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OVERVIEW

Among those starting businesses each year are many Americans who are relatively poor (Dennis, 1998). There is a growing trend in the United States promoting self-employment among the poor through Microenterprise Assistance Programs. These programs have attracted increased attention and public/policy support. The number of assistance programs has steadily risen with currently over 300 programs throughout the United States (Langer, et. al., 1999). Additionally, federal funding for programs has continued to expand and initiatives have been supported by several governmental departments including the Department of Labor, Department of Health and Human Services, and Department of Housing and Urban Development (Meyerhoff, 1997). Many states have also provided funding to support local community economic initiatives that include microenterprise.

Microenterprises are very small businesses often run as a sole proprietorship, sometimes as a partnership or family business, with fewer than five employees. Owners of microenterprises generally do not have access to the commercial banking sector and initially begin their business with a loan under $15,000 and often much less (Langer, et. al., 1999). Microenterprise programs in the United States largely target low-income people. Additionally, many programs are aimed at ethnic and racial minorities, and overwhelmingly at women. Microenterprise programs have sought to provide access to financial capital and business training that may otherwise not be available to disadvantaged groups. Some U.S. programs emphasize poverty alleviation, others fill a need for credit gap, others focus on local economic development, while others promote job development for the unemployed or economic sufficiency among low-income women, including welfare recipients.

Microenterprise initiatives have both proponents and critics. Proponents suggest that microenterprise has the capacity to create jobs and businesses, revitalize low-income communities and move people out of poverty (Clark & Huston, 1993). Some advocates have touted microenterprise as an anti-poverty strategy (Banerjee, 1998; Gugliotta, 1993) and others see microenterprise as a way to bring poor families into the economic mainstream, enable economic opportunity, or exit out of the secondary labor market (Raheim, 1997, Raheim, 1996).

Critics of microenterprise suggest that, with a focus primarily on credit, microlending cannot seriously reduce poverty in the United States. Additionally, they suggest microenterprise initiatives are part of a larger trend toward reducing social safety net programs (Neff, 1996). On the whole, self-employment for poor people is more difficult in the United States than in developing countries (Schreiner, 1998). In developing countries the informal sector is relatively easy to enter, is unregulated, small-scale, competitive, labor intensive and allows the adaptability of resources from one use to another. While programs such as The Grameen Bank have had significant effects on improving the economic well being of the poor in developing nations, there

are difficulties transposing such models to a capitalist society like the United States (Taub, 1998).

To date research on microenterprise in the United States is somewhat limited. Exploratory research is typically done to provide a beginning familiarity with a topic (Babbie, 1995). In this regard, the prevalence of cross-sectional, descriptive studies is not surprising given the relative newness of the field and research about it in the United States. With few exceptions (Benus, et.al., 1995) most studies are cross-sectional in nature, lack control or comparison groups, are descriptive in nature and sometimes fail to report findings with adequate interpretation. These limitations require that current research findings be interpreted cautiously. As is, most studies do not allow for the parceling out of program effects. Self-employment studies more broadly pay scant attention to low-income entrepreneurs.

This study builds on current microenterprise research in the United States and examines household income and poverty over time of low-income microentrepreneurs. Comparisons are drawn between three groups: Low-income microenterepreneurs who participated in one of seven U.S. microenterprise programs; low-income self-employed not attached to microenterprise assistance programs; and a third group of low-income workers not engaged in self-employment. By employing a quasi-experimental design, with comparison groups and repeated measures, different outcomes between groups can more readily be attributed to microenterprise assistance programs.

Research on the effects of microenterprise assistance programs has important social policy and practice implications. Current work aimed at promoting self-employment among the poor is seen as an effort to improve economic well-being and move poor families out of poverty. Whether or not programs are having a significant affect is examined in this study.

THEORETICAL FRAMEWORK

There are various reasons why individuals choose to pursue self-employment and what outcomes may follow. Economic perspectives emphasize utility maximization and human capital reward. A greater expected payoff from self-employment would cause individuals to shift from wage labor to self-employment and vice versa (Hamilton, 1996). Neoclassical economic theory rests on the assumption that people make choices on the basis of their own self-interest (Elster, 1989). That is, people rationally choose among alternative options in order to maximize their satisfaction or utility. Employment is closely tied to human capital (Becker, 1993). In order to fully exploit one's skills it is necessary to find the appropriate job. According to Fredland and Little (1985), "self-employment is an alternative for those who have or believe they have human capital which employers discount" (p. 21). According to this theory, discrimination in the labor market may encourage self-employment among disadvantaged groups and possibly result in higher earnings.

