V. MICROENTERPRISE LENDING

From Public Assistance to Self-Sufficiency: The Role for the Microenterprise Strategy *Lisa J. Servon*

The Importance of Trust in Micro-Credit Borrowing Groups $Denise\ L.\ Anthony$

Discussion Comments William C. Hunter

FROM PUBLIC ASSISTANCE TO SELF-SUFFICIENCY: THE ROLE FOR THE MICROENTERPRISE STRATEGY

Lisa J. Servon Rutgers University

Introduction

The mandate of the recent welfare legislation to move recipients from welfare to work has motivated policy makers and analysts to consider the potential of self-employment, particularly for low-income women heads of household. Microenterprise programs, which provide potential entrepreneurs with credit and training, have received a great deal of attention in policy-making circles since 1992, when President Clinton pledged \$382 million to support microenterprise programs and community development banks. More recently, the microcredit summits held in Washington, D.C. in early 1997 and New York in June 1998, coupled with First Lady Hillary Rodham Clinton's decision to champion this issue as the Clinton Administration began its second term, opened the door for policy makers and the media to tout the microenterprise strategy as a way to alleviate poverty and create jobs in both the U.S. and in developing countries.

The purpose of this paper is to answer the following questions: First, can microenterprise programs be used as a strategy to help enable low-income heads of households become economically selfsufficient? Second, in what ways do microenterprise program participants who start businesses differ from those who do not? And third, what benefits—if any—do microenterprise program participants receive by going through the training portion of programs without starting businesses? Many low-income household heads pursue self-employment as a way to make ends meet. However, this group particularly the poor women who comprise the majority of this population—often lacks access to key self-employment resources such as credit and training, precisely the resources that microenterprise programs provide (Spalter-Roth, et al., 1994). This research shows that although microenterprise programs clearly play a critical role in growing and stabilizing the self-employment activity of low-income people, self-employment is neither a certain nor an easy route off of public assistance. Those who become self-employed often do so because they perceive self-employment to be their best available option; those who do not become self-employed often do not because a better option presents itself.

This paper is based on case studies of three U.S. microenterprise programs that specifically target low-income entrepreneurs: Women's Initiative for Self Employment (Women's Initiative) in San Francisco/ Oakland, which has served low- and moderate-income women since 1988, and solely low-income women since 1996; the Institute for Social and Economic Development (ISED) which operates throughout the state of Iowa and targets public assistance recipients; and the Women's Housing and Economic Development Corporation (WHEDCO) which operates in the South Bronx and targets low-income residents of that neighborhood. The programs were chosen because of their geographic diversity (which enabled us to look at three different policy environments and demographically different settings) and their commitment to serving very low-income people. Many microenterprise programs, recognizing the high cost and amount of training this population tends to require, have decided to target a higher socioeconomic group, which is generally cheaper and easier to serve. This research relies primarily on in-depth interviewing in an attempt to obtain a more three-dimensional perspective of poor entrepreneurs' lives than quantitative analysis can achieve. Specifically, the kinds of data employed in this study are as follows: in-depth interviews; existing program data;1 non-participant observation;2 and recent programgenerated research at Women's Initiative and ISED. The core of the research consisted of 34 in-depth interviews conducted with current and former public assistance recipients who completed microenterprise training and considered, or are considering, using self-employment as a route off of public assistance. Twenty-four interviews were conducted with single mothers; two with single fathers; three with married couples with children; two with women who were single mothers when they received public assistance but are now married to men who are the primary earners in their households; two with single women who received unemployment insurance and have no dependent children; one with a married father who received public assistance after being granted political asylum in this country; and two with single men who received food stamps and have no dependent children.³

These case studies illustrate a wide range of entrepreneurs and potential entrepreneurs who are current or former public assistance recipients. This research also illuminates the common characteristics of those who are able to use self-employment to help them transition off of public assistance. Those who do engage in self-employment tend to have solid support networks, some prior experience in their line of business, and a strong desire to exit public assistance. Further, interviews with program staff and non-participant observation at programs

illustrate the kinds of services and support that these entrepreneurs require. In most cases, income generated from self-employment has been a necessary, but not sufficient, ingredient for those who have made the transition from public assistance. Those who do not pursue self-employment either lacked these resources or chose not to pursue the self-employment route because they had a better option, usually either marriage or a job.

The next section of this paper looks at the microenterprise movement in the U.S. and reviews other studies concerning the potential of the microenterprise strategy for low-income people. I then provide a description of the three programs studied. The fourth and fifth sections provide a breakdown of the program participants into reasons why each pursued self-employment and lay out the characteristics of those who pursue self-employment. The following section explores the ways in which self-employment, and/or participation in a microenterprise program operates as a temporary way station for many public assistance recipients on their route to self-sufficiency. Next, I explore the idea that self-employment or participation in a microenterprise program operates as a temporary way station on a participant's route to self-sufficiency. The final section presents concluding thoughts based on these findings.

The Microenterprise Strategy in Context

Microenterprise programs are being created at a fast pace with public and private support. These programs provide access to business training and small amounts of credit⁴ to people who cannot obtain these resources any other way. The Aspen Institute's 1996 *Directory of U.S. Microenterprise Programs* profiled 328 programs in 46 states that have assisted in the creation and growth of over 36,211 businesses in 1995 alone, mostly among low-income people.

The group of people that is attracted to the microenterprise strategy consists largely of those who exist at the margins of the mainstream economy. This includes the working poor, those who have found themselves jobless as a result of economic restructuring, those who cannot make ends meet from the part-time and temporary work that is increasingly replacing full-time work that comes with benefits, and those who find corporate America currently inaccessible or undesirable for any number of other reasons. Most of the people who start businesses through these programs do so because they need more money. Most use the extra income their businesses generate to survive—few get rich.

Earlier research documents that the work that self-employment provides often comes with low wages and provides no benefits (Servon, 1998; Servon, forthcoming; Spalter-Roth, Soto, and Zandniapour, 1994).

In addition, many entrepreneurs work long hours at their businesses. Self-employment, by itself, does not sustain the majority of microentrepreneurs' households. Slightly less than half of the entrepreneurs interviewed through the Aspen Institute's Self-Employment Learning Project (SELP) reported making a profit on a monthly basis (Clark and Kays, 1995). Slightly more than half (56 percent) reported relying on their businesses as their primary source of income. Forty-nine percent report depending on at least two other sources of income. An evaluation of the Self-Employment Investment Demonstration (SEID) showed that, for the 96 participants with businesses that were still operating when the survey was conducted in 1993, the median gross income per business was \$8,000; the mean net income was \$4,446 (Raheim and Alter). Twenty-six business owners reported taking an owner's draw with a mean value of \$574 per month, and eight reported paying themselves a regular wage with a mean value of \$798. A study conducted by the Institute for Women's Policy Research (IWPR) found that the businesses of self-employed former public assistance recipients paid an average hourly wage of \$4.38, while self-employed current public assistance recipients made only \$2.63 on average. These same populations earned average hourly wages of \$6.98 (former recipients) and \$4.00 (current recipients) for wage or salary employment (Spalter-Roth et al., 1994).

The IWPR study cited above questions the efficacy of relying upon microenterprise as an anti-poverty strategy for women. This analysis of women nationwide who received some sort of means-tested transfer payments (food stamps, AFDC, food programs for women, infants, children) found that 140,332 of them reported self-employment income. This same study also found that, among all employed women, those who were self-employed were the most likely group to be married to a full-time, full-year working spouse (Spalter-Roth, et al., 1994). Among those self-employed women receiving transfer payments, mean annual hours devoted to self-employment were 605, and mean self-employment earnings were \$1,948. On an hourly basis, this translates to self-employment earnings of \$3.22 per hour. Self-employment, on average, generated sub-minimum wage returns.

At the same time, most of these women did not rely solely on self-employment income—of the 10 percent of women who were self-employed, one-half engaged in self-employment in combination with other wage and salary jobs or a second self-employment job (Spalter-Roth et al., 1994). Their average hourly earnings from their wage job were \$4.50. Earnings figures, stated in 1990 dollars, indicate that self-employment yielded less per hour of work than wage employment for this particular group. Although these data clearly favor wage labor over self-employment from an income perspective, these women are not necessarily making irrational choices. For the increasing number

of workers who cannot make ends meet from the part-time and temporary work—which is replacing full-time work that comes with benefits—self-employment can make the difference between living above or below the poverty line. In addition, the question remains whether these women could work as many hours as they wanted for wages. For many, self-employment may be their best available option.

Programs Studied

The term "microenterprise program" is broad and covers a wide range of programs with different missions, methods, and target populations. All three of the programs studied are similar in that they have maintained a commitment to serving very low-income entrepreneurs. This commitment means that these programs resemble each other in several ways. First, these programs are both broad and deep, in terms of the range of services offered and the amount of time spent training and supporting clients. Second, and related to the last, the relationships forged between entrepreneurs, program staff, and other participants are strong and important to participants' success. These relationships often serve the purposes that are filled by family, friends, and other work or education-related networks in more advantaged populations. And finally, the microenterprise literature distinguishes between creditled programs (those that define their principal product as credit and focus on making loans) and training-led programs (those that focus on training and tend to have intensive and frequent interactions with their clients) (Burrus and Stearns, 1997). All three of the programs studied here are training-led. Only one, Women's Initiative, makes loans directly. This focus on training is linked to the programs' goals of serving lowincome individuals, including persons living below the poverty line, who tend to require more intensive training than do participants at the higher end of the socioeconomic scale.

Two of the three programs studied (WHEDCO and Women's Initiative) target low-income women, both because of the greater need for alternative income-generating options among this population, and because women seem to be attracted to the microenterprise strategy.

Women's Initiative for Self Employment, San Francisco/Oakland, California

Women's Initiative for Self Employment was initiated in September 1988 as a sponsored project of the Women's Foundation in San Francisco. The founders were driven to increase the economic options available to women in the San Francisco Bay Area. The program provides entrepreneurial training, business and support services, and individual loans, and targets low-income women. The Women's Initiative mission emphasizes training as a necessary component with which to facilitate client business development and expansion. Women's

Initiative offers four loan products, ranging from research loans of up to \$500 to growth loans of up to \$20,000. Participants (with the exception of those applying for research loans who may apply while attending classes) must complete 14 weeks of training in order to qualify for a loan. Women's Initiative is the only program of the three studied that provides direct access to credit.

A strategic planning process that Women's Initiative underwent in 1993 generated the recognition that the program was serving two populations of women: women who were more economically and socially advantaged and very close to being ready to borrow, and a much less advantaged population for whom the route to readiness would be much longer and more complex. In January 1996, the Women's Initiative board made a policy decision to shift services to only low-income women. This led to the testing of program components more conducive to serving very low-income women. Women's Initiative used funds from a federally funded program called Job Opportunities for Low-Income (JOLI) to create the Women Mean Business program to address the needs of very low-income women.

Institute for Social and Economic Development, Iowa City, Iowa

John Else, a social work professor at the University of Iowa, initiated ISED in 1988 after returning from working in Zimbabwe for over two years, where he helped train field staff who were implementing the microenterprise strategy in rural areas of this developing country. Recognizing the potential of this program type for the U.S., Else created ISED with initial funding from the state's Department of Economic Development, which was participating, along with four other states, in the Self-Employment Investment Demonstration. Jason Friedman, ISED's vice president for economic development, claims that there are four elements that characterize ISED's program and, to some extent, differentiate it from other microenterprise programs. These are: 1) the historic focus on public assistance; 2) accessing business credit for clients through commercial banks and public funds rather than operating its own loan fund; 3) the intensive follow-up that occurs after clients graduate; and 4) ISED's holistic approach to business development.

ISED is unique because it began operations as a program designed to serve the public assistance population in the State of Iowa. All public assistance recipients receive a flyer about ISED with their checks, which is how most of the people interviewed for this paper first heard about the program. During Iowa's pre-public assistance reform years (1988-1993), those who went through the ISED program had 12 months during which they could continue to receive benefits after they began to show significant sales. After Iowa's public assistance reform demonstration started in 1993, asset limits were raised for all Aid to Families with Dependent Children (AFDC)—called Family

Investment Program (FIP) in Iowa—recipients and the former self-employed waiver provisions were included in the basic FIP. FIP recipients could, therefore, continue to receive their benefits after 12 months as long as their assets did not exceed \$5,000 and their earnings from the business did not exceed the cut-off point. Although this transitional support provided recipients with a greater cushion than those receiving public assistance in most other states, 12 months is a relatively short time to get a business to the point of enabling a family to become self-sufficient. Else realized that this challenge meant that his program would have to offer tremendous support, and work to help clients turn their businesses into serious income generators quickly.

ISED does not have a loan program, but it does help participants to obtain financing from commercial banks, the state's Self-Employment Loan Program for low-income entrepreneurs, and grants from the Trickle Up Program. The largest single source of capital for ISED clients continues to be commercial banks.

The intensive follow-up and holistic approach operate together to ensure that the program deals with the whole person, and that the training component is not isolated. ISED trainers call and visit former students regularly, and continue to monitor their personal and professional progress.

Women's Housing and Economic Development Corporation, Bronx, New York

WHEDCO was initiated in 1991 to promote economic independence of low-income women. In addition to its microenterprise program, WHEDCO also conducts job training. WHEDCO has begun its microenterprise activity relatively recently, and is one of the few programs that uses a sectoral approach to the microenterprise strategy. That is, WHEDCO trains women to start businesses in one of two areas: food and home-based child care. Training includes broad entrepreneurial training similar to that provided by Women's Initiative and ISED, and, in addition, covers topics specific to these two sectors. Clients in the home-based daycare program, for example, can attend workshops on child safety and discipline.

