Program in Massachusetts, 1991-2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
A. Number of Loans										
Boston	32	83	167	221	279	409	315	242	229	135
Other Massachusetts	3	18	35	129	194	362	415	493	596	567
Total	35	101	202	350	473	771	730	735	825	702
B. Number of Cities & Towns Outside of Boston										
Received Loans During Year	1	6	15	29	41	58	60	62	76	75
First Year of Receiving Loans	1	5	12	17	18	18	10	10	11	14
Ever Received Loans	1	6	18	35	53	71	81	91	102	116
C. Number of Banks										
Made Loans During Year	3	6	7	10	17	22	25	23	20	25
First Year of Making Loans	3	3	2	4	7	6	8	2	2	3
Ever Made Loans	3	6	8	12	19	25	33	35	37	40

Total loans over 10-year period: 2,112 in Boston; 2,812 elsewhere in Massachusetts; 4,924 statewide.

Table 11
Timeline for Boston Soft Second Mortgage Program (SSP)

1990	SSP opens for business in November.
1991	Closing on first SSP-financed home-purchase in Boston in January.
1991	Closing on first SSP-financed home-purchase outside of Boston (in Quincy).
1991	MAHA's first homebuyer education class begins.
1992	Fannie Mae and MAHA adopt underwriting guidelines for 2- and 3-family homes.
1992	MAHA begins full-time homebuyer counseling project, supported by The Boston Co.
1994	Banks make initial multi-year commitments to SSP, at May public meeting attended by 300. (Larger meetings and bigger commitments follow in 1997 and 2000.)
1994	Purchase and rehab option added to SSP.
1994	Completion of homebuyer counseling course becomes a requirement for SSP borrowers.
1994	Federal Home Loan Bank of Boston makes first award/grant to SSP.
1994	Hyde Park Co-op Bank (1994 assets: $53 million) is first small bank to join SSP
1995	Fleet-Shawmut merger is first of four major Boston bank mergers in 1990's; SSP is subject of negotions and agreement between banks and MAHA.
1996	HomeSafe program begins, supported by property insurance companies. (It later obtains support from City of Boston, banks, and MHP.)
1996	Boston SSP loans pass the 1,000 mark.
1997	SBLI becomes first investor in SSP-mortgage backed securities packaged by Fannie Mae. (The Life Initiative — funded by life insurance industry — follows in 1999.)
1999	HomeSafe program expands to western Massachusetts and Cape Cod.
2000	First MAHA homebuyer class to be sponsored by non-mortgage lender (John Hancock Financial Services).
2000	MHP increases purchase price ceilings for first time.
2000	"Don't Borrow Trouble" homeowner education campaign begins.
2000	Boston SSP loans pass the 2,000 mark.
2001	Gala at John F. Kennedy Library celebrates 10th anniversary of SSP.
2001	Massachusetts SSP loans pass the 5,000 mark

Acronymns: MAHA is Massachusetts Affordable Housing Alliance; MHP is Massachusetts Housing Partnership (a quasi-public agency); SBLI is Savings Bank Life Insurance (a mutual insurance company).

Notes

1. Listoken and Wyly (2000a, 2000b) provide an ambitious and informative survey of key features of many of these programs. Avery, Bostic, and Canner (2000a, 2000b) describe what a detailed Federal Reserve survey of major banks revealed about the characteristics, performance, and profitability of "CRA Special Mortgage Programs." (In each case, the second reference is to a substantially shorter and less technical summary of the primary article.)

2. Campen (1992) describes in considerable detail the actors, events, and issues involved in "The Struggle for Community Investment in Boston, 1989-1991" that resulted in the creation of the Boston SSP and many other initiatives. Miara (2000) provides an overview of the whole range of CRA-related programs and activities in Boston during the decade that followed those initial struggles.

3. We cannot claim to be impartial observers. One of us, as MAHA's executive director, has been intimately involved in guiding the program's development from the beginning. The other, although employed by the University of Massachusetts, has been a member of MAHA's board of directors for several years. Although we have not attempted to disguise our highly favorable view of the program, we have tried to be objective in our analysis and to present enough information so that each reader will have a solid basis for reaching his or her own conclusions. More than that, we believe honest and critical reviews are essential to inform changes that will be necessary to ensure the SSP's continued success.

4. This draft study, leaked to reporters, was abandoned by the Boston Fed and has never been publicly released. It should not be confused with two later Boston Fed studies that also found evidence of racial discrimination in mortgage lending in Boston — the first in lending to predominantly black neighborhoods (Bradbury, Case, and Dunham 1989) and the second in higher denial rates experienced by black and Latino individuals (Munnell et al. 1992).

5. The average price of the homes purchased in Boston during the year 2000 with SSP loans was $137,500. Condos were purchased for an average price of $111,200, single-family homes for $126,600, two-family homes for $167,700, and three-family homes for $177,500.