Components of utility or satisfaction include monetary reward but also include other factors such as time spent with family, flexible hours and enjoyable work (Blau, Ferber & Winkler, 1998). Compensating differential theory speaks to workers' decisions about the industry, occupation, or firm in which they will choose to work. One view is that entrepreneurship offers greater freedom, autonomy and flexibility (Evans & Leighton, 1989). This implies that workers may choose self-employment over wage employment despite earnings below the paid employment alternative (Hamilton, 1996). In the case of self-employment, non-pecuniary rewards may compensate for lower wages. For example, women may pursue self-employment in order to juggle home and work. More broadly, structural constraints affect earnings from self-employment for the poor. Low-income entrepreneurs encounter structural barriers that discourage business development (Sherraden, Sanders, Sherraden, 1998). Moreover, many of the institutional supports that enable business development do not benefit low-income business owners, making it difficult for them to gain access to information, capital, and business networks. Barriers exist within the global economy, local economy, and business infrastructure. Well-integrated global markets in the United States create difficulty for small-scale microentrepreneurs who must compete against mass-produced goods. Local economies must contend with factors like declines in economic base, seasonal fluctuations and fierce competition with large chain stores (Sherraden, Sanders, Sherraden, 1998).

Microenterprise assistance programs may serve to break down some barriers to self-employment for poor workers by providing access to financial capital and business training courses. However, it may be beyond the abilities or goals of assistance programs to significantly impact structural barriers more broadly.

In summary, some theory suggests workers who choose self-employment do so for a higher financial reward and to maximize human capital. Other theory suggests that structural constraints may inhibit earnings from self-employment for low-income business owners or that lower earnings from self-employment compared to a paid work alternative are compensated for by non-pecuniary rewards such as flexibility and autonomy.

THE STUDY

Throughout, *program participants* refers to low-income microentrepreneurs who took part in one of seven microenterprise assistance programs in the United States. Low-income self-employed persons who did not participate in microenterprise assistance programs are referred to as *non-participants*. Low-income workers not engaged in self-employment are referred to as *wageworkers*. Low-income refers to families with incomes at or below 150 percent of the national poverty line at the beginning of this study in 1991.

This study examines economic well-being outcomes including income generation and family poverty between 1991 and 1995. While income generated from the business is examined, the primary focus here is at the household level, on whether or not poor families improve their economic status. This focus is consistent with the current dialogue between proponents, who suggest microenterprise can move families out of poverty, and critics who question such claims, suggesting microbusinesses may instead perpetuate poverty. Broadly, this study asks: Does

microenterprise improve the economic well being of poor families over time? And, do economic outcomes differ significantly between program participants, non-participants and wageworkers?

METHODOLOGY

Design, Data Set and Sample

This study uses a quasi-experimental research design, with matched comparison groups and repeated measures. Secondary data are analyzed for three comparison groups from two sources: 1) Data from the Aspen Institute's Self Employment Learning Project (SELP) are used for the program participation group. Data come from entrepreneurial surveys administered between 1991 and 1995. Data utilized in this study include data from 1991, the first year of the survey, and 1995, the last year of the survey. Data used include survey data from a subset of SELP's original sample. SELP began their study with 405 microentrepreneurs, 133 who were living at or below 150 percent of the poverty line in 1991. SELP selected 150 percent of the poverty line because they believed—and it is quite widely believed—that the poverty line is an inadequate measure of the income that is really needed for families to survive (Clark, et. al., 1999, p. 11).

Data were collected from participants of seven different U.S. based programs via intensive hour-long telephone interviews. Eighty-six of the 133 interviewed in 1991 were re-interviewed in 1995. Two of the 86 were removed from the low-income subset after data corrections for 1991 revealed they began the study above 150 percent of poverty. One other case was deleted because most data were missing in both 1991 and 1995. Finally, three additional cases are not used in this study because respondents were over the age of 65 in 1991. Their employment status and reasons for pursuing continued employment are probably quite different than other workers. These adjustments result in a sample size of 80 SELP participants[1].