Like Women's Initiative, WHEDCO targets low-income women. And like ISED, WHEDCO does not do direct lending. Thus far, the only source of funds participants have accessed is Trickle Up, where a typical grant does not exceed \$1000.

Three Types of Program Participants

Program participants range widely in terms of the reasons they first began receiving public assistance and the reasons they pursued selfemployment. There appear to be three main categories of people who pursue self-employment through microenterprise programs: "true entrepreneurs" who would always prefer to work for themselves even if this does not appear to be an economically rational decision (i.e., they may work for lower wages and for longer hours in self-employment than they would by getting a job); those who pursue self-employment because it is their best available option; and those who consider self-employment at a critical juncture in their lives but decide against self-employment because it is not their best available option.

True Entrepreneurs

True entrepreneurs pursue self-employment because they do not seem to fit into the mainstream economy. Several of these entrepreneurs had training in a variety of areas, but were unable to settle into a regular job. Before starting her daycare business, Grace had worked as a nurse's aid and had obtained her cosmetology license. She continues to do hair for a couple of regular clients, which supplements her income from public assistance and from her business. Dwight decided to open his own machine shop after being unable to resolve conflicts with his former employer. Sangeetha and Dan had both experienced conflict with past employers. Asked why they preferred self-employment to work in the formal economy, Dan said:

It's calling your own shots. You know, you do good work for someone else, show care and commitment, and they walk on you. Making them money and them showing no respect. I think entrepreneurial people really feel the shackles. This was our last shot.

They, like the other true entrepreneurs interviewed, also decided to pursue self-employment because they believed in their product and got a great deal of satisfaction out of making customers happy.

Best Available Option

Interestingly, participants who perceive self-employment as their best available option do not look markedly different—in terms of education, income, and gender—from those who are true entrepreneurs. Their reasons for pursuing self-employment are what distinguish them. Their primary reasons for pursuing self-employment are layoff from a job and/or an unplanned life event.

In Iowa, three of the entrepreneurs interviewed began receiving public assistance after losing well-paid factory jobs. They did not consider low-wage work without benefits to be an option, largely because it did not pay enough to cover childcare costs and did not provide medical benefits for their children. All three had union jobs and would have taken a significant pay cut if they had moved to another factory job. For this group, self-employment offered more hope and opportunity than other low-wage, unstable jobs. Angie, a single mother of three,

lost her \$10 an hour job with a meat packing company in a small, industrial Iowa city when the plant she worked in closed in 1986:

I worked for awhile as a school associate but it wasn't enough to carry the load. I went on public assistance and I had three kids at home at the time. I was in the middle of buying a house when the plant closed, and my bills got to the point where without a college degree I couldn't get a job that would support us, so it was kind of sink or swim. My kids' fathers were absent and I wasn't getting any child support.

Angie went through the ISED program and opened a consignment clothing store, which helped her to exit public assistance after her waiver expired. Still struggling to make ends meet each month, Angie claims that she could not have made the transition without the waiver, ISED, or her mom, who has "been here from the word go." Self-employment has enabled Angie and her family to survive without public assistance, but the road has been rough. She does not make nearly what she made at the plant, and her family has sacrificed a great deal. Asked what advice she would give someone who was in her shoes ten years ago, Angie said:

I'd tell her to go to school, don't necessarily go into business. Your family makes more sacrifices this way than if you work a 40-hour week. It's nice to be self-employed but it's also nice to have a paid vacation. It takes more dedication to do this. I felt like self-employment was really my only option. If I could have gotten another job that paid well, I would have taken it.

Angie worked in an industry that has seen widespread cutbacks in employment. She was a low-skilled factory worker in a declining industry whose skills would not transfer to a job providing comparable compensation. Self-employment was her best option for maintaining her lifestyle. Angie claims that working for herself entails harder work and longer hours than her previous job.

Several of the single parents claimed that they had not been able to find jobs that would pay a living wage and allow them to take care of their children. Some claimed that they would work now if they had access to child care. Others maintained that it was most important for them to raise their young children themselves. Some planned their pregnancies but received little, no, or unreliable support from the children's other parents—they planned the pregnancy but did not plan to support their child alone. Jim is a single father who has two daughters. After his wife abandoned the family, he left his job at a battery company because he could not spend the time required to make out of town deliveries and care for his daughters at the same time. In

February 1995, he quit his job, went on public assistance, and began a television repair business in his basement. After working with ISED, he moved to a storefront. Having a business, he says, allows him to take better care of his children. He is closer to home and can easily get away if one of them is sick. Others did not plan their pregnancies. Lorraine has relied on public assistance for most of the 13 years since her son was born. She discovered she was pregnant while undergoing the physical exams required for entry into the Air Force. In 1991, Lorraine started a business doing bookkeeping for grain farmers and providing other business services from her home.

For this group, the labor market could not accommodate their needs. Most had skills the labor market generally values, but their life situations prevented them from finding employment that would work with their particular needs. Although self-employment is less lucrative for most than opportunities the mainstream economy offers, opening a business provides many people with needed flexibility.

Did Not Pursue Self-Employment

Many participants explored the option of self-employment at a critical juncture in their lives. These junctures often included events (loss of job, unplanned life event) that motivated the best available option group to become self-employed. Most of those who did not become self-employed had another, better option—they found another job or they got married, for example. For others, the same event that kept them from working in the mainstream economy also kept them from seriously pursuing self-employment. This latter group tended to remain on public assistance and/or packaged public assistance together with income from other sources, including very informal self-employment (mowing a few lawns on weekends, selling cakes by word of mouth). If and when their situations change (e.g., their kids start school), they will re-examine their options and either look for a job or put more effort into self-employment.

Those who lost jobs and did not become self-employed tended to use the microenterprise program as a vehicle for exploring self-employment while also examining other options, including a new job in the mainstream economy. Although some continue to keep a dream of self-employment in the back of their minds, most recognized that it would not provide them with sufficient income. Both Jeannine and Martha were laid off from a candy factory in 1997. Martha had worked there for 26 years and Jeannine had worked there for 5 years. Prior to that, Jeannine worked in several other manufacturing jobs that had closed their plants. Both collected unemployment, obtained additional training, and looked for work. Martha completed a computer and office equipment repair program at a local community college and Jeannine took a photography class to build on her associate

degree in the arts. The photography class did not lead to any work, so Jeannine worked as a temp for a year. The Job Training Partnership Act (JTPA) paid for both women's classes. They also attended the ISED program. Jeannine now works at a hospital distributing supplies, and Martha works in the dye room at a factory making cardboard boxes. Neither one is satisfied with her job and both earn considerably less than they did when they were laid off from the candy company. Both chose employment in the mainstream economy over self-employment because they believe their jobs are more secure.

Julia began receiving unemployment after losing her job as a cashier at a gas station. Two days after being laid off, she was in a car accident, making her ineligible for unemployment. She attended ISED with dreams of opening a NASCAR shop. While researching the business, she discovered that another person is slated to open a shop in her home city. She will, therefore, go to work for him when the store opens. She is engaged to a man whose income will lift her out of poverty. She continues to dream about opening a business and hopes that she can learn enough in her job to open her own store in the future in another location.

Several would-be entrepreneurs explored self-employment because their personal situation got in the way of their ability to work. These same situations often, ultimately, limited their ability seriously to pursue self-employment. Some generate extra income by selling products and services rather informally on the side, but their self-employment activity is insufficient to label them as being truly self-employed. Andrea was attending school to become a chiropractor and decided to have a child while in school and before setting up her practice. Her son was born with a disease which requires around-the-clock care. Andrea's husband left her shortly after the child's birth three years ago, requiring her to go on public assistance and put aside her dream of opening a practice. She describes her decision-making process as follows:

The doctors told me my son would only live to be five years old, and I'm thinking to myself, it's going to take me five years to set up a decent practice—do I want to focus my time on building a practice or do I want to focus on spending time with my son that I'm not going to have? So there was no question...I feel like I'm where I'm supposed to be, even though it means financially we're tight all the time.

Andrea recently attended the ISED program, thinking that she might be able to reconsider self-employment. Although she has neither the time nor the resources to launch a chiropractic practice given her son's situation, attending the class spurred her to consider other things she can do from her home to make extra money and supplement the public assistance and child support she receives. She currently makes

some money by cooking dinner for the priests at her church every day, and she is thinking about selling cakes to local restaurants.

Cindy started receiving AFDC after leaving an abusive husband. She eventually started a cleaning business, which she continued to operate until she remarried. The household is now primarily supported through her husband's job and the child support she receives from her ex-husband. She remains interested in self-employment, however, and brings in extra money by selling decorating products for a large company through her home. Lily completed the Women's Initiative program and had several business ideas. She was derailed when she found out she was pregnant with her third child. She continues to receive public assistance and support from the father of her youngest child (which she does not declare). She supplements this money with income generated by cleaning, driving elderly people, and babysitting.

Characteristics of Those Who Pursue Self-Employment

Although this study is exploratory, the interview data suggest that public assistance recipients who are able to use self-employment as an exit strategy appear to be a niche population within the larger universe of people who rely on public assistance. This section discusses the set of characteristics that entrepreneurs who have been able to exit public assistance hold in common. The three characteristics that link all of those who started businesses are: their ability to tap into strong support networks; experience or training in their line of business; and fierce determination.

Strong and Reliable Support Networks

For many of those program participants who have become self-employed, self-employment more easily allows them to fulfill the household and economic obligations that single parents must meet. At the same time, those who have successfully made the transition from public assistance to self-employment have a solid support network of family and friends. Angie's mother and Jim's brother watch their stores when they need to be elsewhere, and Grace's sister helps her with financial planning and bookkeeping. Dwight's parents and Jim's father watch their children after school. Home-based daycare providers in New York City are required to have a back-up person who has been screened and who can watch the children in an emergency. Vivian's sister is her back-up person, and Tamika has a friend who helps her. In exchange, Tamika watches her friend's children while their mother goes to school. Others had help from family and friends with renovations to their storefronts and donations of other necessities.

Microenterprise programs clearly add to and strengthen these networks. Many of the entrepreneurs interviewed spoke of the importance

of the relationships they had forged with the business consultants and trainers at microenterprise programs. These relationships function to boost self-confidence and to get entrepreneurs personally to a place that enables them seriously to pursue their businesses. Most of the successful entrepreneurs maintain these relationships after graduation and continue to use them as a resource to obtain access to information, funding, and other resources.

Prior Experience or Training in Their Line of Business

Having the skills required to produce their product or service gives these entrepreneurs a head start and allows them to focus more on the business aspect of entrepreneurship. Jim learned how to repair televisions from his parents. Grace's mother is a daycare provider. Dwight honed his skills repairing small engines for his previous employer before opening his own shop. In some cases, the entrepreneurs interviewed had worked for someone else in their line of business and decided to start their own business because they believed they did better work or because they didn't like the idea of doing the work without making the profit. Cindy started her cleaning business after working for someone else.

She would pay me six bucks an hour and I would see her pick these checks up for \$60 and I would think, "I just cleaned this house and she got \$60 and I got \$15." I thought, something's not right. I can do this myself.

Entrepreneurs with an existing skill already know how to produce their good or service. Many also know where to obtain supplies and how to market and price their product.

Determination and Resourcefulness

Many of the entrepreneurs interviewed defined success for themselves as getting off of public assistance. Many felt ashamed for having to rely on public assistance. Others described their experiences with the public assistance system as depressing and so tedious that they wanted to have nothing to do with the bureaucracy. Most simply felt that they wanted to be good role models for their children and that they wanted to work for their own money. This desire to exit public assistance often drove their determination.

Examples of entrepreneurs' resourcefulness and ability to start a business on a shoestring abound. Dwight could not afford to buy much of the equipment he needed for his machine shop, so he improvised by building his own using cast-off equipment that he salvaged. He was able to get a bank loan for \$15,000 which he stretched by buying plumbing supplies for the system he installed himself, and machinery he could not make. His workshop, in a shed next to his house, is

heated only with a wood burning stove. Successful entrepreneurs work very long hours and invest enormous amounts of energy into their businesses. Sangeetha recalled that:

In the first few years, when [our son] was very little it was very hard. I was working until late at night, coming home with blisters on my hands. We have just put so much energy in this business. Sometimes I thought I could not do this any more. But the next day you go again.

The entrepreneurs interviewed for this study work well in excess of a standard forty-hour week—most work 60-80 hours. And when times get tough they work harder, either putting more energy into their businesses or picking up extra sidework to bridge the rough spot.

Benefits of Microenterprise Training for Those Who Do Not Start Businesses

Success does not always mean starting a business or maintaining and growing that business permanently. Many program staff have found that during their training, participants often realize that they are not ready to start businesses or that self-employment is not the best option for them. Those who do not choose to pursue self-employment, however, obtain the skills and self-confidence to use other routes, such as mainstream employment, to achieve self-sufficiency. Writing a business plan—which two of the three programs require⁵—calls for research skills, writing skills, and the ability to work with numbers in order to forecast costs and sales. Program staff also work with participants to present their ideas out loud and on paper, clearly and convincingly. If nothing else, the experience of going through microenterprise training appears to give public assistance recipients, whose spirits are often broken, a critical jump start.

Many program participants who did not start businesses claimed that participating in a program gave them a self-confidence boost and motivated them to change direction. Some of the stories already relayed illustrate the ways in which participation in a program motivated the client to take charge of his or her life. Jeannine claimed that going through the course gave her "confidence that we could do something like this if we wanted to." Asked what she would be doing if she had not gone to ISED, Kristy replied:

I'd be sitting at home... It changed my whole state of mind, my mental and physical attitude. It makes you get up, get the kid off to school, go to the library and do the research for the business. . . It was kind of like therapy.