6. The rules for determining the amount of interest rate subsidy, if any, are complicated. If total monthly payments (principal, interest, taxes, insurance, and condo fees) are more than 28% of the borrower's monthly income, the borrower is eligible for an interest rate subsidy to bring his or her payment down to that level, subject to two limits. The first limit is that the subsidy cannot exceed 75% of the interest on the second mortgage. The second limit is that the total present value of the payment to the loan loss reserve plus all payments for interest rate subsidies cannot exceed $12,500. The complete rules governing this and other aspects of the Soft Second Program can be found at the Massachusetts Housing Partnership's website: www.mhpfund.com. The authors are grateful for the patience and insight with which the MHP's Heather Hennessey has answered our many queries about SSP's rules and operations. Her answers have been valuable in helping us calculate the numbers that are presented in Tables 1 and 5. We are also grateful to Reay Pannesi,

from the city of Boston's Department of Neighborhood Development, and Kevin Mello, from the Massachusetts Housing Finance Agency, for providing data used in this case study.

7 Homebuyers whose liquid assets at the time of closing, after paying three percent of the purchase price as a partial down payment and all other closing costs, are equal to less than two monthly payments are eligible for the full grant of two percent of the purchase price. Homebuyers with liquid assets equal to more than two monthly payments qualify for down-payment assistance after their own contributions to the down payment reduce their liquid assets to that level. Technically, the assistance is not a grant; the money is provided as a zero-percent deferred loan that is forgiven after the borrower has lived in the property for five years. Otherwise, it must be repaid.

8 As this brief historical review has indicated, all of Boston's largest retail banks have made commitments to the Boston SSP. In particular, the seven top-ranking mortgage lenders among Boston banks, according to 1999 HMDAdata, have all signed agreements with MAHA (one of these banks, Boston Federal Savings, has yet to make its first SSP loan). The statement in the Treasury Department's recent Final Report on CRAthat "In Boston, the top ten mortgage lenders forego the city's soft-second program…" (Litan *et al* 2001: 60) is not correct.

9 The authors have observed the skill and persistence with which Heather Hennessey has not only managed the expanding MHPdatabase in recent years but has also dramatically improved its quality and usefulness; this paper has benefited greatly from her making available to us some of the fruits of her labor. The portion of the MHP database provided to the authors contains the following information for each of the 4,924 SSP loans made in Massachusetts through year-end 2000: closing date, lender, borrower income and (sometimes) race/ethnicity, and property location by city/town and ZIPcode. The coverage of the database should be complete, because the agency's central role in administering the program — for example, it authorizes and disburses the payments that fund the loan loss reserves and provide interest rate subsidies — means that no SSPloan is made without MHP involvement. The HMDA-SSP data was created by Campen in the process of removing the "double-counting" of SSP loans in order to provide more meaningful analysis of mortgage lending patterns in Boston (see, most recently, Campen 2000). The double-counting in HMDAdata arises because two mortgage loans are originated when a home is purchased through the SSP program — a first mortgage and the "soft" second mortgage. Some, but not all, lenders, include both of these loans in their HMDA Loan Application Registers. While there is no explicit indication that a loan is an SSP loan, these were located on the assumption that a pair of loans by the same lender, with consecutive sequence numbers, to borrowers having the same income, race, and gender, and for homes located in the same census tract, were in fact SSP loans. The HMDA-SSP database contains information on 1,240 first mortgages that were part of pairs of SSPloans located in this way, a number equal to 58.7 percent of the loans in the MHP database. The HMDA-SSP database was used for analysis of the race/ethnicity of borrowers (the MHP database lacks this information for most borrowers) and for analysis of the distribution of SSP loans among census tracts grouped by income level and racial composition (the smallest geographical units in the MHP-SSPdatabase are ZIP codes).

10 Every SSP borrower is now required to authorize his or her mortgage lender to notify a local counseling agency — MAHAfor those purchasing homes in Boston — in the event that loan payments become more than 30 days delinquent. Before this authorization was required, lenders were prevented by privacy considerations from giving the names of delinquent borrowers to counseling agencies that could contact them and offer assistance.

11 The period is only nine years because this table is based on our HMDA-SSP database, and 1999 is the most recent year for which HMDA data are available. The MHP-SSP database contains very limited data on the race/ethnicity of borrowers. For the program's first four years, data are reported only on the minority or non-minority status of the borrower. For the last five years, data are reported for specific racial/ethnic categories, but only for 38 percent of borrowers. For the other 62 percent, no information on race/ethnicity is reported.

12 The numbers in this paragraph were calculated primarily on the basis of data not shown in any of the tables in this paper and provide only a rough approximation to the "true" numbers. The income levels and minority population percentages of the two neighborhoods were calculated for sets of census tracts that approximate the neighborhoods as defined by the Boston Redevelopment Authority. The percentage of all loans in these two neighborhoods that went to Blacks and Latinos is based on the HMDA-SSP database, using the same sets of census tracts. The neighborhoods' percentage of total loans is based on ZIP code data from the MHP database. The resulting comparisons, although based on different data sets and varying definitions of neighborhood boundaries, contain no obvious upward or downward bias and correspond to qualitative observations by individuals involved in the operation of the SSP.

13 "An Act Relative to Insurance Redlining," Massachusetts General Laws, Chap. 175, Sections 4A& 4B <www.state.ma.us/legis/laws/mgl/175-4A.htm>.

14 "An Act Insuring Community Investment and the Equitable Taxation of Insurance Companies in Massachusetts," Massachusetts General Laws, Chap. 63, Sections 29C — 29E. (The act is available on the web now only as Chap. 259 of the Acts of 1998 <follow links beginning at www.state.ma.us/legis/legis.htm>.)