2) Two matched comparison groups; one of low-income self-employed not attached to microenterprise assistance programs (non-participants, N=109); and low-income wageworkers not engaged in self-employment (N=242) are drawn from the Panel Study of Income Dynamics (PSID). PSID is an on-going longitudinal survey of 5000 families, begun in 1968, conducted by the Survey Research Center at the University of Michigan (Hill, 1992). PSID[2] was chosen, above other national survey data sets, because families have been surveyed over the same time period as microenterprise program participants (1991 through 1995). Data are examined at two points in time, 1991 and 1995, with an emphasis on examining change over time between groups. The total sample size used in this study is 431.

Matching process: While not a perfect experiment, comparison of program participants with matched comparison groups approximates equivalency (Royse, 1991). Most examinations of microenterprise outcomes have been before versus after comparisons rather than with versus without (Schreiner, 1999). Without a control group, "Although the analyst can observe users both before and after a MEP [Microenterprise Assistance Program], the analyst cannot observe users both with and without a MEP. It ignores that changes in outcomes might have happened even without an MEP" (Schreiner, 1999, p. 20). This study compares three very similar groups of workers beginning in 1991 and examines whether they diverge significantly on economic

outcomes over time. Thus, we can begin to see whether or not microenterprise assistance programs are having a program affect.

Low-income self-employed[3] and wageworkers were identified in the PSID and matched as closely as possible to the program participants on 1991 data. Matching focused on six demographic factors--age, education, race, gender, marital status, and presence of young children. Matching is carried out in the aggregate (Rossi & Freeman, 1993). That is, individuals are not matched one to one on every factor, but the overall distributions on each variable are made to correspond between groups. The number of self-employed Latinos (in PSID) reporting data in 1991 and 1995 was limited. Because of this data limitation, Latinos and African Americans are grouped together as non-whites.

In addition, self-employed workers drawn from PSID included a higher frequency of male than female self-employed. To maintain overall sample size, a greater proportion of men were drawn from PSID than is present in SELP. Any significant differences between groups on any of the matching factors are used as a covariate in analyses.

Variables

Dependent variables examined in this study include family income in 1991 and 1995, change in family income between 1991 and 1995, family income from the business in 1991 and 1995, change in family income from the business between 1991 and 1995, and poverty status—that is whether families remain at or below 150% of the poverty line or rise above it by 1995. Matching variables, used as covariates in the event groups differ include age, education, race, gender, marital status and presence of children age 5 and under. Variable definitions are found in table 1.

Table 1: VariableDefinitions

Variable	Definition
• Family income 1991 and 1995[4]	• Continuous measure of total dollar family income. 1991 figures are adjusted to 1995 dollars to assess for real change between 1991 and 1995.
• Change in family income 1991 – 1995	• Continuous measure of the dollar amount change in family income between 1991 and 1995
• Family income from the business 1991 and 1995[5]	• Continuous measure of total dollars in family income derived from the business. 1991 figures are adjusted to 1995 dollars to assess for real change between 1991 and 1995.
• Change in income from the business 1991 –1995	• Continuous measure of the dollar amount change in family income derived from the business between 1991 and 1995.
• Poverty Status[6]	• This variable is a dichotomous variable indicating whether a family is living at and below or above 150 percent of poverty. Poverty

	status is coded: 0 = 150 percent of poverty or below, 1 = above 150 percent of poverty.
• Age	• Respondent's age in number of years.
• Education	• Continuous variable representing the actual number of years in education.
• Race	• 1= White, 0 = Non-white.
• Gender	• 1 = Male, 0 = Female.
• Marital Status[7]	• 1 = Married, 0 = Not married
• Presence of young children age 5 and under.	• 1 = Presence of children age five and under, 0 = No children age five or under present.

ANALYSES AND FINDINGS

Table 2 describes the characteristics of workers and households included in the sample. On average the workers are in their mid-thirties, approximately half are white and half African American or Latino, most have at least a high school degree or the equivalent and about two thirds are women, of which about two thirds are head of their household.