Of the role ISED played for her, Andrea explains:

Going to the classes at ISED was the first thing that I did where I just left [my son] with the nurses. And that led into taking on the responsibility of cooking for the priests. ISED just kind of coaxed me into focusing back on me when I'd been so focused on [my son].

Related to this notion of motivation is the idea that participation in a microenterprise program keeps people engaged, active, and attached at a critical point. The kinds of events discussed earlier—loss of job, abandonment by spouse—that lead to participation in a microenterprise program can also lead to discouragement and dropping out of the economy. Many participants described the classroom sessions as weekly boosts. Whether they ultimately started businesses or not, these classes helped them to keep believing in themselves and provided them with a forum to examine their options and problem-solve—with others in similar situations—about what to do next.

Another positive externality of the training for those who did not start businesses was economic literacy. Several participants claimed that, by going through the exercise of budgeting for a business, they obtained tools that have helped them do a better job of household budgeting. When Marie lost her factory job, she had to continue making mortgage payments on her house and make decisions on how and where to cut back:

By going through the course at ISED helped me in a way. Because when [the factory] closed all I was getting was unemployment. So I had to balance the budgets as far as paying this and paying this. Well, by having my life insurance policy, I did borrow some money from that. But I did not have to not pay a bill. Or file bankrupt or anything like that, because by partially from the course and partially from my knowing how to do it, I made sure I stayed up on my bills.

Bethany claimed that ISED training has also helped her to keep better track of household finances:

...It got to the point where the bills at the end of the month, some of them weren't getting paid, and I looked at them and they were due at the beginning of the month, and it was getting all screwed up. But when you think about it, at home you are running a business. Because you're running the budget for. . . okay, we've got to pay this, this, and this. And if you want something extra, it's going to have to wait until maybe next time. More or less just keeping better books. I run my house better.

One of Bethany's goals, which she claims came from her participation in the program, is to start a savings account. Other participants claim to have a better understanding of the tax system, their credit rating (and how to fix problems and/or improve it), and when and how to take on debt. Women in particular often have control/self-esteem issues around money (Servon, 1996). Programs that address these issues directly are contributing to stronger households.

Self-Employment/Program Participation as a Way Station on the Road to Self-Sufficiency

As this paper has illustrated, many people research the option of self-employment but do not pursue it further. Others use self-employment temporarily as a way to generate income. Two of the women who currently operate home-based daycare businesses are also attending degree programs in order to enter the job market with better credentials. Their businesses allow them to earn income while also caring for their own children. Another woman closed her home-based desktop publishing business when one of her clients offered her a full-time job. She made the transition from self-employment to a more stable, salaried job with benefits.

In this process, program staff often become brokers, helping clients to determine their best option. Staffers at all three programs claimed that they do not encourage people to start businesses, but rather help them to assess whether self-employment is a good fit and, if it is not, direct them to another place.

Staffers at all three programs also believe that those who do go through training, but do not start businesses, bring valuable skills with them to the workplace. Both ISED and WHEDCO are currently working on ways to formalize these links to this group of clients and the mainstream economy. ISED is currently considering how to help clients who have been through the program, but are not ready to become entrepreneurs, to use the skills they have learned in the program. Jason Friedman, vice president for economic development at ISED, has begun to conceptualize the creation of a network comprised of employers who would be willing to interview those who have completed ISED's training. ISED would effectively provide a screen for these employers. Women's Initiative connects clients with a job placement and retention program that focuses on jobs in small business. WHEDCO already runs complementary programs, particularly in the food sector. WHEDCO trains people to work in the food service industry and also runs its own catering company, as well as developing a line of food products for retail sale. WHEDCO will be able to funnel clients who go through microenterprise training for the food industry into one of these programs or into a job using its existing contacts. Maria

Elena del Valle, who runs the training program for the food sector entrepreneurs, often encourages program participants to work for someone else before launching a business: "If they learn the industry on someone else's dollar, they are more likely to succeed when it is just them."

Self-employment is a transition strategy or a partial solution for many precisely because it is often insecure and unstable. Although many of the entrepreneurs interviewed for this research have used self-employment successfully to exit public assistance entirely, the self-employment income they generate remains low and is often unstable. Many of these people continue to package together income from a variety of sources. Others require years to transition completely off of public assistance because they cannot generate sufficient income from their business. Sangeetha and Dan have housing assistance, as well as food stamps and Medicaid. Asked whether the business supports them otherwise at this stage, Dan replied:

We take an average of \$550 a month out of the business. That's two people 50 to 60 hours a week. The business income is consistent now, but of course that does not meet our requirements. So Sangeetha caters on the outside, she did child care, I deliver, I did landscaping. It's all self-employment.

WHEDCO's home-based daycare providers claim that they enjoy running their own businesses because self-employment allows them to run things their way and affords them the flexibility to care for their own children and do other things. However, all complained about the inherent instability of their business income, which Tamika describes as follows:

I may have a child for six months and then the parent decides not to send them and I'm counting on that money. It's always up and down like that, so you can't really depend on it.

Many will use self-employment as a temporary strategy to help them through a transition. Others use self-employment to supplement public assistance and/or income from low-wage work. Several of the ISED entrepreneurs do farm work for extra money during heavy seasons. Lily, a Women's Initiative client who has not yet started a business, receives income that she does not report from one of her children's fathers, and also earns extra money driving for an elderly woman, in addition to her public assistance check. Bethany and her husband do landscaping work on weekends to bring in extra money. Vivian does not report all of the child care money she brings in—reporting too much would cause her to lose her food stamps and Medicaid benefits, which she needs to get by. During the past year,

when Lorraine was still on a waiver,⁶ she supplemented her public assistance and business income with \$800 from selling vegetables from her garden, \$800 helping her parents on their farm, and \$500 from painting and wallpapering.

Most of the entrepreneurs interviewed were income packagers on public assistance and continue to package self-employment income with income from other sources. These families continue to struggle and to seek innovative ways to make enough money to make ends meet. This finding supports other research that shows that neither low-wage work nor public assistance on its own are sufficient for families to live (Edin and Lein, 1997). Given this finding, self-employment earnings are important sources of income and help to stabilize family incomes.

Concluding Thoughts

This exploratory research helps to paint a better picture of the ingredients a public assistance recipient needs in order to use self-employment to generate significant income. It also illustrates the decisionmaking processes of those who became self-employed and those who did not. These findings lead to the recommendation that self-employment should be supported as an option for the segment of the public assistance population that is prepared to pursue it. Although the participants who have been able to make the transition from public assistance to self-employment are not representative of the larger public assistance population, the support they have received through microenterprise programs has been critical to their success. Staff at all three programs agree that self-employment will only work for a small percentage of the public assistance reliant population, but it is important to focus on continuing to find solutions that work for different groups rather than searching in vain for a single silver bullet. Support for a variety of routes makes sense, given the range of reasons why people become dependent upon public assistance in the first place. For those interviewed for this study, self-employment has allowed them both to support their families financially and to be present as parents. Participation in microenterprise programs has helped them to maximize the financial return from their business and, in many cases, to access other critical resources, such as credit, emotional support, and help with legal and accounting matters.

At the same time, states vary widely in terms of their treatment of self-employment. In Iowa, ISED has a very good relationship with the Department of Health and Human Services, and all AFDC/TANF recipients receive a flyer with information about the program with their checks. In New York, attending WHEDCO classes is not an allowable activity, and some of the entrepreneurs I interviewed were cut off of welfare completely because they decided to pursue their businesses

rather than taking a menial job with the Work Experience Program. More states need to work with microenterprise programs that target low-income people to help this group use self-employment as an exit strategy, rather than placing obstacles in the way of this route.

In addition, the other benefits that program participants receive should be documented and valued by funders, policy makers, and evaluators. Most programs do not have the resources or incentives to track participants who do not start businesses. Funders should earmark funds for evaluation that include this group. This exploratory research shows that participants do benefit from participation in a microenterprise program in a range of ways. Temporary self-employment or participation in a microenterprise program is often a way station on a public assistance recipient's journey to self-sufficiency.

Whether or not clients start businesses, many of them claimed that they were attracted to self-employment training because—unlike traditional public assistance-to-work programs—microenterprise programs prepare people for work that offers them hope. New York's WEP participants work cleaning parks and doing maintenance in housing projects, jobs that pay little and are not challenging. Microenterprise programs train them to think critically, prepare for jobs they want to do, and perhaps most importantly, help them to think about themselves and their careers in a long-term way. All of these hard-to-measure outcomes are critical first steps on the circuitous journey to self-sufficiency.

Lisa J. Servon is assistant professor in the Department of Urban Planning and Policy Development at Rutgers University. She teaches and conducts research on urban economic development, urban poverty and gender. Her book, <u>Bootstrap Capital: Microenterprises and the American Poor</u>, will be published by Brookings Institution Press in 1999. Servon has a Ph.D. in city and regional planning from the University of California at Berkeley.

Notes

- These data included budgets, organizational charts, historical statistics on client base and loan fund activity, and internal reports and evaluations.
- I spent a great deal of time at the programs and at client businesses, attending classes, consulting sessions in order to get a sense of the day-to-day operation of the program and to obtain a more complete picture of lender/borrower relations. In most cases, I conducted interviews at borrowers' homes or businesses, which allowed me to get a better feel for the businesses financed through these loans.
- When making arrangements with program staff to conduct this research, I asked them to provide me with a set of names of clients who were representative of their overall client population and were current or former public assistance recipients. The clients interviewed ranged widely in terms of their experiences with programs, their business types, and their demographic characteristics.

- 4 Maximum first loan size at many programs is \$5,000.
- 5 Women's Initiative requires a business plan for larger loan requests and offers an optional course designed to guide clients through the process of writing their business plans.
- During Iowa's pre-welfare reform years (1988-1993), those who went through the ISED program had twelve months during which they could continue to receive benefits, while stabilizing their business after they began to show significant sales. After Iowa's welfare reform Demonstration started in 1993, asset limits were raised for all AFDC recipients, and the former self-employed waiver provisions were included in the basic welfare package. Recipients could, therefore, continue to receive their benefits after twelve months as long as their assets did not exceed \$5,000 and their earnings from the business did not exceed the cut-off point.

References

- Burrus, William and Katherine Stearns. "Building a Model: ACCION's Approach to Microenterprise in the United States," ACCION International, Washington, D.C., 1997.
- Clark, Peggy and Amy Kays. "Enabling Entrepreneurship: Microenterprise Development in the United States," Report, The Aspen Institute, Washington, D.C., November 1995.
- Hartmann, Heidi. "Changes in Women's Economic and Family Roles in Post-World War II United States," in *Women, Households, and the Economy*, edited by Lourdes Beneria and Catherine R. Stimpson, Rutgers University Press, New Brunswick, New Jersey, 1987.
- Raheim, Salome and Catherine Alter. "Self-Employment Investment Demonstration: Final Evaluation Report, Corporation for Enterprise Development, Washington, D.C., 1995.
- Servon, Lisa J. and Timothy Bates. "Microenterprise as an Exit Route from Poverty: Recommendations for Programs and Policy Makers," *Urban Affairs Quarterly*, conditionally accepted for publication.
- Servon, Lisa J. "Microenterprise Development as an Economic Adjustment Strategy," Report to U.S. Department of Commerce, Economic Development Administration, December 1998.
- . "Microenterprise Programs in U.S. Inner Cities: Economic Development or Social Public Assistance," *Economic Development Quarterly*, 11:2, May 1997, pp. 166-180.
- Spalter-Roth, Roberta, Enrique Soto, and Lily Zandniapour. "Micro-enterprise and Women: The Viability of Self-Employment as a Strategy for Alleviating Poverty," Institute for Women's Policy Research, Washington, D.C., 1994.

THE IMPORTANCE OF TRUST IN MICRO-CREDIT BORROWING GROUPS

Denise L. Anthony University of Michigan

Micro-credit organizations attempt to do something remarkable: lend financial capital to high risk borrowers, i.e., individuals with little or no credit experience, a poor credit history, or those who lack the financial ability to repay, based on standard bank criteria. Instead of using conventional market mechanisms such as collateral or fees to cover risk, group-based micro-creditors require individual borrowers to join borrowing groups that are collectively responsible for borrower screening and selection, loan approval, and repayment oversight.

Micro-creditors face steep adverse selection and moral hazard costs given the pool of high-risk borrowers they seek. Typically, banks screen loan applicants for financial resources to select only borrowers who pose a low risk of default. Micro-creditors, in contrast, deliver low-cost credit to high-risk borrowers by externalizing the costs of screening and monitoring to members of the borrowing group. Instead of screening based on borrower financial information, borrowing group members assess the personal reliability of fellow members. Evaluations of personal reliability and trustworthiness are based on personal knowledge and judgments of integrity, requiring that actors invest in developing relationships rather than merely exchanging limited financial information. I argue that micro-creditors are successful to the extent they facilitate relationships of trust among members of borrowing groups because trust provides a basis for effective screening by group members and makes borrowers more likely to repay their loans, because the trust relationship creates mutual obligations of reciprocity.