15 Even though SSP homeowners have had time to repay only a small fraction of the principal value of their mortgages, the large increases in Boston's housing prices in the last few years have resulted in many of them acquiring substantial equity in their homes.

References

Avery, Robert B., Raphael W. Bostic, and Glenn B. Canner, "CRA Special Lending Programs," *Federal Reserve Bulletin*, Vol. 86, No. 11, November 2000(a), pp. 711-731.

________, "The Performance and Profitability of CRA-Related Lending," *Economic Commentary*, Federal Reserve Bank of Cleveland, November 2000(b), pp. 1-3.

Bradbury, Katharine L., Karl E. Case, and Constance R. Dunham, "Geographic Patterns of Mortgage Lending in Boston, 1982-1987," *New England Economic Review*, September/October 1989, pp. 3-30.

Burns, Arthur F., *The Ongoing Revolution in American Banking*, Washington, DC: American Enterprise Institute, 1988.

Campen, James T., Chapter 2, pp. 38-72 of "The Struggle for Community Investment in Boston," *From Redlining to Reinvestment: Community Responses to Urban Disinvestment*, Gregory D. Squires (ed.), Temple University Press, 1992.

Campen, Jim, *Changing Patterns VII: Mortgage Lending to Traditionally Underserved Borrowers and Neighborhoods in Greater Boston*, *1990-1999*, Massachusetts Community & Banking Council, December 2000.

Listoken, David, and Elvin K. Wyly, "Making New Mortgage Markets: Case Studies of Institutions, Home Buyers, and Communities," *Housing Policy Debate*, Vol. 11, No. 3, 2000(a), pp. 575-644.

________, "Making New Mortgage Markets: Case Studies of Institutions, Home Buyers, and Communities," *Housing Facts & Findings*, Vol. 2, No. 3, Fall 2000(b). pp. 1 & 7-15.

Litan, Robert E., Nicholas P. Retsinas, Eric S. Belsky, Gary Fauth, Maureen Kennedy, and Paul Leonard, *The Financial Modernization Act After Financial Modernization: A Final Report*, Prepared for the U.S. Department of the Treasury, January 2001.

Massachusetts Housing Partnership, *Soft Second Program Handbook*, available online at www.mhpfund.com.

Miara, James A., *A Progress Report II: Initiatives by Massachusetts Bankers and Neighborhood Leaders to Meet Community Credit Needs, 1990-2000*, Massachusetts Community and Banking Council, 2000, esp. Chapter Five, “Mortgage Lending.”

Munnell, Alicia H., Lynn E. Browne, James McEneaney, and Geoffrey M. B. Tootell, “Mortgage Lending in Boston: Interpreting HMDA Data,” Working Paper No. 92-7, Federal Reserve Bank of Boston, 1992. (A revised version was published in the *American Economic Review*, Vol. 86, No. 1, March 1996, pp. 25-53.)

EVALUATION OF CRA

Discussion Comments
David C. Fynn
National City Corporation

At the outset I would like to commend the Federal Reserve System for its continuing support of this series of public discussion. Too frequently one comes away from conferences with ideas and concepts of varying cohesiveness. This series enables the participants to move ever closer to information with which it is possible to make more definitive statements and which can assist an informed basis for public policy.

Because I am neither an economist nor an academic, my comments reflect the hopes, concerns, and perspectives of a banker trying to make sense of this array of data and trying to influence public policy in meaningful directions.

The papers on which these comments are based fall broadly into two categories.

The first two papers are *The Effect of the Community Reinvestment Act on Bank and Thrift Home Purchase Mortgage Lending,* by **Belsky**, **Schill**, and **Yezer**, and *Assessing the Impact of the CRA on Banking Institutions*, **Avery**, **Bostic**, and **Canner**. These papers assess the promise of contribution that was anticipated under the original, and now reformed, CRA. Both papers document the realization of that promise. Additionally, both papers raise important questions related to public policy and long-term viability.

The final three papers are as follows: *The Impact of Bank Consolidation on CRA Business Lending,* by **Samolyk** and **Richardson**; *Community Organization and Community Reinvestment Act Lending in Washington D.C.,* by **Holyoke**; and *Boston's Soft Second Program: Reaching Low-Income and Minority Home Buyers in a Changing Financial-Services Environment,* by **Campen** and **Callahan**. These papers deal with different aspects of community access and structural change in the financial-services industry. They are more focused on specific program functionality than the first two papers.

I will comment briefly on each paper and then address a number of broad strategic issues related to sustainability.

General Observations

There is an assumption, common to all of the papers, that the 1995 changes to CRA were necessary and achieved the articulated objectives. Those objectives were to make the examination process more objective, less burdensome, and more performance-based. I would assert that these objectives have yet to be tested. There is a substantial body of anecdotal evidence that this is not the case, at least for the larger banks. Regulators themselves have recognized that large banks have seen an increase in "CRA-related burden" as a result of the 1995 revisions. At the same time, it is precisely these banks that have had the greatest impact on the larger urban communities where the greatest need for renewal exists.