Table 2: Demographic and Household Characteristics, N=431

	Range	Mean	Median	Std. Deviation
Education	**0-23 yrs.**	**12**	**12**	**2.5**
***Age**	**20-63 yrs.**	**36**	**34**	**9.9**
HH Size	**1-9**	**3.5**	**4**	**1.7**

Race	Percentage
White (218)	51%
Non-white (213)	49%
***Gender**	
Male (134)	31%
Female (297)	69%
Marital Status	
Married (197)	46 %
Non-Married (234)	54 %
***Presence of children age 5 and under**	
Yes (178)	41%
No (253)	59%

*Groups vary significantly

The three groups are initially examined to determine if any significant differences exist between groups on demographic factors. Chi-square analyses and analysis of variance (ANOVA) indicate that the groups are quite closely matched but some differences do exist. First, groups differ by gender (X^2=19.24, df=2, $p \leq .001$). Chi-square analyses reveal that the observed frequency of males in the non-participant self-employed group was greater than the expected count, while the frequency of females among program participants and wageworkers was less than the expected count. That is, groups varied by gender with significantly more males among the non-participant group. Second, groups varied by whether or not there were children age five and under present in the family (X^2=6.65, df=2, $p \leq .05$). Compared to program participants and non-participants, wageworkers were more likely to have children age five and under in the family. Finally, analysis of variance indicates that significant differences occur between groups on average age ($F = 21.22$, $p \leq .001$). Post hoc Bonferroni tests reveal wageworkers were on average younger than both program participants and non-participants. Comparisons of participants and non-participants reveals that groups vary only by gender. Significant differences between groups are controlled for by including variables that differ as covariates in analysis of covariance models.

Economic Outcomes

Family income, family income from the business and whether or not families moved above 150% of poverty by 1995 are examined and differences between the three groups assessed. Particular emphasis is placed on examining change in these variables between 1991 and 1995 and whether or not the three groups vary significantly in amount of change. For each dependent variable, both within and between group comparisons are made. Table 3 provides descriptive statistics on income and poverty characteristics of the sample as a whole. Following are findings for each dependent variable.

Table 3: Income Characteristics 1991 and 1995

	1991	1995
Households below and above poverty (N=431)		
Below 150 percent	100 %*	58 % (249)
Above 150 percent	0 %	42 % (182)
Households with open businesses below and above poverty (N=92)		
Below 150 percent (43)	100 %	47 %
Above 150 percent (49)	0 %	53 %

	Range	Mean	Median	Std. Deviation
Family Income				
1991	$600-33,990	$13,121	$12,083	$6,643
1995	$300-$132,038	$22,596	$19,678	$16,602

Change in Family Income	$-30,051-$107,028	$7,914	$4,972	$15,665
Family Income from the Business				
1991 (n=189)	$0-**$**22,320	$4,273	$2,000	$5,137
1995 (N=92)	$0-48,007	$9,480	$6,224	$9,953
Change in Income from the Business (N=92)	$-21,948-$ 38,719	$3,057	$761	$9,094

Family Income. First, t-tests were conducted for each of the three groups independently to assess whether differences existed within group between 1991 and 1995 on family income. Significant differences in average family income between 1991[8] and 1995 exist for program participants (t= -5.61, p≤.001), non-participants (t= -5.81, p≤.001) and wage workers (t= -9.84, p≤.001). That is, all three groups on average showed significant gains in family income between 1991 and 1995.

Second, analysis of covariance (ANCOVA) was conducted to assess whether significant differences existed between groups in 1991 and again in 1995 on family income. Covariates included gender, whether or not there were children age five or under in the family, and age—as groups significantly differed on these factors. The assumption of homogeneity of regression slopes, for ANCOVA, was tested by fitting a model containing main effects of the group variable and each covariate, as well as a group by covariate interaction term. The interaction term provides a test of the null hypotheses of equal slopes (Tabachnick & Fidell, 1996). No significant interactions were found, thus supporting the assumption of homogeneity of regression slopes. As seen in tables 4 and 5, no significant differences were found in family income in 1991 or family income in 1995 (logged) between groups after controlling for differences.