Introduction

Banks, and other financial services, lend money to make a profit. They sell capital for a fee. Because lenders do not know *ex ante* which borrowers are able or likely to repay, they screen loan applicants for financial resources, such as income, assets and debt, to select only borrowers who pose a low risk of default. For small business owners, lenders evaluate both personal and business assets and debt. Lenders calculate a debt-to-income ratio to evaluate a potential borrower's

I wish to thank Douglas Heckathorn, Wayne Baker and Warren Whatley for helpful comments and suggestions. I am also grateful to Jeffrey Ashe, Sarah Smith and Ken Proudfoot for their insights into micro-credit. I thank the University of Connecticut and the Robert Wood Johnson Foundation for financial support.

financial ability to repay a loan. Statistical credit scoring may determine the loan terms and the amount of collateral required to secure the loan. Credit scores that fall below an acceptable range are not eligible for loans because they are considered costly high risks. Banks request information on borrowers' credit histories to assess borrowers' past credit performance, but they are uninterested in issues of individual dependability or borrowers' overall personal reliability. That is, banks screen potential borrowers for their *financial ability* only; banks do not trust borrowers to repay.¹ By screening for low-risk borrowers, banks attempt to limit adverse selections. In addition, banks typically require financial assets as collateral to guarantee they will recover their funds.

Business owners who have few personal assets and operate very small or fledgling businesses are unlikely to have many of the resources required by banks. Based on the information banks gather to make loan decisions, these business owners would be classified as high-risk borrowers and would be unlikely to receive loans.² The relatively new form of lending called micro-credit is directed to precisely these kinds of borrowers, i.e., those characterized as high-risks by conventional lenders.

Micro-credit is the term for small, short-term loans (as low as \$500 over six months) made by mostly nonprofit agencies to the owners of "micro-businesses." A micro-business is "a sole-proprietorship, partnership or family business that has fewer than five employees, does not generally have access to the commercial loan banking sector and can initially utilize a loan of under \$15,000" (Self Employment Learning Project, 1994). The term micro-business can encompass everything from conventional small businesses, such as an independently ownedand-operated retail shop, to self-employed individuals, such as a bookkeeper who works from her home, to part-time and casual producers and sellers of handicrafts. It is difficult to underestimate the size of micro-businesses. The vast majority of micro-credit borrowers own and operate sole proprietorships in which they are the only employee, and which have yearly sales of less than \$20,000 (Clark and Huston, 1993; Anthony, 1996). Micro-credit borrowers typically have few, if any, of the resources required for commercial loans from banks. That is, micro-credit borrowers are high risks.

The lending mechanisms devised by traditional lenders do not work in the case of micro-credit because, instead of screening to remove high-risk borrowers, micro-creditors seek them out for lending. Thus, micro-creditors must develop alternative lending mechanisms. One of the most intriguing of these alternatives is the borrowing group. Micro-creditors who use borrowing groups require potential borrowers to join together with a small group of fellow micro-business owners (usually three to ten individuals) to form a borrowing group that is collectively responsible for making loan decisions and monitoring

Denise L. Anthony 549

repayment. While loans are made by the micro-creditor to members individually, access to credit depends on the repayment status of the entire group. Typically, group members apply for and receive loans in succession with the condition that all borrowers be current in their loan payments for the next member to receive a loan. Only after the first borrower demonstrates she can repay by making a number of timely payments, are other members eligible to borrow.

Micro-creditors thus attempt something remarkable. They make business loans to borrowers who may have little business knowledge or experience; no credit experience; or worse, a bad credit history; few financial resources; no collateral; and, possibly, an unreliable income stream. That is, micro-creditors lend to borrowers who, by standard bank criteria, are high risk on a number of different dimensions of risk (e.g., financial ability to repay, probability of business success, credit experience and reliability). And they do so at standard rates of interest.³ Market forces would predict exceedingly high default rates. Notably, micro-credit appears to succeed with default rates comparable to, or better than, bank repayment rates. If micro-creditors are not screening for financial eligibility, how is it that they are able to successfully lend at low costs to individuals with high-risk characteristics?

In this paper, I show that relationships of trust allow microcreditors to successfully expand credit access to even high-risk borrowers for two reasons. First, borrowers must develop trust in order to effectively screen, select, and monitor other members of their borrowing group. Relationships of trust allow borrowing groups to reduce the costs of lending to high-risk borrowers because fellow borrowers perform many of the functions and assume some of the risks associated with lending. Second, the trust relationships required to successfully screen, select and monitor fellow group members increase the probability of repayment by transforming borrowers from bad credit risks to good ones. In essence, the creation of cooperation and trust among borrowers facilitates the growth of human, financial, and especially social capital that make borrowers *more likely* to repay their loans.

In Section I of this paper, I briefly describe the history of microcredit and how it typically operates in the U.S. In Section II, I discuss the concept of trust in theory and in the practice of micro-credit borrowing groups. Next, I describe the lending mechanisms used in microcredit borrowing groups, and show how this structure facilitates the development of personal relationships of trust among group members. In Section IV, I use ethnographic data to illustrate the formation of trusting relationships among group members, and show how these provide an alternative to financial screening used by banks. In Section V, I use survey and loan data to analyze the effect of trust among borrowers, showing that trust makes a significant contribution to individual and group borrowing success. Finally, I discuss some of the implications

of a better understanding of how relationships of trust, facilitated through micro-credit, affect borrower and community resources.

Micro-Credit Borrowing Groups in the U.S. (Section I)

Micro-credit is found primarily in developing countries around the world. Muhammad Yunus developed micro-credit and the borrowing group concept when he started the Grameen Bank of Bangladesh in 1976. Yunus conceived of lending capital at standard interest rates to high-risk borrowers, e.g., very poor rural women, by forming small groups of borrowers to serve as a collective source of collateral to compensate for lack of financial collateral. Similar to rotating savings and credit associations (RoSCAs), Grameen borrowing groups rely on pre-existing personal relationships among members to ensure the trust, cooperation and compliance necessary to operate (Besley and Coate, 1995; Woolcock, 1998; Yunus, 1993). Unlike RoSCAs, however, in which participants contribute their own money into the pool, micro-creditors like Grameen furnish the capital that individual group members borrow.

The notable success of the Grameen Bank (over 2 million borrowers, with a debt recovery rate of 98 percent) (Yaron, 1992) has fostered the spread of its borrowing group methodology into many countries, including the United States. The goals of U.S. micro-credit programs are similar to those of Grameen, but the context of microcredit, however, is very different from that found in the developing world. The most important difference⁵ for the study of trust is that borrowing groups in Grameen are comprised of members from the same village who have known one another for many years, and typically see one another every day. The social relationships among group members, that is, the stock of social capital, is argued to be one source of Grameen's success (Woolcock, 1998; see also Besley and Coate, 1995). In micro-credit groups in the U.S., however, group members typically do not know one another before joining the group (or are merely acquaintances) (Edgecomb, Klein and Clark, 1996), so the success of micro-credit in the U.S. is dependent on the cooperation and trust that borrowers build *within* the group.

Most micro-creditors introduce potential borrowers to the group process with a required "business training" sequence in which borrowers learn technical skills such as budgeting, pricing, and marketing. After completing the training, borrowing group members can begin applying for loans. Micro-creditors require groups to hold regular meetings; make collective decisions regarding loan applications; make loan payments at group meetings; and, collectively, send payments to the lender. Some micro-creditors in the U.S. require mandatory group savings, and most encourage groups to establish their own

Denise L. Anthony 551

additional rules to facilitate group interaction. (For more on microcredit in the U.S., see Anthony, 1996, 1997; Edgcomb, Klein and Clark, 1996; Servon, 1997.)

Similar to developing countries, micro-creditors in the U.S. often target low-income, female, and minority individuals who borrow small (\$500-\$5,000), short-term loans to start-up or expand very small businesses (Edgcomb, Klein and Clark, 1996). Most programs have graduated loan packages so borrowers start with small loans and gradually move up to larger and longer-term loans. All borrowers begin with the same loan package, for example, a \$500 loan over five months. Each successive loan increases the amount and term of the loan to levels pre-set by the micro-creditor. For example, a second loan for \$1,000 over 14 months, a third loan for \$3,000 over 36 months. Loans are made at interest rates comparable to other consumer and commercial loans by banks. Since the late 1980's, micro-credit programs in the U.S. have loaned over \$44 million to micro-businesses, assisted in the creation of over 20,000 new businesses and served over 200,000 clients (Self Employment Learning Project, 1994).

Trust Formation (Section II)

Trust has recently emerged as a concept of theoretic interest crossing social science disciplines (Luhman, 1980; Barber, 1983; Zucker, 1986; Gambetta, 1988a; Kramer and Tyler, 1996). Trust is defined as *expectations*⁶ about how others will act. ⁷ *Trusting behavior*, according to Edward Lorenz (1988), "consists in action that (1) increases one's vulnerability to another whose behavior is not under one's control, and (2) takes place in a situation where the penalty suffered, if the trust is abused, would lead one to regret the action." Thus, having trust enables actors to cooperate in situations where they are vulnerable when expectations are positive, and to avoid cooperation when expectations are negative, i.e., there is *dis*trust.

Willingness to engage in trust behavior is tied to actors' knowledge and identification with particular others (Kramer, Brewer and Hanna, 1996). When individuals are unknown to one another, they will seek information regarding actors' reputations for trustworthiness (Raub and Weesie, 1990; Kollock, forthcoming). Studies of choice situations find that simply making public the content of past choices leads to higher rates of cooperation (Raub and Weesie, 1990; Burt and Knez, 1996).

Unlike banks who screen borrower's financial information, group-based micro-credit programs rely on the borrowing group to evaluate the personal reliability of fellow members. Indeed, the essence of group-based credit is that the mandate of responsibility for member screening and selection, loan approval, and repayment oversight that

lies with the group. While reducing costs for the micro-creditor, screening for personal reliability entails very high information costs for group members because assessing reliability requires detailed personal information about past behavior, as well as knowledge of personal values and beliefs. Whereas credit histories are recorded and verified by third-party sources, personal information may be more difficult to gather and confirm. Judgments of personal reliability and trustworthiness are indeed judgments, based in the personal knowledge and evaluation of another's integrity. Gathering personal information of this kind and making judgments about it requires that actors invest a great deal of time developing a *relation-ship* with others, rather than merely exchanging the limited financial information required for a formal lending contract.

According to social exchange theory on the evolution of trust, actors who build trust through low-risk cooperation will be better able to engage in cooperation on high-risk activities, such as approving loans for fellow group members, and repaying their own loan. I expect that the creation of trust through low-risk cooperation will make borrowers *more likely* to repay their loans for two reasons: (1) relationships of trust lead to more effective screening by borrowers, and (2) relationships of trust create mutual obligations of reciprocity among group members. To the extent that borrowing groups foster relationships of trust, they have the basis for successful lending.

Organizing Trust in Micro-Credit Borrowing Groups (Section III)

Unlike a bank, where information about past performance is limited to a borrower's credit history, assessments of personal reliability require knowledge of an individual's personal values and beliefs, and information about past performance from a broad range of circumstances. Micro-creditors cannot make the significant investments of time necessary to develop relationships with each individual loan applicant, else they would lend to only very few borrowers.8 Instead, micro-creditors rely on borrowing groups to assess reliability. Three factors contribute to the extent to which borrowing groups can and will screen members and select reliable borrowers. Individual members must: (1) be willing to invest time in the group; (2) have an interest in evaluating the reliability of fellow members; and (3) have an opportunity to develop the relationships necessary to do so. The structure and rules of micro-credit borrowing groups facilitate all three by providing access to desired goods, by making individual access to credit dependent on group behavior, and by providing group members the opportunity to build relationships.

Denise L. Anthony 553

Access to Desired Goods

Micro-credit requires significant investment from borrowers. Before receiving a micro-loan, potential borrowers often must attend many hours of group meetings in order to be eligible even to apply for a loan. Moreover, the entire loan process requires continual investments of time participating in group meetings. Why would individual borrowers be willing to make these investments of time and energy?

Members of micro-credit borrowing groups recognize that they have limited credit options, and so are willing to invest their time, and incur the opportunity costs to participate in a borrowing group. One reason individuals may be willing to invest time in a borrowing group is that micro-credit provides the lowest *financial* cost of borrowing for high-risk borrowers. That is, other sources of capital exist, including high-cost finance companies, moneylenders, and loan sharks, but only at very high financial (and potentially high personal) cost. In addition, micro-credit borrowers can receive a loan even when operating a casual or even underground business, i.e., a business that operates in the informal economy in that it is not registered for tax purposes. About one-third of all micro-businesses sampled in this study are not registered. Typical underground micro-businesses are those that sell clothing or craft items from the owner's home, but do not collect sales tax or claim profits as income.⁹

It is not only access to credit, however, that motivates members' participation. Most are also eager for the technical business assistance and peer support they get from group meetings. Other studies of group micro-credit find that the loan is not the only, or even the primary, factor motivating continued participation in borrowing groups (Mount Auburn, 1994; Servon, 1995). My case study of the Neighborhood Credit program reveals much the same thing. Only one of the twelve group members interviewed ranked the loan as the only reason he joined his group; nine others ranked the loan as equally important with the business education and support provided in the group; while two said the education and support were more important than the loan. For example, one group member said that one reason she likes her borrowing group is because "it is just so good to be in a positive atmosphere with other positive people. To be around people who set goals and achieve them." Conventional small business owners are likely to have access to business information and support through organizations such as Rotary Clubs, industry organizations, and the like. Given the small size and informal nature of many micro-businesses, micro-business owners may not have access to these groups.