Examinations continue to take far too long and the examination process is increasingly removed from the day-to-day business lines that are the target of the evaluations. This is partly due to definitional issues. It is also because the data evaluated are two-to-five years old by the time a Performance Evaluation is published. Each time the agencies publish new guidelines through question and answer documents the process becomes more complex and cumbersome. During an examination it is now necessary to correlate which guideline was in effect at the time of each specific historical event.

Examinations are not noticeably more objective. Bankers argued at the time of the revisions that too great an emphasis on objective criteria would lead to credit allocation. They also argued that the Performance Context should be the forum to articulate all of the relative priorities and competitive issues. Recent examinations do not appear to give the Performance Context the weight that was attributed to it in the guidelines.

Notably absent from any of the papers is an analysis of the impact that externalities have had on the data. For example, what has been the impact of the recent strong economy or the changing role of the regulators?

Finally, all of the authors address a variety of challenging data issues. Data adequacy will likely never be settled to the satisfaction of all parties. From the industry perspective, data costs money. More data costs more money, and those costs will be reflected in the costs of credit to all borrowers. Every time a new data element is changed or added, every system related to that loan category must be changed, and all of the tools used for evaluation must reflect the changes. Some lenders estimate that each record reported in the Home Mortgage Disclosure

Act data costs up to $14. This cost will only increase as we add new fields. From the academic perspective there may never be enough of the right data to research the specific point in question. It is imperative that we balance the desire for additional data against the costs of generating it. Every dollar spent to collect data diverts resources that otherwise can be used to support development that impacts individuals, neighborhood by neighborhood. This is particularly important at a time when financial institution stock prices are under pressure.

A Discussion of the Papers

The paper, by **Belsky**, **Schill,** and **Yezer**, should be encouraging to even those most skeptical of the process. This analysis concludes that CRA lenders, even net of acquisitions, outperformed non-CRA lenders in expanding access to home mortgage credit. This *is* the heart of the issue. This is the evidence that CRA has, in fact, had the intended impact. The paper entertains the possibility that this is a zero-sum game and that these gains have only lowered the share of other market players. Even if this is so, our response is “Hallelujah!” The result has moved borrowers toward the financial mainstream. This, by itself, is a valid and sufficient public purpose.

A significant concern with this paper, one that is recognized by the authors, is that the “CRA Impact Variables” (low- to moderate-income share and lender agreements) are far from adequate. In many cases, lender agreements are the result of CRA challenges that leverage the position of the challenger rather than addressing legitimate performance criteria related to a particular financial institution.

The study finds that higher CRA lending is correlated with higher secondary market purchases. It would be interesting to know if this is true for all markets, or if this is a phenomenon related to the size of a Metropolitan Statistical Area. It would also be interesting to explore the urban/rural observations related to this data. Finally, it would be useful to examine the impact that bulk purchases, as contrasted with flow purchases, might have on the conclusions. Flow purchases would focus on the “originating transaction“ which has a direct, tangible neighborhood impact. In the opinion of this discussant, it is the originating transaction that should be the focus of the CRA examination process. The data to research these issues would be available in the existing public data set. There are subsequent bulk purchases that should also be considered in the examination. These would include a purchase from a nonprofit or from a small community lending entity. In these cases the purchase facilitates additional lending in a real sense. Purchase transactions that expand the availability of affordable credit should be included in CRA evaluation. The burden of making the case should reside with the purchaser and should be presented in the Performance Context.

Avery, **Bostic**, and **Canner** begin an important discussion that relates directly to long-term sustainability. Again the authors recognize the significant challenges related to the appropriateness and availability of data. This paper represents an innovative and flexible use of the survey required by the Financial Modernization Act of 1999. The conclusions broadly reflect what many financial institutions have known for quite some time: CRA is a complex process and some product segments are not profitable. Some financial institutions reported in the survey that certain product lines, necessary to CRA, are not profitable. Thus, CRAmay result in both benefits and costs for a single institution. This is not news to the financial institutions. This paper takes a necessary step toward bringing this topic into the arena of public discussion. Financial institutions themselves have not wanted to deal with this issue. In some situations, others have interpreted such an admission by a financial institution as an attempt to undermine CRA itself. Somehow the industry seems to have convinced itself that all of the business related to CRA has been good business, and even if a product was not profitable it was justified by the community purpose.

The conclusion that community development lending is almost always profitable is intuitively reasonable. Even here this discussant is aware of transactions that have been priced below a financial institution's cost of funds. Irrational as this may seem, these transactions were justified by the community impact. They are not sustainable. In some circumstances this is the result of competitive pressure, in others the decision is the result of not wanting to be the “difficult" partner.

Typical accounting systems are not structured primarily to support CRA. The result is that it is very difficult to get accounting data that reflects “CRA lending" as defined in the survey. Many, if not most, financial institutions do not manage CRA as a line of business. CRA by itself is not a sufficient reason to make any loan. There is evidence to suggest that when the industry has erred in this direction, the results have been elevated delinquency and losses. The other limitation presented by accounting systems is that they reflect neither the opportunity costs nor appropriately weighted, fully loaded costs from a CRAperspective. Theoretically, all of the costs associated with CRA should be included in the evaluation of marginal lending that is the result of

CRA requirements. How can one estimate what portion of loans to moderate or lower-income borrowers have only been made as the result of CRA?