Table 4. ANCOVA of Family Income in 1991 by Group

Source	Type I SS	Df	F
Corrected Model	2.043E+09	5	10.259****
Intercept	7.420E+10	1	1862.538****
Gender	777500614	1	19.517****
Children	1.043E+09	1	26.189****
Age	183372856	1	4.603**
Group	**39217837**	**2**	**.492**
Error	1.693E+10	425	
Corrected Total	1.897E+10	430	

*p≤.10, **p≤.05, ***p≤.01,****p≤.001

Table 5. ANCOVA of Family Income in 1995 (logged) by Group

Source	Type I SS	Df	F
Corrected Model	10.254	5	2.657**
Intercept	40776.560	1	52822.794****
Gender	2.359	1	3.056*
Children	2.184	1	2.829*
Age	3.941	1	5.105**
Group	**1.771**	**2**	**1.147**
Error	328.079	425	
Corrected Total	338.333	430	

*p≤.10, **p≤.05, ***p≤.01,****p≤.001

Third, ANCOVA was conducted to assess whether a significant difference existed between groups on change over time in family income (logged). The assumption of homogeneity of regression slopes was met. As can be seen in table 6, the change in family income between 1991 and 1995 did not vary significantly by group.

Table 6. ANCOVA of Change in Family Income (logged) by Group

Source	Type I SS	Df	F
Corrected Model	2.513	5	3.604***
Intercept	47174.721	1	338210.75****
Gender	6.058E-02	1	.434
Children	.393	1	2.815*
Age	2.047	1	14.673****
Group	**1.354E-02**	**2**	**.049**
Error	59.141	424	
Corrected Total	61.654	429	

*p≤.10, **p≤.05, ***p≤.01,****p≤.001

An additional ANCOVA[9] was conducted to see if significant differences occurred on change in family income between self-employed participants and non-participants by whether or not the business was still open in 1995. As seen in Table 7, business status was significantly related to change in family income. Those whose businesses were still open in 1995 had a significantly greater change in family income. This suggests that either the amount of income gained from the business was considerable or that those households who were more financially well off, due to other sources of income for example, helped enable businesses to remain open.

Table 7. Two-way ANCOVA of Change in Family Income (logged) by Group and Business Status in 1995

Source	Type I SS	Df	F
Corrected Model	1.162	4	2.087*
Intercept	20664.219	1	148404.10****
Gender	.264	1	1.899
Group	1.746E-02	1	.125
Status[a]	.784	1	5.628**
Group*Status	9.674E-02		.695
Error	25.621	184	
Corrected Total	26.783	188	

[a]open = 1, closed = 0
*p≤.10, **p≤.05, ***p≤.01,****p≤.001

Family income from the business. Differences between self-employed program participants and non-participants were examined to assess whether significant differences in earnings from the business existed. First, t-tests were conducted for the two self-employed groups independently to assess whether differences exist within group between 1991 and 1995 on family income from the business. Significant differences in average income from the business between 1991[10] and 1995 existed for program participants (t= -1.71, p≤.10) and non-participants (t= -4.17, p≤.001). That is, both groups (those with open businesses) made substantial gains in income drawn from their businesses.

Second, analysis of covariance (ANCOVA) was conducted to assess whether significant differences existed between groups in 1991 and again in 1995 on family income from the business. The assumption of homogeneity of regression slopes, for ANCOVA, was tested and met. As seen in tables 8 and 9, no significant differences were found in income from the business in 1991 (square root transformed) or 1995 (square root transformed) between groups.

Table 8. ANCOVA of Family Income from the Business in 1991 (square root) by Group (N=189)

Source	Type I SS	df	F
Corrected Model	2.995	2	3.707**
Intercept	575.867	1	1425.533****
Gender	2.654	1	6.571***
Group	**.341**	**1**	**.844**
Error	75.138	186	
Corrected Total	78.133	188	

*p≤.10, **p≤.05, ***p≤.01,****p≤.001

Table 9. ANCOVA of Family Income from the Business in 1995 (square root) by Group (N=92)

Source	Type I SS	df	F
Corrected Model	15.315	2	12.259****
Intercept	456.090	1	730.142****
Gender	14.230	1	22.780****
Group	**1.085**	**1**	**1.738**
Error	55.595	89	
Corrected Total	70.910	91	

*p≤.10, **p≤.05, ***p≤.01,****p≤.001

Third, ANCOVA was conducted to assess whether a significant difference existed between groups on change over time in family income from the business (logged). The assumption of homogeneity of regression slopes was met. As can be seen in Table 10, the change in income from the business between 1991 and 1995 did not vary significantly by group.