The fact that business information is discussed by and with peer business owners who live in the same community; have similar living conditions, incomes, and educational backgrounds; and may have similar ethnic or racial heritage is at least as important as the content of the information itself. Members feel more comfortable asking questions and revealing information with their peers than with a bank loan officer or even a small business educator. For example, one group member interviewed said that she felt "intimidated" by an advisor at the Small Business Development Corporation, a nonprofit group that provides technical assistance to small business owners. She was intimidated, she said, because she "didn't even know where to begin or what questions to ask" regarding starting up her business. Another group member explained her difficulty in gathering information on her own, "I tried reading about 'starting your own business' from those books, you know, the ones about 'Be Your Own Boss,' but I realized I wasn't ready for them. They were way over my head." Most group members said they had never sought help from any other business training or assistance program because they didn't think it would be relevant for them.

Incentives to Evaluate Reliability

From the first information meeting about micro-credit, potential borrowers learn that their individual access to credit depends on the entire group's ability to approve loans and to ensure that borrowers repay their loans. Group members understand that their credit is tied to the group. Indeed individuals who complete the business training at Neighborhood Credit become "certified" by pledging that they accept the dual responsibilities of membership in a borrowing group of repaying their own loan, and approving and monitoring fellow members' loans.

By establishing collective consequences to individual behavior—benefits (loans) and sanctions (frozen access to credit) extending to every member of the group in response to individual member's actions—micro-creditors create a group structure that gives individuals incentives to carefully screen, select, and monitor fellow group members. (See Heckathorn, 1988, 1990 for a formal discussion of how collective sanctions contribute to group cooperation.)

An important caveat to the group loan approval process for some micro-creditors is that group members cannot all receive loans at once. Staggered borrowing eliminates the possibility for agreements between group members in which they arrange to approve one another's loans simply in return for their own loan approval. Because the first borrower will affect the rest of the groups' access to credit, *who* borrows first is of great importance and requires that members carefully evaluate all group members.

Although the formal incentive structure of micro-credit borrowing groups establishes necessary conditions for borrowing success, this structure alone is not sufficient to explain micro-credit success. While group structure is consistent across borrowing groups, groups produce

Denise L. Anthony 555

different levels of borrowing and repayment, i.e., different rates of borrowing group success. Micro-creditors create the incentives for group members to cooperate, but group members, themselves, must build personal relationships before they can actually cooperate for access to credit. In addition to structuring incentives, micro-creditors further facilitate the creation of relationships of trust by giving group members continuing opportunities for interaction.

Opportunities for Building Relationships of Trust

The period of business training prior to borrowing means that group members must spend a significant amount of time with one another before they become active members of a borrowing group. Business training is often directed by the micro-creditor, but the group members themselves must discuss how to apply the information to their own businesses, thus sharing details about themselves and their business activities with other group members. In addition, borrowing groups must continue to meet regularly, even after members have received loans.

Relationships of Trust (Section IV)

To explore the processes of trust formation, I conducted an ethnographic study of micro-credit borrowing groups in the Neighborhood Credit micro-credit program. The case study consisted of three parts: 1) approximately 40 hours of observation of four active borrowing-groups (average group size is six members), including group meetings, training sessions, and loan decisions (from January to May 1995); 2) unstructured interviews with the micro-credit program director and group members; and 3) semi-structured interviews with 12 borrowing-group members (45-90 minutes) that included reasons for joining a borrowing group, and the nature and extent of interaction with other group members.

The Neighborhood Credit (NC) program uses a peer-borrowing model to lend capital to small and micro-business owners who live or operate their business in one of five inner-city neighborhoods of a small New England city (population approximately 160,000). NC is operated by a Housing Services nonprofit organization operating in the same five neighborhoods. Both operating funds and loan capital are provided by the parent organization. In January 1995, when the case study began, NC had four active borrowing groups with 24 members, and had made 15 loans to date (of which, one had been written off, one had been successfully repaid, and of the 13 outstanding loans, five were classified as past-due). In February and March 1995, two additional groups were formed. Groups were chosen on the basis of accessibility¹⁰ and included two established groups and the two new groups that formed.

Building Relationships

During group meetings, members act as both expert and novice, asking questions of, as well as providing answers to, other group members. At almost every group meeting, members shared business information, such as low-cost suppliers and sources of free advertising. In one group, a massage therapist suggested to a medical billing contractor that he might expand his business by providing limited probono work in order to make contacts with new clients. One group member shared with her group a tax guide for small businesses and sole proprietors that she got from the library; a fellow member showed her how to use it for her own business. These kinds of exchanges are important for each group member involved because in helping others, members reinforce their own business knowledge and skills. Studies of peer tutoring find that helping others increases the skills and understanding of the tutor, as well as leads to improved communication skills, more effective social interaction, and increased self-confidence for the tutor (Allen, 1993).

Many group members also engage in low-risk cooperation outside of group meetings. For example, because Beverly is "good with numbers," she helped fellow group member, Kathy, establish a record-keeping system and set and negotiate prices. Beverly described this help session with Kathy to the group, "Kathy is hopeless with her pricing. I tried to tell her that she has to set her prices and then stick to them. She wants to give a discount to everyone, but I told her no, she has to stick with it."

A member of a different group sold a fellow member's handmade jewelry alongside her own clothing designs. Another interesting example of low-risk cooperation is that between a beauty consultant and a massage therapist who combined their services to create a 'beauty package,' hoping to increase demand for their services while reducing their individual advertising costs.

Another way some groups build trust is by establishing a "group fund" to which all group members must contribute a specified amount, usually from ten to fifty dollars, *before* anyone receives a loan. This fund can then be used if a borrower misses a payment, or for whatever purpose the group decides. In this way the group creates a source of collateral. At the same time, group members signal their trustworthiness, as well as their willingness to trust others by accepting some personal risk, thus creating a source of mutual obligation that can encourage cooperation and compliance from all.

Using Relationships to Screen and Select Borrowers

Business training and group meetings also create a context in which group members begin to establish reputations. If a group member was

Denise L. Anthony 557

absent from a meeting, the other members of the group often discussed that person's prospects for business success. For example, when Eileen was absent from her group, group members expressed concern about the extent of her interest in business. Fellow group member, Kathy, explained,

The reason I'm here is because I love what I do. I'll do whatever it takes to make my art. I've already sold my own stuff to buy supplies. I never get that from Eileen. Why haven't we ever seen any samples of her work?

Patty agreed,

I think [Eileen] just wants to have it [the business] without working to get it. She thinks she can just open up an office all nice without having to put the time in. She doesn't seem to know you have to work for it.

In the same group, during a meeting in which Kathy was absent, everyone agreed that she would be successful at her business. Beverly was clearly impressed when she said that Kathy would be successful, "with or without the group. We all want to succeed, but she wants it the most."

Notice that in each of these statements, group members are judging one another's business skills and commitment, as well as demonstrating their own business commitment. Concern about fellow members' business commitments makes sense for two reasons. First, if group members join borrowing groups to receive business information and support, they need to know that other members have a similar entrepreneurial desire and drive. Second, the extent of members' commitment to their business may serve as a proxy for their commitment to long-term involvement in the group. Since most micro-business owners have limited access to any other form of business credit, they are likely to want and need continued access to micro-credit, implying a long-term involvement with their borrowing group. Individuals not truly interested in operating a business, however, have little reason to need the business information and support provided by the borrowing group or the continued access to credit necessary to expand a business. Thus, they may be more interested in the short-term gain from the first loan rather than in a constant source of capital, especially given the obligations of the group. Because it is impossible to know others' actual preferences for continued participation in the borrowing group, group members instead evaluate one another's level of commitment to operating their own business.

A common statement made by members, both in referring to themselves and in assessing other group members is that they are "serious" about their business. At the first post-training meeting of the newly formed borrowing group, Robert raised his concerns about another member of the group, noting that she had missed meetings during the training and that she was not present for that night's meeting. He also expressed doubts about her actual business prospects and wondered how her participation would affect the group. Philipe agreed, saying he did not feel she was as "serious" about her business as the other members were about their businesses. When I questioned him about what he meant by "serious" he explained,

She doesn't talk about her business the way everyone else in the group does. I don't think she really knows what she is doing, or even what she wants to do. Sometimes she can't answer a simple question about her business.

I emphasize the phrase "talk about" to illustrate that group members glean information not just from the content of what others say, but also from the manner in which they say it. Group members make evaluations about others' sincerity and reliability based on everything from behavior (missing meetings) to how they talk about their business.

This example also illustrates how group members consider seriously the screening issues they face. The members of this group did not want to be stalled by the absence of a possibly unreliable member. Nor did they want to face the difficult task of evaluating a loan application from a member they felt was not really committed to her business, and, therefore, posed too high a risk to the group. By sharing evaluations publicly within the group, as well as making claims about their own individual reliability and "seriousness," group members build reputations, both positive and negative. By making group members responsible for one another, the micro-creditor shifts the costs of screening borrowers to the borrowers themselves. If this case were actually one of "adverse selection," meaning this member was truly unreliable (regardless of financial ability), then the long training phase, in which members develop relationships with one another, reduced the risk of lending to an unreliable borrower who would not repay. The period of training and group development may also have raised the costs of participating to the unreliable individual, and she self-selected herself out of the group.

Given that not all group members can borrow at one time, and that repayment by the first borrower affects the entire group, selecting the first borrower is a very important decision. Groups seem to recognize the potential difficulty of denying a fellow member's credit application because they attempt to avoid the situation by influencing who is first to apply for a loan. Members informally negotiate the order of borrowing by discussing what they think are the criteria for loan approval. Group members make comments such as "I don't want to get a loan until I have x," where x refers to any variety of business activities, such as some specified number of orders or production of a new

Denise L. Anthony 559

product. The timing of these statements, usually after another group member states why he or she wants a loan, implies that they are not meant only to pass on information about one's own plans, but to influence what they expect of any loan applicant.

Sometimes members try to gauge the standards the group will use for evaluating loans by asking general questions such as, "Does anyone feel ready to apply for a loan?" Individual group members will also tell the group they are "almost ready" to submit an application as a way of "testing the waters" to learn what kind of reaction their application is likely to receive.

Groups may even actively discourage a member they do not believe is ready for a loan. Not surprisingly, Eileen's group spent one entire meeting trying to convince her that she was not yet ready for a loan. In another group, when a jeweler named Antonio announced his plans to apply for a loan, fellow group members asked him detailed questions about such things as, his income sources, job security, and what he did during the time he was laid off. Because each is directly affected by the behavior of other borrowers, group members are intensely interested in everyone's prospects for business success as well as their ability and reliability to repay a loan. One member asked, "What if, over the next few months, the business does not do as well as you have planned? Will you be able to make the loan payments and still live?" NC group members come from the same community and have similar living conditions so they understand the challenge of making a business successful while repaying a loan and covering basic living expenses. This makes them both more and less reluctant than commercial loan agents to accept the potential risks of lending to a fellow group member. Group members may be more reluctant to lend because they have experience with the difficulties of starting and running a business with very few resources. On the other hand, they also have the experience of making their businesses work and so do not evaluate risk narrowly, based on financial assets alone. When Antonio became defensive in the face of the questions, a fellow member explained, "If I am going to be affected by this [loan], I need to feel comfortable with you before I can agree to it." Members want to be assured that borrowers are both financially able to make payments and personally reliable.

Not all groups are successful in screening members or influencing who borrows first. Interviews with Francisco and Anita, two former members of a defunct group, provide details on the dissolution of their borrowing group, ironically named TRUST. (Francisco and Anita continue to participate in NC; each was re-certified and joined a new group.) None of the five members of the TRUST group knew one another before joining, but, according to Anita, they felt like they got to know one another through the training and certification process. "I

thought we were all serious about our businesses." After certification, members of the TRUST group elected James as their president, because, Anita said, "he seemed most interested." According to Anita, James was a "smooth talker" who got the group to approve his loan right away (during the second group meeting). After only a few meetings, it became clear there were problems. NC requires bimonthly loan payments to keep payment amounts low; James became delinquent after only two payments. When James failed to come to the group meeting, other group members became worried but did not know what to do. James himself had most of the group materials, including a list of everyone's telephone numbers. The other members felt like they could not even hold a group meeting without him. When James missed the next meeting and failed to make any of his loan payments, the group realized they had to take action. Francisco got James' phone number and address and attempted to contact him, but with little success. "He just left town. None of us know where he is. That left the rest of us with responsibility for his loan. We weren't able to get credit." Despite the default, group members did attempt to remain a viable borrowing group for a short time. Anita explained that the group made two of James' payments, amounting to about \$100 (\$25 each). They tried to keep the group current so that others would be eligible for loans, "but then we realized he was not coming back." The default had a destructive impact on the group. Anita said, "Having the loan go bad was really hard for the group. It was very discouraging. Some people just couldn't handle it. We all felt bad and got discouraged. That's why a lot of people left [the program]." Francisco added, "We were responsible for his loan. We were the ones who decided he should be first."

Of the four remaining members of the TRUST group, only Anita and Francisco stayed with the program. Anita thought that although the default and failure of the group was difficult, it "showed who was serious about their business. Francisco and I really wanted to stick with it."

The failure of the TRUST group indicates the difficulties in producing group cooperation. That members of the TRUST group did not effectively establish trusting relationships with one another prior to approving the loan is clear. If James could easily "leave town," he was obviously not committed to either his business or the group. The TRUST group failed to build relationships that could have enabled them to learn more about one another's personal and business lives, empowering them to cooperate to better influence and control group borrowing and repayment.