The authors imply that financial institutions know where the hurdle lies between a Satisfactory and Outstanding rating. The questions in the survey suggest that lenders know which loans were made, or which products were offered, in order to get an Outstanding rating. The process of CRA, however, is not one that lends itself to exacting standards such as this. For a variety of reasons, what works in one community does not necessarily produce the same results in another.

A key question that this paper begins to address is whether or not the economic model required for CRA rewards irrational practices that lack sustainability in the long run. This is an important concern and one that deserves additional thought and research.

Samolyk and **Richardson** have identified a correlation that, while it clearly has CRA implications, may not be the result of CRA or a financial institution's commitment to CRA. This paper concludes that banks experiencing merger activity have lower CRA-related loan growth than inactive banks. This topic deserves additional investigation to validate the conclusions and to differentiate the causative factors. For example, is this conclusion related to organizational change, a function of size, or perhaps name recognition? Would there be different conclusions in rural markets when compared to urban markets?

The definition of "small business and small farm," for CRA purposes, is less well-suited to the business model than are the mortgage lending definitions. The use of the Call Report definition, which does not report any loans secured by residential real estate, distorts the conclusions that can be drawn. The smallest business purpose loans tend to be overwhelmingly secured by residential real estate since this is frequently the only available collateral. A follow-up study in three to five years might determine whether the conclusions were related to the process of change or somehow related to institutional structure or size.

The final two papers, both written from the perspective of community activism, accomplish a number of objectives. **Campen** and **Callahan** provide a useful reminder of how far we have come. This paper documents that it takes multiple entities, all focused on the same objective, to make significant progress. The story of the Boston Soft Second Program is a testament to the tenacity of devoted neighborhood advocates. It is also, however, documentation of the continuing need for government participation at every level in the process of community development. Without continuing public subsidy, many similar programs have limited long-term viability. I would differ with the author's conclusion that bank CRA ratings result from signed agreements. Examiner Guidelines specifically do not examine or enforce these agreements.

A future paper that explores the full costs and benefits of these types of community-focused programs would help to quantify the true social impact. How many individual households need to be impacted, in what ways, and at what cost per household, for a positive entry in the social ledger? We will have made true progress when we can have meaningful public discussions on this topic without either side drawing premature conclusions about the other's objectives. To the extent that the common objectives in any given community remain obvious to the parties, continued progress will be made. This conference facilitates that process.

The analysis of lending and political activism in Washington D.C. by **Holyoke** makes a number of assumptions about financial institutions that are not substantiated. The paper asserts that financial institution behavior is predicated on the knowledge of future acquisitions. This is not the case. Even if it were, it is simply not possible to change corporate culture related to community development to meet each new opportunity in this way. The paper stated that "lending in neighborhoods with Community Development Corporations (CDCs), particularly ones specializing in financing such as Community Development Finance Institutions (CDFIs), make the probability of default less likely." There is no evidence presented to support this conclusion.

This paper, however, leads this observer to the same conclusion as the prior paper. Lending results appear to be the result of multiple forces, including banks, government and CDCs with capacity, all focused on the common objective of improving the neighborhood. Where this occurs, the process makes significantly more progress than where both resources and energy are consumed by any one party seeking its own advantage.

Conclusions

The presentation of this group of papers comes as we approach the review of CRA in 2002. The questions are timely. Given the likelihood of an economic slowdown, given also the changing political environment, it is essential that CRA discussions center on sustainable behavior. It is appropriate to examine how much of the new CRA lending has been facilitated by the low unemployment and economic strength of the past decade. It is appropriate that we begin to understand that financial institutions with low portfolio delinquency have been able to carry marginal and unprofitable product segments because of their commitment to CRA. Those circumstances may be changing as we enter a new decade.

Sustainable behaviors must recognize and balance both the needs of the neighborhoods and the actual costs incurred by all parties. CRA imposes an artificial economic model that can cause irrational decisions by the participants. When this occurs, we need to be able and willing to recognize it, deal with it, and move on without questioning each other's motives. What appears to be lacking is an articulation of the objective or criteria for success. This should be defined in terms of direct, tangible neighborhood impact.

Significant progress has been made in challenging traditional underwriting norms. We now know that loans can be made on a profitable basis to borrowers with less than 20 percent down. Indeed, we have large volumes of lending at 95 percent and 97 percent loan to value that are actively sold every day into the secondary market. Financial institutions and the secondary market now have mortgage data that relates delinquency to downpayment. Many neighborhood directors are concerned that lending to borrowers with no money down does not build neighborhood strength. Regulating agencies have come to understand that poor neighborhoods cannot thrive without the purchasing power that results from economic integration. Banks are more cognizant of the neighborhood concerns related to "gentrification."

Future research should examine how large the CRA market segment might be. Are there theoretical limits to growth in this market, and is this a zero-sum process? Responsible lenders are now able to offer a mortgage product to any qualified borrower who has access. Is it possible that the recent debate about irresponsible lending (*i.e.* predatory lending) is a debate fundamentally focused at the most marginal borrower? Are there elements of the predatory-lending discussion that suggest we are approaching the outer limits of the affordable-mortgage market? This is not intended to imply that fraud and customer abuse have not occurred in specific situations.