Table 10. ANCOVA of Change in Family Income from the Business (logged) by Group (N=91)

Source	Type I SS	df	F
Corrected Model	1.122	2	4.837***
Intercept	9244.317	1	79693****
Gender	1.094	1	9.434***
Group	**2.795E-02**	**1**	**.241**
Error	10.208	88	
Corrected Total	11.330	90	

*p≤.10, **p≤.05, ***p≤.01,****p≤.001

Poverty status. Whether groups differed in the rate of movement out of poverty was assessed through logistic regression. Among the sample, 249 (58 %) were still at or below 150 percent of poverty in 1995 and 182 (42%) had moved above that line. With program participants acting as the reference group, logistic regression (Table 11) predicted no significant difference between groups in the odds of movement out of poverty by 1995 when controlling for gender, presence of young children and age.

Table 11: Logistic Regression with Comparison Groups[a] to Predict the Likelihood of Exiting Poverty in 1995 (N=431)

Variable	**b**	**Std. Error**	**Wald Chi-Square[b]**
Gender	.055	.218	.065
Young Children	-.552	.213	6.689***
Age	-.029	.011	6.797***
(Participants)			
Non-participants	-.142	.305	.216
Wage workers	-.153	.272	.316

[a] program participants serve as the reference group
[b]Model chi-square: 10.74, df=5, p≤.05.
*p≤.10, **p≤.05, ***p≤.01,****p≤.001

A second logistic model was tested between program participants and non-participants only adding business status to the model to see if poverty status varied by whether or not the business was still operating in 1995. The model (table 12) was not significant. The poverty status of participants and non-participants did not vary significantly by whether or not the business was still open in 1995. So, while significant gains in income from the business between 1991 and 1995 were significant, it did not result in greater movement out of poverty than for those whose businesses had closed.

Table 12: Logistic Regression with Comparison Groups and Business Status to Predict the Likelihood of Exiting Poverty in 1995 (N=189)

Variable	b	Std. Error	Wald Chi-Square[a]
Gender	.197	.317	.387
Group[b]	-.010	.319	.001*
Business Status[c]	.523	.305	2.942

[a]Model chi-square: 3.68, df=.35, p=.30
[b]participants = 1, non-participants = 0
[c]open = 1, closed = 0
*p≤.10, **p≤.05, ***p≤.01,****p≤.001

DISCUSSION AND IMPLICATIONS

Findings reveal that all three groups on average made statistically significant gains in income over time at the household level. Those who remained in business in 1995 also saw significant gains in income drawn from the business between 1991 and 1995. However, less than half of the sample moved above 150% of poverty by 1995 and of those with businesses that remained open in 1995, only about one third exited poverty. The analysis suggests that microenterprise programs result in no significant gains for participants, compared to non-participants and low-wage workers in general. This conclusion is stated with some caution, as the sample is limited in size and generalizability. It is possible that unobservable differences between groups exist that are not accounted for through the matching process. Nonetheless, findings do cast some doubt on the effectiveness of microenterprise assistance programs as an anti-poverty strategy in the United States.

At the same time, participants in microenterprise assistance programs do not appear to have worse economic outcomes at the household level than low-income wage laborers or other self-employed individuals. While it appears that income gains from microenterprise are modest, at least in the short run, income generated from the business may play a vital role in a family's income package (Spalter-Roth, Zandniapour, Soto, 1994). Combining multiple sources of income is not unique to poor microenterpreneurs. Other studies have shown this to be a common strategy among poor households (Edin & Lein, 1997).

While unique affects of microenterprise may be questionable, the utility of such programs should not be prematurely disregarded. On the basis of equity, disadvantaged individuals who wish to enter self-employment should have a means of acquiring start-up capital. However, policy

initiatives aimed at wide scale poverty alleviation may be unwarranted and further research is needed.