Borrowing groups create a formal incentive structure that generates interest in fellow group members' reliability, as well as provides members the opportunity to develop relationships with one another. When members build trusting relationships, borrowing groups reduce

Denise L. Anthony 561

at least some of the *ex ante* costs of lending by screening members and borrowers before approving loans. In addition, trusting relationships establish mutual obligations among group members that increase their likelihood of reliably repaying loans. Two different successful borrowers explained that trust contributed to their borrowing success. Penelope explained, "Knowing that my group trusted me helped me repay my loan." Similarly, Nancy said, "Having all of these people believe in me gave me confidence that I could do it."

In the next section, I turn to the statistical analyses of borrowing group members to empirically evaluate the effects of relationships of trust on micro-credit success.

The Effects of Trust on Micro-Credit Success (Section V)

Survey Data: The Working Capital Program

Working Capital (WC) is a nonprofit organization that uses a borrowing group methodology to issue loans to the self-employed and small business owners in seven states. Operating since 1990, WC was one of the first, and is one of the largest, micro-credit programs in the U.S. WC operates as an "umbrella" organization that franchises its peer-borrowing methodology and training materials to over 70 local, non-profit agencies and affiliates in seven states. As of 1996, WC had over 2,400 customers, of whom over 1,880 are currently active in over 350 borrowing groups. Between 1990 and 1996, WC members borrowed over 2,700 loans valued at almost 2.5 million dollars. According to internal accounting reports, WC boasts a 95 percent repayment rate and a total debt write-off rate of 3 percent.

I use two sources of data to analyze WC borrowers and groups. The first is a telephone survey I conducted between November 1995 and January 1996, of a representative sample of former and active borrowing group members (N=361). The sample was drawn from the WC master membership list, which includes everyone who was ever a member of any borrowing group, stratified by state (see Table 1). Given that a substantial proportion of the population is low-income and transient, we had a relatively high level of invalid telephone numbers (29 percent) and failed contacts (16 percent). Of those we did contact, only 10 percent refused to participate. Still, respondents somewhat over-represent members with longer rates of participation in Working Capital. Moreover, it is likely that a higher proportion of very low-income participants are non-respondents.

The second source of data is Working Capital's internal loan database. This database provides detailed loan information for every borrower in WC groups, including number of loans borrowed by each member, repayment status, and the actual dates of payments, if any.

Thus, I could construct variables for loan status (i.e., paid-in-full, current, or past due) and number of days past due. Borrower's group designation is also included, providing information on loan activity at the group level.

The sample used in this paper is a subset of survey respondents who answered questions regarding group interaction (n=177) (see Table 2). Table 2 shows that two-thirds of respondents are female, as is typical of participants in micro-credit (Edgecomb, Klein and Clark 1996). Sixty-seven percent of the sample is White. Indicating that these borrowers are high-risk on the criteria banks use, only 29 percent have incomes over \$30,000. Somewhat surprisingly, two-thirds of the sample has at least some college education. As shown in Table 2 (and demonstrated below), educational attainment has an inverse relationship with micro-credit borrowing success.

Independent Variables

I use two measures of trust in borrowing groups. The first is the extent of low-risk cooperation between group members, based on four questions which determine the extent of cooperation on low-risk personal and business activities outside the group, for example, referring customers, cooperating on a joint business venture, or helping one another with a personal matter. These questions were collapsed into a dummy variable for low-risk cooperation when members cooperate in at least two of four possible ways. The second measure of trust is a dummy variable for whether a group had a *group fund* or not. (See Table 3 for descriptive statistics.)

Control Variables

One important control variable is whether members of a borrowing group knew one another before joining the group, measured as the percentage of group members a respondent knew before joining the group. This variable controls for the effect of pre-existing relationships, so we can evaluate the effect of cooperative, trusting relationships formed within the group. Other control variables include individual business and personal financial characteristics and characteristics of the borrowing group including: length of participation in group; number of active group members; and group loan characteristics; calculated to exclude ego for analyses of individual borrowers. (See Table 3 for descriptive statistics.)

Dependent Variables

I measure borrowing outcomes along two dimensions, repayment and amount borrowed, at both the group and individual levels. I measure amount borrowed as total number of loans borrowed by each individual borrower, as well as by each group (Table 4). Number of loans is a

proxy for the amount borrowed because loan amounts are fixed by the micro-creditor. At Working Capital, the first loan is \$500, the second is \$1,500, the third is \$3,000, the fourth is \$4,000 and the fifth is \$5,000 (the maximum). Not all micro-creditors have fixed loan terms.

I measure repayment with variables for delinquency and default at both the individual and group level. Delinquency rate is calculated as the number of delinquent loans (any payments 30-days past due), divided by the total number of loans. Similarly, default rate is calculated as the number of loan defaults (any payments 120-days past due), divided by the total number of loans. For example, an individual who makes three payments late during the course of her second of three loans, all of which were paid-in-full, would have an individual delinquency rate of 33 percent (1/3). Group members who take no loans and borrowers who make all payments on time both have delinquency rates equal to zero. Although these two cases are qualitatively different, their effect on the group's ability to borrow is the same.

Table 4 shows that about two-thirds of all borrowing groups are delinquent at some time in repaying loans. More than one-third have a positive default rate. Individual delinquency and default are much lower, only about 30 percent of all borrowers have a positive delinquency rate, and fewer than ten percent default on a loan. For statistical analyses, individual delinquency and default rates were recoded because of the high number of individuals with default and delinquency rates of zero. Each rate was recoded into a dummy variable such that individuals with a positive delinquency/default rate are coded as "1," individuals with a zero delinquency/default rate are coded as "0."

Results

Table 5 shows the results of the ordinary least squares (OLS) regressions of group delinquency and group default rates on group characteristics and measures of trust among group members. For both delinquency and default, trust formed through relationships built on low-risk cooperation has a significant effect on group repayment. In addition, groups that have been in existence longer (GROUP YEARS) are more successful in controlling group default.

Table 6 shows results from the OLS regression analysis of number of individual and group loans borrowed on four blocks of variables, including business, individual, and group characteristics, and measures of trust. The most powerful predictors of individual borrowing (see Column 1 in Table 6) are the average borrowing success of the entire borrowing group and the length of participation in the group. This means that individual members are more successful (borrow significantly more loans) when they are members of a group that is successful (i.e., all members have a high rate of borrowing) over time,

presumably as both individual borrowers and the group gain experience with successful borrowing. Somewhat surprisingly, the group delinquency rate contributes to individual borrowing success, quite possibly because as group members borrow more loans, the chances of being delinquent increase. Borrowers with less education, and those who have access to one or more sources of business debt other than the micro-creditor, also borrow significantly more loans. In addition, after controlling for these effects, borrowers who establish trusting relationships through low-risk cooperation borrow significantly more loans.

Column 2 in Table 6 shows results of the OLS regression of number of group loans on group characteristics. Long-standing groups (GROUP YEARS) and those with more active members borrow significantly more loans. After controlling for these effects, however, I also find that groups that signal trustworthiness by creating a group fund borrow significantly more loans. Unexpectedly, groups in which members engage in low-risk cooperation borrow significantly fewer loans. This is the opposite of what was expected and seems to imply that groups in which members build trust through low-risk cooperation limits group borrowing success overall. It is not entirely problematic, however, when we consider the connection between relationships of trust and information. Group members who build trust through low-risk cooperation should have better information about which members are truly reliable, that may, ultimately, limit borrowing overall.

Individual repayment is measured by rates of individual delinquency and default. Because the vast majority of group members do not have a positive delinquency or default rate (see Table 4), it is not appropriate to use OLS regression techniques. Instead, I use maximum likelihood estimation (MLE) to regress a binary variable of "any delinquency" and "any default" on selected variables. These analyses test the odds that individuals with certain characteristics will be delinquent in loan payment or will default on a loan.

As shown in Column 1 in Table 7, the group delinquency rate (GROUP DELINQUENCY), has the strongest significant effect on the odds that individual borrowers will be delinquent in their loan payments. Male borrowers also have a somewhat higher probability of individual delinquency. Neither of the measures of trust, however, affects individual delinquency rates.

Column 2 in Table 7 shows the results of the MLE regression of individual default (default=1) on selected individual and group characteristics. Somewhat surprisingly, borrowers with higher education have higher odds of defaulting. Female borrowers have significantly lower odds of defaulting. Similar to the analysis of delinquency, the overall group default rate (GROUP DEFAULT, calculated exclusive of ego's default rate), significantly increases the odds of individual

default. Pre-existing relationships among group members also increase the odds of a borrower defaulting on a loan. Neither measure of trust has a significant effect on individual default.

Discussion

My findings provide evidence that trusting relationships formed within the borrowing group are an important basis for borrowing success in micro-credit borrowing groups. I find that individuals who invest their time and resources in initial low-risk cooperation reap the benefits of trust with greater individual and group success in micro-credit borrowing. Measures of trust successfully predicted four of the six outcome measures studied. Trust built through cooperation on low-risk activities had significant effects on individual borrowing, group delinquency and group default. Trust established through contributions to a group loan fund had a significant effect on group borrowing. In contrast, groups in which members knew one another prior to joining the group were not more successful borrowers. Indeed, pre-existing relationships among group members were associated with higher individual default rates.

Conclusion (Section VI)

Sociologists have long noted the importance of social relationships as a resource for economic action (most recently see Granovetter, 1985, and the literature on embeddedness). In the case of micro-credit, borrowing groups create incentives and opportunities for group members to cooperate on low-risk activities, providing the basis for trust that makes it possible for even these high-risk borrowers to gain access to loan capital. Where traditional financial mechanisms fail, social relationships become a successful mechanism for screening, selecting, and monitoring borrowers. The social relationships formed within the group become a source of information about borrowers' personal reliability, and, therefore, an economic resource akin to a good credit record or collateral. That is, in addition to access to loan capital, micro-credit borrowing groups provide members the opportunity to create a source of social capital (Coleman, 1988; Putnam, 1995). See Woolcock (1998) for a detailed history of the concept of social capital.

Cooperation in micro-credit borrowing groups provides group members with a source of social capital that both contributes to micro-credit success and can improve members' economic well-being. Contrary to those who claim that micro-credit cannot address the real problems of impoverished communities because it does not attract the poorest of the poor (e.g., Bates and Servon, 1996), this study suggests that micro-credit borrowing groups provide a mechanism for low- and

moderate-income individuals in poor communities to build a variety of economic and social resources, creating potential that can benefit an entire community.

Denise L. Anthony is currently a postdoctoral research fellow in the Robert Wood Johnson Scholars in Health Policy Research program at the University of Michigan. In Fall 1999, she will join the Department of Sociology as an Assistant Professor at Dartmouth College. She is continuing her dissertation research on cooperation, trust and social capital formation. Anthony received her Ph.D. from the University of Connecticut.

TABLE 1 Working Capital Telephone Survey Response Rates

	Response
POPULATION	N (%) 1880
ORIGINAL SAMPLE	804 (100%)
NONRESPONDENTS	<u>.</u> -
Invalid numbers	235 (29%)
No contact Refused Interview	130 (16%) 78 (10%)
RESPONDENTS	
Interview Conducted	361 (45%)
Response Rate as % of Valid Numbers	63% (361/569)
GROUPS SELECTED	175/350 (50%)

TABLE 2
Working Capital Respondent Characteristics

	Survey Respondents Full Sample N (Percent)		Group Interaction Sub-sample Mean Loans			
Characteristics			N (Percent)		N (SD)	
TOTAL	361	(100%)	177	(100%)	2.2 (1.1)	
GENDER						
Men	110	(31%)	58	(33%)	2.3 (1.0)	
Women	213	(59%)	119	(67%)	2.4 (1.5)	
Missing Cases	38	(9%)		` ,	, ,	
RACE/ETHNICITY ¹						
African American	61	(17%)	15	(9%)	2.5 (1.3)	
Hispanic	62	(17%)	34	(19%)	2.7 (0.8)	
White	218	(60%)	118	(67%)	2.0 (1.1)	
Other	. 14	(4%)	9	(4%)	2.3 (1.1)	
Missing Cases	6	(2%)		` ´	` '	
FAMILY INCOME						
< \$10,000	39	(11%)	25	(14%)	2.4 (1.0)	
\$10,000-\$20,000	84	(23%)	46	(26%)	2.0 (.98)	
\$20,001-\$30,000	72	(20%)	55	(31%)	2.3 (1.2)	
> \$30,000	125	(35%)	51	(29%)	2.2 (1.2)	
Missing Cases	41	(11%)			` ′	
EDUCATION ²						
< High school	29	(8%)	20	(11%)	2.7 (.66)	
HS Grad / GED	65	(18%)	37	(21%)	2.5 (1.1)	
Some College	127	(35%)	. 54	(31%)	2.2 (1.1)	
College Degree +	137	(38%)	65	(37%)	1.9 (1.1)	
Missing Cases	3	(1%)			, ,	

¹ There is a significant borrowing difference between racial groups; F=3.68, p<.01. Post-hoc Sheffe test reveals that Hispanics borrow more compared to whites (p<.05).

² There is a significant difference between educational groups on borrowing: F=3.57, $p \le .05$. Post-hoc Sheffe test reveals that those with less than a high school education borrow significantly more loans compared to college graduates ($p \le .05$).