An honest public discussion related to the true cost/benefit equation will assist us in articulating a focused and positive way forward that benefits communities and allows for rational decisions that have long-term sustainability. This will help to clarify the objectives and, therefore, assist in retaining all of the necessary partners at the table.

EVALUATION OF CRA

Discussion Comments
James W. Head
The National Economic Development & Law Center

Let me say, in general, that I believe all of the papers contribute to a healthy discussion of critical issues related to the evaluation of the Community Reinvestment Act (CRA), and I commend all the authors for excellent papers and presentations that continue to stimulate our thinking on CRA. That said, let me give you a few specific comments based on my readings, the presentations, and some of the questions that have been raised during today's discussions with the papers' authors.

The first paper, *The Effect of the Community Reinvestment Act on Bank and Thrift Home Purchase Mortgage Lending,* considers the extent to which the Community Reinvestment Act has led institutions under its authority to increase the number of home purchase mortgage loans to low- and moderate-income borrowers and neighborhoods. The paper identifies the early 1990s as a point at which significant CRA activities began to occur and identifies a number of reasons for that benchmark in activities.

Those reasons include experimentation with new products at the urging of community groups, public availability of CRAratings, expansion of available lending information through the Home Mortgage Disclosure Act, the first-time denial of a merger for CRA reasons, the strengthening of CRA regulations in the mid 1990s, and the acceleration of merger activities within the financial industry.

I would suggest that there were two additional reasons for these activities. First, the late 1980s to early 1990s was a time when we had significant community capacity to participate in partnerships with financial institutions and others through Community Development Corporations (CDCs), Community Development Financial Institutions (CDFIs), and other community-based entities. This greatly increased the ability of financial institutions to get CRA-related products out and tested without prohibitive costs to the financial institutions. Second, in the mid- to late-1980s, we were emerging out of a period, when the savings and loan restructuring (some would say "bailout") was occurring, and the public was seeking some identifiable return (*quid pro quo*) for the massive infusion of public dollars being devoted to that segment of the financial industry. Other financial institutions were feeling a need to demonstrate their concern for community financial issues and were more than willing to invest in programs that would show their commitment to these issues.

The paper concludes that the evidence on lending patterns thus far is consistent with the proposition that CRA does have a positive effect on low- and moderate-income lending by financial institutions under its authority. However, the paper notes that its analysis does not address the question of whether lending to low- and moderate-income borrowers and communities is increased overall by CRA. Let me go out on a limb on this one and say what the paper does not. "CRA has had a direct effect on the overall lending of financial institutions to low- and moderate-income borrowers and communities, and increased merger activities have had a direct effect on the willingness of financial institutions to do CRA lending." While I have no hard data to back up that statement, I don't think anyone in this room would disagree with me.

The second paper, *Assessing the Impact of the CRA on Banking Institutions,* tries to answer the age-old question of whether CRA lending is profitable. Given the data available, the paper does a very good job in breaking down the different aspects of profitability and determines that, based on a number of definitions of profitability, a significant minority of institutions experienced at least some loss, and a significant number incurred no loss. Virtually every financial institution surveyed reported that at least some of their CRA lending was profitable. In layperson terms, few financial institutions reported losses in their CRA lending, and nearly all reported some aspect of profit. This is encouraging news and, for a number of us, not surprising. Those who have conducted economic analyses of the aggregate dollars flowing into low- and moderate-income communities have found that contrary to popular belief, strong sources of capital do exist in these communities. Additionally, surveys of the payment patterns and histories of borrowers have found that low- and moderate-income borrowers are much more likely to be timely than others in their loan payments.

However, the question of profitability may not be the right question we should be asking. The more important question is what is the overall value of CRA lending to both the community and to financial institutions. As the paper suggests, there may be a number of reasons a financial institution engages in community development lending. As with any company, profit is but one of a number of motives around which the company builds activities. Other motivating factors include image, competitiveness, senior management philosophy, *etc*. I agree with the earlier question-and-answer discussion suggesting that what may be more important to us is the issue of where this lending is being done successfully, and how to share and replicate that success. While the paper points out the complexity of coming to final conclusions over the question of profitability, its conclusions show no major areas of loss by financial institutions engaged in CRA lending and should allow us to move past profitability and on to other important questions.

The third paper, *The Impact of Bank Consolidation on CRA Business Lending,* focuses on CRA in the business lending context. This is a critical area to examine because the work of my institution finds that small business lending is critical to creating economic stability in low- and moderate-income communities. The paper uses the relatively new CRAsmall business loan data to examine how CRA-related business lending has been affected by bank merger activity during the late 1990s. The paper studies changes in CRA lending by financial institutions as a whole as well as how a consolidation or merger affects lending to the markets that comprised the financial institution's service area before the consolidation or merger. The paper concludes that financial institutions experiencing merger activities had systematically lower CRA-related loan growth than inactive financial institutions. However, the merger-related effects appear to be associated with a general decline in small business lending rather than a shift away from low- to-moderate-income areas or very small businesses. The paper also found that merger-related effects can differ for urban and rural markets. I'm not quite sure what this means. What I do know is that more small business lending is needed in low- and-moderate income communities, not less. So if the paper's conclusions suggest that there is a slowing of these activities either because of merger activities or because of other economic and market forces, there is cause for concern and we should explore ways to stimulate greater small business lending.