If the goal of policy initiatives is to move poor families out of poverty then program and policy changes should be explored. More extensive and ongoing services to program participants may be required. Microenterprise initiatives should be carefully integrated with other policies to maximize poverty reduction (Servon, 1999). Policies that promote and enable low-income entrepreneurs to draw more income from their businesses, such as more lenient tax policies for low-income entrepreneurs are one possibility. Community and economic develop initiatives should also be mindful to create access to markets and facilitate patronage of small businesses. Microenterprise assistance programs, while instrumental in allowing low-income people to start and/or develop their businesses, may not be providing enough start-up funding, market knowledge, or skills training. Qualitative research with program participants suggests loan availability is limited, and ongoing individualized training is needed (Sherraden, Sanders, Sherraden, 1998).

What is perhaps most apparent from this study is that very few low-income workers, regardless of job sector, make economic gains and move out of poverty. All low-income workers can benefit from policy initiatives that promote economic progress and wellbeing. Microenterprise programs are likely to be only a small part of that support. Living wages, supplemental income support, expanded EITC at both federal and state levels, and benefits such as health insurance and retirement programs afforded to higher income workers are needed for low-income workers caught in employment with restricted mobility and earnings. The costs and outcomes associated with microenterprise programs should be carefully examined and weighed in relationship to other employment programs, poverty initiatives and safety net programs.

REFERENCES

Babbie, E. (1995). The practice of social research (7th ed.). Wadsworth Publishing Company.

Banerjee, M.M., (1998). Microenterprise development: A response to poverty. In Sherraden, M.S., & W.A. Ninacs (Eds.), Community development and social work, New York: Hayworth.

Becker, G.S. (1993). Human capital: A theoretical and empirical analysis, with special reference to education (3rd ed). Chicago: University of Chicago Press.

Benus, J.M, Johnson, T.B., Wood, M., Grover, N., & Shen, T.(1995). Self-Employment programs: A new reemployment strategy, Final Report of the UI Self-Employment Demonstration. Unemployment Insurance Occasional paper 95-4. U.S. Department of Labor

Blau, F.D., Ferber, M.A., & Winkler, A.E. (1998). The economics of women, men, and work. (3rd Ed.). Upper Saddle River, NJ: Prentice Hall.

Clark, P., Kays, A., Zandniapour, L., Soto, E., Doyle, K. (1999) Microenterprise and the poor: Findings from the self-employment learning project five year study of microentrepreneurs. Economic opportunities program, The Aspen Institute. Washington DC.

Clark, P. & Huston, T. (1993). Assisting the Smallest Businesses: Assessing Microenterprise Development as a Strategy for Boosting Poor Communities, , Self-Employment Learning Project, The Aspen Institute, An Interim Report, August 1993.

Dennis, W.J. Jr. (1998). Business regulation as an impediment to the transition from welfare to self-employment. Journal of Labor Research, 19 (2), 263-276.

Edin, K., & Lein, L. (1997). Making ends meet: How single mothers survive welfare and low wage work. New York: Russell Sage.

Elster, J. (1989). Nuts and bolts of the social sciences. Cambridge University Press.

Evans, D.S., & Leighton, L.S. (1989). Some empirical aspects of entrepreneurship. American Economic review, 79 (3), 519-535.

Fredland, J.E., & Little, R. (1985, Fall). Psychic income and self-employment. Journal of Private Enterprise, Fall, 121-126.

Gugliotta, G. (1993). Harvesting a living from seeds of credit: Anti-poverty strategy called microenterprise is growing in U.S. *Washington Post*, 6 May.

Hamilton, B.H. (1996). Does entrepreneurship pay? An empirical analysis of the returns of self-employment Olin School of Business, Washington University: Unpublished manuscript.

Hill, M.S. (1992). The panel study of income dynamics: A users guide. Newbury Park: Sage Publications.

Langer, J.A., Orwick, H.A. & Kays, A.J. (1999). Directory of U.S. Microenterprise Programs. Washington D.C: The Aspen Institute.

Meyerhoff, D. (1997). Federal funding opportunities for microenterprise programs. Journal of Developmental Entrepreneurship 2 (2), 99-109.

Neff, G (1996). Microcredit, microresults. Left Business Observer, 74.

Raheim, S. (1997). Problems and prospects of Self-Employment as an economic independence option for welfare recipients. Social Work 42 (1), 44-53.