TABLE 3

Descriptive Statistics for Independent and Control Variables

	Variable	Mean	Standard Deviation	N
TRUST INDICATORS	Low-Risk Cooperation (1=coooperate in 2+ ways)	.817	.388	169
	Group Fund	.531	.500	177
CONTROL	_			
VARIABLES	Years Operating Business Number Weekly Hours	4.93	3.6	172
BUSINESS	Worked in Business Business Assets	36.6 \$17,037	22.8	177
	(LN) One or More Sources of	6.78	3.19	177
	Business Debt Average Monthly Sales	.497 \$3,477	501	175
	(LN)	6.76	2.48	177
(2 H (1	Education (>College Grad=1, Else=0)	.369	.484	176
	Household Income (1= <\$10,000, 6= >\$50,001)	3.02	1.44	177
	Personal Assets (LN)	\$56,662 9.27	2.94	. 177
	Personal Debt	\$26,185		
	(LN)	7.03	4.59	177
	White	.671	.471	176
	Female % Group Knew Prior	.672	.471	177
	Membership Number Years in Group	.381 1.62	.371 1.03	176 177
GROUP	Years Group in Existence	1.85	.94	177
	Number Group Members	5.55	2.63	177
	Average Loans/Member	2.2	1.1	174
	Group Delinquency Rate	.21	.23	174
	Group Default Rate	.09	.16	174

TABLE 4 Loan Statistics for Working Capital Borrowers and Groups

Characteristics	N (Percent) [SD]
TOTAL GROUPS	106
Mean Members/Group	5.4 [2.5]
Range Group Members	3 - 12
TOTAL LOANS	1210
Mean Loans/Group	12.7 [9.4]
Range Group Loans	0 - 39
Mean Loans/Member	2.2 [1.1]
Range Individual Loans	0 - 6
MEAN GROUP	
DELINQUENCY RATE	.21 [.23]
# Groups w/positive	
delinquency rate	70 (66%)
MEAN INDIVIDUAL	
DELINQUENCY RATE # Individuals w/positive	.15 [.26]
delinquency rate	52 (29%)
MEAN GROUP	
DEFAULT RATE	.09 [.16]
# Groups w/positive	.07 [.10]
default rate	44 (42%)
MEAN INDIVIDUAL	
DEFAULT RATE	.05 [.17]
# Individuals w/positive	
default rate	16 (9%)

 ${\it TABLE 5} \\ {\it Unstandardized OLS Regression Coefficients for Group Repayment on Group Characteristics and Trust}$

	Group Repayment		
	DELINQUENCY	DEFAULT	
Constant	.342**** (.062)	.181**** (.043)	
oup Characteristics	-		
% GROUP KNEW	079 (.049)	021 (.034)	
GROUP YEARS	032 (.019)	029** (.013)	
ACTIVE MEMBERS	.008 (.007)	.006 (.005)	
st	-		
GROUP FUND	.030 (.035)	.012 (.024)	
LOW-RISK COOPERATION	131**** (.046)	09*** (.031)	
Adjusted R ²	.079*** (N=168)	.068*** (N=168)	

 $\begin{tabular}{ll} $\sf TABLE 6$ \\ $\sf Unstandardized OLS Regression Coefficients for Group and Individual \\ $\sf Borrowing on Borrower and Group Characteristics and Trust \\ \end{tabular}$

	INDIVIDUA	AL LOANS	GROUP	LOANS
Constant	.168	(.433)	-2.74	(1.99)
Business Characteristics				
YEARS OPERATING	018	(.022)		
HOURS WORKED	002	(.004)		
BUSINESS ASSETS (LN)	.009	(.025)		
BUSINESS DEBT DUMMY	.290*	(.155)		
MONTHLY SALES (LN)	.046	(.038)		
Individual Characteristics				
EDUCATION	366**	(.158)		
HOUSEHOLD INCOME	.020	(.059)		
PERSONAL ASSTS (LN)	.006	(.033)		
PERSONAL DEBT (LN)	015	(.022)	i	
WHITE	133	(.185)		
FEMALE	.112	(.156)		
Group Characteristics				
% GROUP KNEW PRIOR	.219	(.203)	.567	(1.56)
YEARS MEMBER IN GROUP	.412****	(.075)		
GROUP YEARS		. ,	3.55****	(.595)
# ACTIVE MEMBERS			1.88***	(.197)
AVERAGE LOANS/MBR ¹	.337****	(.066)		, ,
GROUP DEFAULT ¹	-1.00*	(.611)		
GROUP DELINQUENCY1	.800*	(.429)		
Trust				
GROUP FUND	.122	(.148)	2.08*	(1.12)
LOW-RISK COOPERATION	.359*	(.197)	-3.18**	(1.49)
Adjusted R ²	420xx****		426***	
	(N=169)		(N=168)	
Calculated for ego's group, exclu-				
* p < .10	*** p ≤ .0.	****	p ≤ .001	

TABLE 7 Unstandardized Logistic Regression Coefficients for Individual Repayment¹ on Borrower and Group Characteristics and Trust

	DELING	UENCY	DEFAULT		
Constant	-1.77*	(.968)	-3.39**	(1.46)	
Individual Characteristics					
EDUCATION	121	(.481)	1.74*	(.809)	
HOUSEHOLD INCOME	.021	(.169)	449	(.321)	
WHITE	-1.04**	(.455)	-1.03	(.759)	
FEMALE	-1.01**	(.444)	-1.65**	(.735)	
Group Characteristics					
% GROUP KNEW PRIOR	.431	(.606)	1.77*	(.965)	
YEARS MEMBER	.228	(.199)	339	(.354)	
GROUP DEFAULT ² GROUP DELINQUENCY ²	4.65***	(1.00)	7.29****	(1.46)	
Trust					
GROUP FUND	- 215	(.437)	1.09	(.781)	
LOW-RISK COOPERATION	.638	(.600)	1.05	(1.21)	
-2LL	147.28		65.21		
Chi-Square	52.03**** (N=163)		34.94**** (N=163)		

Any delinquency/default = 1.
 Calculated for ego's group, excluding ego.

^{***} p ≤ .01 **** p ≤ .001

Notes

- Trust may have been involved to a certain extent when loan decisions were made by local bank managers, because they did rely on personal knowledge about individual borrowers. There is some evidence that so-called "relationship banking" is still an important source of credit for small business (see Uzzi, this volume). As banks move to purely data-driven loan decisions based on statistical calculations of applicants' debt-to-income ratio, however, loan decisions are based almost exclusively on assessments of ability to repay. Some smaller financial institutions, however, continue to use personal networks and relationships of trust to make lending decisions (see, for example, Baker, 1994, pp.197-199).
- There is also evidence that discrimination persists in consumer credit markets, despite the Equal Credit Opportunity Act (ECOA), which outlaws discrimination in granting credit based on race, color, religion, national origin, sex, marital status, or age. Bates (1991) finds that Black-owned firms received smaller loan amounts than White-owned firms with the same characteristics. Hawley and Fujii (1991) find that non-Whites are more likely to be rejected for credit relative to Whites with the same characteristics, and that non-Whites are more likely to be discouraged from applying for credit. Similarly, they find that female heads of households are more likely to be discouraged from applying for credit (Hawley and Fujii, 1991, p.28). Others, however, use credit applications and consumer complaint data to argue there is little support for the assertion that discrimination ever was or continues to be a problem in consumer credit markets (e.g. Lindley et al., 1984; Elliehausen and Durkin, 1989).
- 3 Loan sharks and money lenders also lend successfully to "high-risk" borrowers, but they do so at very high rates of interest and typically use other methods to enforce repayment, such as intimidation.
- Rotating savings and credit associations (RoSCAs) are found throughout the world and among many immigrant groups in the U.S. (Geertz, 1962; Ardener, 1964; Kerri, 1976; Velez-Ibanez, 1982; Greenbaum, 1991). RoSCAs are typically informal lending circles formed by individuals who agree to make regular contributions into a pool that is then distributed to each contributor in rotation (Ardener, 1964; Light, 1972, pp.19-44; Light and Bonacich, 1988, pp. 244-261; Velez-Ibanez, 1982).
- Another important difference between micro-credit in the developing world and that in the U.S., is that economies in developing countries typically have both high self-employment rates and a large informal sector with much small-scale entrepreneurial activity (Castells and Portes, 1989). Micro-credit programs in the Third World can have a significant impact on poor urban and rural borrowers, especially women, by facilitating small enterprise development in the informal economy (Jain, 1996; Pitt and Khandker, 1998). Self-employment and informal economic activity in the U.S., in contrast, is much more limited, comprising only 10-15 percent of all non-farm employment (Portes, 1994). This implies that encouragement of micro-business, much of which operates in the informal economy, will have a more limited impact on economic development in the U.S.
- Trust as expectations is distinguished from confidence in actors' abilities (e.g., I am confident the pilot will land the plane safely), or confidence in the regularity of natural phenomena (e.g., I am confident the sun will rise in the morning.) (See also Schutz, 1970; Garfinkle, 1967; Barber, 1983; Luhman, 1980; and Snijders, 1996, for discussions of these and other distinctions in definitions of

- trust.) This view also differs conceptually from trust as a generalized and internalized moral orientation (Parsons, 1969; Rotter, 1980).
- Antecedents to this view can be found in Garfinkle's classic "breaching" experiments in which he argued that all social interaction takes place with a set of particular expectations that provide order and stability to social life (see also Schutz, 1970).
- Micro-creditors that lend directly to individuals rather than through borrowing groups often do spend a significant amount of time with each potential borrower, screening for both financial ability and personal reliability (personal communication, director of an individually-based micro-credit program).
- ⁹ Business owners who sell illegal products, e.g., drug dealers, are rarely willing to invest the time for such small loans, or to withstand the scrutiny of fellow group members.
- ¹⁰ The two groups that were not studied were exclusively Spanish-speaking groups.

References

- Allen, Vernon. "Impact of the Role of Tutor on Behavior and Self-Perceptions," in *Collaborative Learning*, edited by Kenneth Bruffee, The Johns Hopkins University Press, Baltimore, 1993, pp. 367-389.
- Anthony, Denise L. "Working Capital Working: A Report on the Impact of the Working Capital Program," *Working Capital*, Cambridge, Massachusetts, 1996.
- ______. "Investing in Trust: Building Cooperation, Trust and Social Capital in Micro-Credit Borrowing Groups," Unpublished Ph.D. Dissertation, Department of Sociology, University of Connecticut, 1997.
- Ardener, Shirley. "The Comparative Study of Rotating Credit Associations," *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 94, 1964, pp. 201-29.
- Baker, Wayne. Networking Smart, McGraw-Hill, New York, 1994.
- Barber, Bernard. Logic and Limits of Trust, Rutgers University Press, New Brunswick, New Jersey, 1983.
- Bates, Timothy. "Commercial Bank Financing of White- and Black-Owned Small Business Start-ups," *Quarterly Review of Economics and Business*, 31, 1991, pp. 64-80.
- _____. and Lisa Servon. "Why Loans Won't Save the Poor," Inc., April 27-28, 1996.
- Besley, Timothy and Stephen Coate. "Group Lending, Repayment Incentives and Social Collateral," *Journal of Development Economics*, 46, 1995, pp. 1-18.
- Burt, Ronald S. and Marc Knez. "Trust and Third-Party Gossip," in *Trust in Organizations: Frontiers of Theory and Research*, edited by Roderick M. Kramer and Tom R. Tyler, Sage, Thousand Oaks, California, 1996, pp. 68-89.
- Castells, Manuel and Alejandro Portes. "World Underneath: The Origins, Dynamics, and Effects of the Informal Economy," in *The Informal Economy:* Studies in Advanced and Less Developed Countries, edited by A. Portes, M. Castells, and L.A. Benton, The Johns Hopkins University Press, Baltimore, Maryland, 1989, pp. 11-37.

- Clark, Peggy and Tracy Huston. "Assisting the Smallest Businesses: Assessing Microenterprise Development as a Strategy for Boosting Poor Communities. An Interim Report," Self-Employment Learning Project, The Aspen Institute, 1993.
- Coleman, James. "Social Capital in the Creation of Human Capital," *American Journal of Sociology*, 94, 1988, pp. S95-S121.
- Edgcomb, Elaine, Joyce Klein, and Peggy Clark. "The Practice of Microenterprise in the U.S.," The Self-Employment Learning Project of The Aspen Institute, Washington, D.C., July 1996.
- Elliehausen, Gregory and Thomas Durkin. "Theory and Evidence of the Impact of Equal Credit Opportunity: An Agnostic Review of the Literature," *Journal of Financial Services Research*, 2, 1989, pp. 89-114.
- Gambetta, Diego. Trust Making and Breaking Cooperative Relations, Basil Blackwell, New York, 1988.
- Garfinkle, Harold. Studies in Ethnomethodology, Prentice Hall, Englewood Cliffs, New Jersey, 1967.
- Geertz, C. "The Rotating Credit Association: A "Middle Rung" in Development," Economic Development and Cultural Change, 10, 1962, pp. 241-63.
- Granovetter, Mark. "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology*, 91, 1985, pp. 481-510.
- Greenbaum, Susan. "A Comparison of African-American and Euro-American Mutual Aid Societies in 19th Century America," *The Journal of Ethnic Studies*, 19:3, 1985, pp. 95-119.
- Hawley, Clifford and Edwin Fujii. "Discrimination in Consumer Credit Markets," *Eastern Economic Journal*, 17, 1991, pp. 21-30.
- Heckathorn, Douglas D. "Collective Sanctions and the Emergence of Prisoner's Dilemma Norms," *American Journal of Sociology*, 94, 1988, pp. 535-562.
- ______. "Collective Sanctions and Compliance Norms: A Formal Theory of Group-Mediated Social Control," *American Sociological Review*, 55, 1990, pp. 366-384.
- Jain, Pankaj S. "Managing Credit for the Rural Poor: Lessons from the Grameen Bank," *World Development*, 24, 1996, pp. 79-89.
- Kerri, James N. "Studying Voluntary Associations as Adaptive Mechanisms: A Review of Anthropological Perspectives," Current Anthropology, 17, 1976, pp. 23-47.
- Kollock, Peter. "The Production of Trust in Online Markets," in *Advances in Group Processes*, edited by E.J. Lawler, M. Macy, S. Thyne, and H.A. Walker, JAI Press, Greenwich, Connecticut, 16, forthcoming.
- Kramer, Roderick M., and Tom R. Tyler. Editors, *Trust in Organizations: Frontiers of Theory and Research*, Sage, Thousand Oaks, California, 1996.
- Kramer, Roderick M., Marilynn B. Brewer, and Benjamin A. Hanna. "Collective Trust and Collective Action," in *Trust in Organizations*, edited by Roderick M. Kramer and Tom R. Tyler, Sage, Thousand Oaks, California, 1996, pp. 331-356.
- Light, Ivan. Ethnic Enterprise in America, University of California Press, Berkeley, California, 1972.