The fourth paper, *Community Organization and Community Reinvestment Act Lending in Washington, D.C.*, looks at the impact of CRA results from an advocacy strategy versus a community development infrastructure strategy. The paper suggests that more CRA lending can occur when the community has a community development infrastructure available to work with financial institutions. It also suggests that political involvement by the community translates into more loans. While agreeing with the paper, I believe that for CRAto be fully effective, the community must combine advocacy with developmental capacity. Regarding political activity and the correlation to more loans, I think that the greater driver regarding lending activity is ultimately the market. With the right infrastructure, the market itself will generate many more opportunities for lending than political advocacy or action. In many communities, the political advocacy or action is directed at financial institutions with the desire to force them to take certain actions, usually to make more loans than before. I would argue that this is only a part of what will be necessary for needed capital to flow into low- and moderate-income communities. Political advocacy or action is also needed to ensure that the community has the ability to fully utilize the capital offered by financial institutions and are able to leverage that capital from other public and private sources. This includes public investment in the community infrastructure necessary to partner with and assist financial institutions in delivering the capital and support needs of the community to fully utilize the capital.

The final paper, *Boston's Soft Second Program: Reaching Low-Income and Minority Home Buyers in a Changing Financial-Services Environment,* is the type of case study needed to demonstrate the impact of CRA-related lending. It is a homeownership mortgage program that combines two mortgages to offer homeownership to some of Boston's poorest residents. The paper provides a compelling story of how advocacy and leadership from both the community and financial institutions have crafted a program that works. It also confirms that, to be successful, you need contributions from all three sectors: the community, financial institutions, and government. It also identifies a number of challenges that can directly impact the success of such a program. One is escalating housing prices. This calls for some thought about land banking and other strategies for ensuring that homeownership will be available to low- and moderate-income families in the future. Another challenge is rising unemployment and falling household incomes impacting the ability of homeowners to continue to make timely mortgage payments. A third challenge is the ability to sustain a strong economy, a theme throughout a number of the papers over the last two days.

Conclusions

Let me now offer some concluding thoughts based on all the papers and then some comments about additional areas for research and exploration. First, in trying to look at the financial impact of CRA lending, we should not underestimate its contribution to the development of the community development lending infrastructure. While much of the resources for that infrastructure have come from other sources (The

Department of Housing and Urban Development, Treasury, foundations), financial institutions have made significant contributions to that infrastructure, both with capital and operational support. There is value added to that infrastructure, both in terms of how it serves the community and the financial institution industry, that usually will not be factored into a cost-benefit analysis of profitability.

Second, the question of whether low- and moderate-income households can be attractive markets for financial services is a difficult one to answer. I believe the ultimate answer may be no, otherwise this market would have been captured some time ago. Financial institutions have not yet been able to achieve the volume and cost containment necessary to offer these services to low- and moderate-income people at an acceptable profit margin, relative to concentrating on more profitable middle- and upper-income markets. In order to do so, significant incentives would need to be provided. Those of you who have been doing this work for some time will remember that many years ago we were having this very conversation about community development lending. Then, the questions were much less about profitability, but whether this kind of lending could be done at all. The paper by **Avery**, **Bostic**, and **Canner** suggests that we have made significant progress with community development lending, and that conclusion is demonstrated by the fact that you don't hear the questions about community lending today that we heard then.

Part of the reason is that many financial institutions have community development lending programs not only for profit, but also as part of being good corporate citizens and for visibility and marketing purposes. For example, I am sure financial institutions consider the marketing value of attracting middle- and upper-income customers who are appreciative of the fact that the institution is making special efforts to invest in low- and moderate-income communities. I know that I take that factor into account when making choices about where to bank, and I'm sure many of you do the same. Having the "good corporate citizen" seal of approval has never hurt the image and marketing appeal of a financial institution, and for many it translates into a direct competitive edge in the effort to attract customers. Also, many institutions understand the concept of a double bottom line in banking. It is possible to do good while doing well. Yes, banks are in business to make money, but the discussions over the past two days have highlighted the importance of access to financial services in helping people move out of poverty and toward self-sufficiency.

We also may need to think about and clarify our goals and end products in CRA. Is the end result to develop financial-services products for new markets (low- and moderate-income), or is it to create ways for low- and moderate-income persons to move into the financial mainstream? Are these end results contradictory, or compatible? Picking up on yesterday's discussion about the unbanked, are we okay with the creation of a two-tiered system of banking in which you have check-cashing companies providing checks for cash, payday loans, money orders, and bill-payment services for low- and moderate-income customers, and traditional checking and savings products provided by financial institutions to middle- and upper-income customers. As yesterday's discussion indicated, the current check-cashing and payday loan structure has a significant negative impact on the opportunity for low- and moderate-income households to save. If savings and wealth creation are in fact part of the formula for moving people out of poverty and towards self-sufficiency, this two-tiered system negates that opportunity. I suspect that our end goals have to again incorporate a dual purpose and result: To stimulate and create financial services markets for low- and moderate-income households that allow financial services institutions to enter and get a financial return, while at the same time allowing households to move toward more traditional banking services as their incomes rise and they move towards self-sufficiency. I also recognize this is an extremely difficult task.