Raheim, S. (1996). Microenterprise as an approach for promoting economic development in social work: Lessons from the self-employment investment demonstration., International Social Work, 39, 69-82.
Rossi, P.H. & Freeman, H.E. (1993). Evaluation: A systematic approach. Newbury Park, CA: Sage Publications.
Royse, D. (1991). Research methods in social work. Chicago, IL: Nelson-Hall Inc.
Schreiner, M. (1999c). A review of evaluations of microenterprise programs in the United States. Manuscript, Washington University in St. Louis, gwbweb.wustl.edu/users/schreiner/.
Schreiner, M. (1998). The context of microenterprises and for microenterprise programs in the United States and abroad. Manuscript, Washington University in St. Louis, gwbweb.wustl.edu/users/schreiner/.
Servon, L.J. (1999). Bootstrap capital: Microenterprise and the American poor. Brookings Institution: Washington DC.
Sherraden, M.S., Sanders, C.K., & Sherraden, M. (1998). From the eyes of the entrepreneurs: Microenterprise as an anti-poverty strategy. Research report , Wave four of the Self-Employment Learning Project. Conducted for The Aspen Institute. April.
Spalter-Roth, R., Soto, E., Zandniapour, L., (1994). Micro-enterprise and women: The viability of Self-employment as a strategy for alleviating poverty. Institute for Women's Policy Research, Washington D.C.
Tabachnick, B.G., & Fidell, L.S. (1996). Using multivariate statistics. New York: HarperCollins.
Taub, Richard P. (1998, Summer). Making the adaptation across cultures and societies: A report on an attempt to clone the Grameen Bank in southern Arkansas. Journal of developmental entrepreneurship, 3 (1), 53-69.

NOTES

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[1] Wave four of SELP was conducted by the Center for Social Development at Washington University in St. Louis, MO. Original data from other waves of SELP that were acquired from the Aspen Institute had some limitations. Among the limitations were some missing data and outliers sometimes due to data entry errors. Efforts were made by the research team at CSD to correct data errors. These included going back and reviewing all of the original handwritten surveys; completing as many missing values as possible and correcting entry errors. CSD staff worked with The Aspen Institute staff to confirm these values. Thus, the data used in this study maybe somewhat different from data used in some published reports on SELP by the Aspen Institute and others.

[2] At the time of the study, early release data (rather than final release data) for 1995 were available and used in this study.

[3] Workers who reported farm income were excluded.

[4] SELP and PSID measure family income slightly differently. Attempts are made to make measures as comparable as possible. Adjustments are made by SELP conventions, as this is what determined SELP participant's poverty subgroup inclusion. For example, SELP includes amount of Food Stamps received in their total family income figure. PSID does not, but does include a measure of Food Stamp receipt. The dollar amount in Food Stamps is thus added to PSID total family income figure.

[5] SELP and PSID measures are somewhat different. SELP respondents were asked to report how much money they paid themselves, spent on family expenses, or took as owners draw. SELP did not factor into this business profit or loss. PSID on the other hand groups personal income taken from the business with business profit. This figure is split between labor part of business income and asset part of business income. While the figure is split according to PSID conventions, the combination of both in many cases represents family income derived from the business. The combined figure is used in this study. If a business loss was reported, income from the business was set at zero (this retains consistency with SELP measures), unless the respondent then went on later to report wages earned from self-employment. Some PSID respondents did not report business income through the labor part business income and asset part business income variables. Rather, some respondents reported earnings from a business when asked about their various jobs and earned income from those jobs. Many low-income workers reported earnings from self-employment, even though they did not report labor and asset part business incomes. Family income from the business in these cases is based on the wages reported from self-employment. Because income from the business is measured slightly different between groups, the change in income from the business between 1991 and 1995 will be of most interest.

[6] Cases that were slightly above the 150% of poverty line in 1991, are counted as moving out of poverty if they experienced at least a .04 gain in income to needs ratio, as this is the minimum change between 1991 and 1995 in income to needs ratio among those moving from 150% of poverty or below to above 150% of poverty.

[7] Respondents who report being married or living with a significant other are counted as married. Respondents, who report being divorced, separated, or never married are counted as not married.

[8] 1991 dollars are adjusted to 1995 dollars to assess for real difference between 1991 and 1995.

[9] Only gender is used as a covariate, as this is the only factor that differs between participants and non-participants.

[10] 1991 dollars are adjusted to 1995 dollars to assess for real difference between 1991 and 1995.