Light, Ivan and Edna Bonacich. *Immigrant Entrepreneurs: Koreans in Los Angeles 1965-1982*, University of California Press, Berkeley, California, 1988.

- Lindley, James, Edward Selby, Jr., and John D. Jackson. "Racial Discrimination in the Provision of Financial Services," American Economic Review, 74, 1984, pp. 735-741.
- Lorenz, Edward. "Neither Friends nor Strangers: Informal Networks of Subcontracting in French Industry," in *Trust Making and Breaking Cooperative Relations*, edited by Diego Gambetta, Basil Blackwell, New York, 1988, pp. 194-210.
- Luhmann, Niklas. Trust and Power, Wiley, Chichester, 1979.
- ______. "Familiarity, Confidence, Trust: Problems and Alternatives," in *Trust Making and Breaking Cooperative Relations*, edited by Diego Gambetta, Basil Blackwell, New York, 1988, pp. 94-107.
- Mt. Auburn Associates. "An Evaluation of the Working Capital Micro-Enterprise Lending Program," Mt. Auburn Associates, Somerville, Massachusetts, 1994.
- Parsons, Talcott. Politics and Social Structure, Free Press, New York, 1969.
- Pitt, Mark and Shahidur Khandker. "The Impact of Group-Based Credit Programs on Poor Households in Bangledesh: Does the Gender of Participants Matter?," *Journal of Political Economy*, 106:5, 1998, pp. 958-996.
- Portes, Alejandro. "The Informal Economy and Its Paradoxes," *The Handbook of Economic Sociology*, edited by Neil J. Smelser and Richared Swedberg, Princeton University Press, Princeton, New Jersey, 1994, pp. 426-449.
- Putnam, Robert D. "Bowling Alone: America's Declining Social Capital," *Journal of Democracy*, 6, 1995, pp. 65-78.
- Raub, Werner, and J. Weesie. "Reputation and Efficiency in Social Interactions: An Example of Network Effects," American Journal of Sociology, 96, 1990, pp. 626-654.
- Rotter, Julian B. "Interpersonal Trust, Trustworthiness, and Gullibility," *American Psychologist* 35, 1980, pp. 1-7.
- Schutz, Alfred. On Phenomenology and Social Relations: Selected Writings, University of Chicago Press, Chicago, Illinois, 1970.
- Self-Employment Learning Project. Directory of U.S. Microenterprise Programs, edited by Margaret Clark, Tracy Huston, and Barbara Meisler, The Aspen Institute, Washington, D.C., 1994.
- Servon, Lisa. "Microenterprise Programs in U.S. Inner Cities: Economic Development or Social Welfare?," *Economic Development Quarterly*, 11, 1997, pp. 166-80.
- Snijders, Chris. "Trust and Commitments," Interuniversity Center for Social Science Theory and Methodology, Gronigen, Netherlands, 1996.
- Uzzi, Brian. "What is a Relationship Worth? The Benefit of Embeddedness in Corporate Financing," this volume.
- Velez-Ibanez, Carlos G. "Social Diversity, Commercialization, and Organizational Complexity of Urban Mexican/Chicano Rotating Credit Associations: Theoretical and Empirical Issues of Adaptation," *Human Organization*, 41, 1982, 107-120.

- Woolcock, Michael. "Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework," *Theory and Society*, 27, 1998, pp. 151-208.
- Yaron, Jacob. "Assessing Development Finance Institutions: A Public Interest Analysis," World Bank Discussion Paper Number 174, World Bank, Washington, D.C., 1992.
- Yunus, Muhammad. "Reflections on the Essentials of Grameen System," *Going Forward, The Peer Group Lending Exchange. Conference Report and Conference Papers*, Calmeadow, Toronto, 1993.
- Zucker, Lynne G. "Production of Trust: Institutional Sources of Economic Structure, 1840-1920," in *Research in Organizational Behavior*, edited by Barry M. Staw and L.L. Cummings, JAI Press Inc., Greenwich, Connecticut, 8, 1986, pp. 53-111.

MICROENTERPRISE LENDING

Discussion Comments William C. Hunter Federal Reserve Bank of Chicago

The papers by Servon and Anthony are especially interesting because they both do something that we economists often do not do—actually interview the individuals about which we theorize. All too often, we speculate as to why individuals in our samples make the choices that they do without ever asking them why. By actually interviewing their subjects in depth, the two authors of these papers are able to bring a different and refreshing perspective to their analyses.

My plan in discussing these papers is to first give a brief summary of the papers taken as a whole. Following this, I will offer some specific comments on the two papers. I will avoid detailed comments on the technical aspects of the papers.

Both papers describe aspects of micro-enterprise lending and training programs and discuss their roles in providing program participants the needed resources to achieve economic independence. Both papers agree that these programs are beneficial to participants.

Servon uses anecdotal accounts from 34 program participants to illustrate the benefits of financial assistance and business training—primarily to those individuals moving off welfare into the work force. Supporting these results, Anthony further discusses the formation of trust and social relationships among such program participants. The papers note that these features are somewhat unique to the microenterprise/credit programs they study and have positive effects on the success of the individuals and the programs. Unlike most traditional lending programs, micro-enterprise programs and micro-credit borrowing groups provide business training to potential low-income entrepreneurs.

In Servon's paper, three U.S. micro-enterprise programs were examined to evaluate the impact of the programs on the participants' lives. The programs are located in California, Iowa, and New York. Two of these programs target low-income women because of their greater need for alternative income generating options. Lending is not the primary focus of these programs. Only the California program provided credit. The Anthony paper analyzes the micro-credit borrowing groups in a neighborhood credit program. In general, the papers suggest that these programs provide two major benefits to participants.

First, the programs offer various training and other services to ensure that their participants have the prerequisite skills to run businesses successfully or to get a salaried job when self-employment is not an optimal choice. Similarly, the micro-credit borrowing groups further require the potential borrowers to go through business training before being considered for a loan.

Second, the programs provide various psychological benefits to the participants and the business education and support provided in these programs appear to motivate the program participants. Based on the participants' testimonials, they feel more confident and have a clearer understanding of their career goals and objectives, enhanced self esteem, more social capital, and networks for better gaining access to both financial capital and knowledge. A special feature discussed in the Anthony paper relates to the mutual obligation characteristic of the micro-credit group. An individual group member's access to credit depends on the repayment status of the entire group and lending decisions are made by group members. As such, the program not only shifts the costs of borrower screening to the borrowers themselves, but also encourages cooperation and strong commitment from all members. Anthony further uses regression methods to examine the relationship between loan portfolio characteristics and group attributes. The statistical analysis suggests that trust and relationship building used in the group lending process generally decreases loan delinquency and default rates and increases borrowing success for the group.

Given this brief summary of the papers, let me now offer some specific comments on the papers. The Servon paper attempts to answer three basic questions: can micro-enterprise programs be used strategically to help low income heads of household become economically self-sufficient? In what ways do micro-enterprise program participants who start businesses differ from those who do not, and what benefits, if any, do program participants receive from programs when they do not start their own businesses?

Servon suggests that the answer to the first question is yes. Training can be valuable. However, as reported in the paper, some individuals were successful while others were not. Hence, the evidence is best interpreted as mixed. Regarding the second question, it seems clear that those participants who were successful in starting their businesses typically had experience in the industry in which they opened a business and also had access to social networks of family and friends who provided financial and other forms of assistance. Similarly, those individuals who did not start their own businesses seemed to gain self-esteem, management skills, and enhanced social capital. Thus, Servon concludes that the programs were very successful. However, given the anecdotal nature of the data, this conclusion should be taken as preliminary. With only 34 interviews conducted across three different

programs, it is not possible to reach definitive conclusions or to make general inferences about such programs. In addition, more effort must be undertaken to control for differences across the individuals interviewed and for general sample selection bias. It is not clear how the respondents were selected, so additional detail on sample selection and individual characteristics would be useful in judging the severity of any selection problems.

The Servon paper could also be improved by giving more detail on the structure of the training programs examined in the study. Such information would allow the reader to better compare the structure of these programs with those which have been found to be effective in moving individuals off welfare and into the workforce. Are these programs linear or nonlinear? That is, are participants assessed, trained, and sent into the workforce? The linear model. Or, are they assessed and trained, sent into the workforce, and continually retrained and reassessed in other areas which correlate positively with success in the workforce? This latter approach is sometimes called the nonlinear model since participants continually go back and forth between work and additional assessment and training. The nonlinear model was found to be highly successful in the city of Chicago and is described in the final report of the Chicago Fed publication "Assessing the Midwest Economy: A Look Back to the Future." The success of this program makes it clear that there is more to moving individuals off welfare than simply finding them a job. A totally interactive approach seems preferable to the traditional linear approach. Thus, I would suggest that the author give a fuller description of the programs studied including an assessment of the costs and benefits of the different approaches employed in the three programs. The finding that there were positive external effects associated with having social networks is informative and encouraging. It would also be interesting to assess the success of these programs during a different macroeconomic environment. The assessment takes place during a period when the economy was performing exceptionally well and the unemployment rate was near record lows. How much of the success of these programs simply reflects the good economic performance we have enjoyed over the past eight years? How much of the success of the participants in finding employment or starting their own businesses was simply due to the good performance of the economy versus their having participated in the programs under study? I think that these questions must be answered before any definitive conclusions can be drawn about the long-term success of these programs.

Turning to the Anthony paper, the key question addressed centers on the value of trust to loan repayment probability in microlending programs. We know a lot about micro-lending programs in lesser developed countries. However, very little is known about these

programs in the U.S. Stated differently, the paper asks-can micro lending models like the Grameen Bank of Bangladesh be successfully employed in the U.S. for low-income groups seeking credit? If they can work, what are the key determinants of success? Anthony seeks answers to these questions using data obtained from the Capital Credit Program, a program modeled along the lines of the Grameen Bank. The Grameen Bank makes small loans to its participants. The average size loan is \$75 and is made to the landless or near landless in Bangladesh. The Bank makes about 475,000 such loans a month and its default rate is an astonishingly low 2 percent. While there are a number of distinguishing features of the program, the most important is that loans are made to individuals in self-formed groups of 5 people each who live in the same village and who are jointly responsible for repaying the loans. Non-compliance with the Bank rules by any member of the group curtails the borrowing opportunities of the other group members. Thus, the key to the success of the Grameen Bank model is that the Bank is able to exploit the local knowledge of the members of the lending groups. It has devised an incentive structure whereby others within a village do the monitoring of behavior for the bank (peer monitoring).

Several papers in the finance literature argue that peer monitoring is an effective way of designing incentive monitoring systems. This is essentially the model employed in the agency studied by Anthony. However, peer monitoring is not without its costs. The members of the borrowing groups in the Grameen Bank model bear risks, that in the absence of the monitoring problem, could much better be absorbed by the Bank. Indeed, in the case of borrowing groups, the interdependence among the members of the group is artificially created and they have to be induced to bear more risks than they otherwise would. Thus, the central question associated with the Grameen Bank model concerns whether the gains from improved monitoring exceed the additional costs of increased interdependence? This question has not been answered quantitatively for the Grameen Bank and not for the programs mimicking it to my knowledge. Thus, the burden on the author is to show that the benefits exceed the costs in the programs studied. In addition, I would hope that the author better connects the model used by the agency studied in the paper to other lending models examined in the traditional banking literature.

There is a huge and growing literature on the economics of relationship lending. Relationship lending is known to be characterized by the collection of information by lenders which exceed the published data, by continuous contact between the lender and the borrower, by the confidential nature of the information used, and by the fact that this information is used in developing future contract terms. All of these characteristics of relationship lending seem parallel to those considered key in the Grameen type micro lending program. Thus, it

would be interesting for the author to rigorously compare and contrast the model studied in the paper with traditional relationship lending models. Clearly, a key to the success of the Grameen type model is the fact that group members can adversely impact each other in their broader lives in their isolated rural villages. One wonders if such pressure could be brought to bear on group members living in major metropolitan areas? Maybe this explains why these programs do not tend to be used as frequently in metropolitan areas as in smaller towns and villages.

As in the case of the Servon paper, I would also suggest that the author better convince the reader that no selection bias problems have been introduced in the analysis via the method used to select the sample. Along the same lines, it is not clear to me that the statistical analysis conducted in the paper is free of the survivorship bias.

To conclude, I found both of these papers to be timely and interesting. I encourage that they be read carefully.

William C. (Curt) Hunter, Senior Vice President and Director of Research, serves as economic advisor to the president of the Federal Reserve Bank of Chicago and supports the president's participation in the System's monetary policy group, the Federal Open Market Committee. He has published more than 50 articles in leading finance and economics journals and is the editor of four books. Hunter holds a B.S. degree from Hampton University and M.B.A. and Ph.D. degrees from Northwestern University.