Before closing, let me suggest a number of additional areas of research and exploration for future conferences. First and most importantly, we must expand our research to focus much more intensely on the financial-services needs of rural communities. Their problems, while perhaps not of the volume expressed in urban centers, are even more complex because of the limited resources available to solve them. All of the issues discussed over the last two days are occurring in rural areas and need a separate analysis and formulation of solutions.

Second, a more comprehensive body of research is needed on the current and future impact of technology on CRAand access to financial services. This is the next sleeping giant waiting for us. Third, we should look to explore in more detail the value of diversity in improving financial services to all communities. This issue surfaced in an ancillary way yesterday during the discussion on relationship banking. The point was made that the strategy of creating greater diversity of African-Americans and women in one particular financial institution resulted in an increase in lending activities to African-Americans and women. While a small point, I believe this has significant promise as a solution to the continuing perception (if not reality) of disparate lending to minorities and women. Last, we should seek to research and better understand the impact of the economy on CRA lending and financial services. If you read all the papers closely, and I'm sure you did, you will remember that a number of them raised the issue of how some increased lending activities to low- and moderate-income people are tied to the sole factor of a strong economy. And we've certainly had that for the past eight to 10 years. How CRA lending may be affected by a less robust economy is not known. The next few years may offer an unexpected opportunity to test this premise as our economy cools and lending activity tightens.

Let me make one response to the comment from the floor that we need to spend more time understanding the true cost of CRA compliance and that maybe this would require some changes in the Act. This would not be a true CRA conference without someone bringing up the burden and costs created by the paperwork and our need to reduce or eliminate CRA to lessen that burden. I agree that we should continually seek ways to reduce the CRA-related paperwork and costs associated therewith, which would also allow those resources to go into even greater delivery of financial services to low- and moderate-income people. I also believe that we need to devote more attention to the successes we are having in CRA lending, and to share and make visible those successes in a much more active way. I can think of no better message or statement for CRA than one that conveys the significant impact that this lending is having in communities and for financial institutions, and I believe this would make it much easier to have a meaningful discussion among financial institutions, community advocates, and public officials regarding changes to CRA. I also believe that the financial institutions community should play an active leadership role in identifying and publicizing these successes, and I think that the American Bankers Association should help to lead this effort.

V. Community Affairs at the Federal Reserve

COMMUNITY AFFAIRS AT THE FEDERAL RESERVE

Each of the 12 Federal Reserve Banks in the Federal Reserve System has a Community Affairs Office that provides financial institutions with information on the Community Reinvestment Act, community and economic development, and issues related to credit access. The Community Affairs Offices also provide resource information, technical assistance, and regulatory guidance to community-based organizations, government entities, and a wide variety of other organizations engaged in community and economic development.

Community Affairs fosters collaboration and provides information for the improvement of communities and the lives of the people who live in them.

Mission

The mission of the Community Affairs program is to support the System's economic growth objectives by promoting community development and fair and impartial access to credit.

Products and Services

Each Federal Reserve Bank Community Affairs Office (CAO) develops specific products and services to meet the informational needs of its regional market. These information products and services fall into three major areas.

Publications

The CAOs issue a wide array of publications. These include newsletters that highlight community reinvestment activities, profiles that assess the credit needs of communities and identify programs that help banks meet those needs, and special publications that cover topics such as fair lending and small business technical assistance.

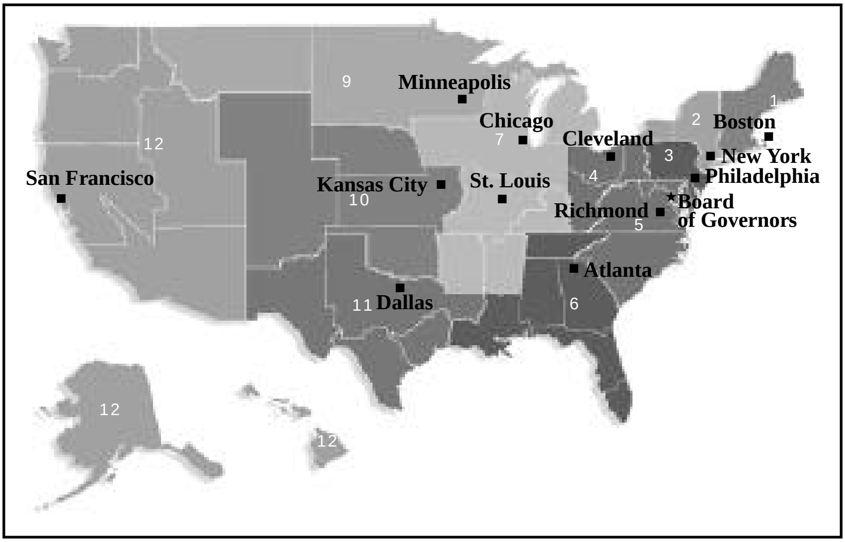
Conferences, Training, and Presentations

The CAOs sponsor and participate in a variety of public forums that provide information and guidance on CRA-related requirements, community investment and development opportunities, and model programs and resources from around the country.

Technical Assistance

The CAOs provide a wide range of technical information on community and economic development, including information on the creation of multibank community development corporations, public/private affordable housing development partnerships, and small business lending.

Federal Reserve Districts



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