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## **Are self-employment training programs effective? Evidence from Project GATE**

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# Are Self-Employment Training Programs Effective?

## Evidence from Project GATE†

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### Abstract

This paper presents new evidence on the efficacy of self-employment training programs using data from Project GATE (Growing America Through Entrepreneurship). Project GATE was an experimental design demonstration program that offered free self-employment training to a random sample of individuals who expressed a strong interest in self-employment. Our analyses show that the program was very effective in assisting unemployed participants start their own business, leading to significant gains in self-employment and overall employment in the early months following program participation. These impacts, however, dissipated over time. Despite the program's impact on the rapid reemployment of unemployed participants, the program did not lead to significant gains in total earnings. Moreover, our analyses provide no evidence that the program was effective for participants who were employed, self-employed, or not in the labor force at the time of application.

Keywords: self-employment, small business, unemployment, workforce development, training, SEA, Project GATE.

JEL Classifications: H4, J6, L2.

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## **Introduction**

In the past 20 years, the potential of self-employment training programs as a reemployment tool for the unemployed has received a great deal of attention from U.S. policymakers. In the early 1990s, the U.S. Department of Labor (DOL) funded two experimental design demonstration programs: the Washington Self-Employment and Enterprise Development program and the Massachusetts Enterprise Project. These programs provided self-employment training and monetary assistance to a random sample of unemployed workers interested in self-employment. Benus et al. (1995) showed that program participants experienced significant gains in self-employment, wage and salary employment, and earnings. The study concluded that self-employment programs are an effective reemployment policy tool and should be incorporated into the U.S. workforce development system.

With the passage of the North America Free Trade Agreement (NAFTA) Implementation Act in 1993, Congress authorized states to establish self-employment assistance (SEA) programs for a 5-year period. SEA programs offered free self-employment training to Unemployment Insurance (UI) recipients interested in pursuing self-employment; recipients who chose to participate remained eligible to receive UI benefits and were exempt from work search requirements. Based on a report documenting early evidence on the implementation and potential benefits of these programs (Vroman, 1997), Congress permanently authorized SEA programs in 1998. To our knowledge, there have not been any rigorous studies of the effectiveness of SEA programs. But a large study funded by DOL (Kosanovich et al., 2002) showed that UI recipients who chose to participate in SEA programs in Maine, New Jersey, and New York were significantly more likely to become self-employed and had higher total income following program participation than their peers.

As of 2002, 11 states passed SEA-enabling legislation, but only Delaware, Maine, Maryland, New Jersey, New York, Oregon, and Pennsylvania were actually implementing an SEA program. During the same year, more than 600 microenterprise programs in the U.S. provided financing subsidies, assistance with government procurement, and business counseling to small businesses (Walker and Blair, 2002). Among these programs were 55 Federal government programs providing small business subsidies, many supported by the Small Business Administration (SBA). Although there is some research on the outcomes of small businesses receiving assistance from Federal microenterprise programs, the research does not provide rigorous evidence on program impacts due to lack of appropriate comparison groups (MacKernan and Chen, 2005).

Interest in self-employment programs has also grown in other developed and developing countries. A number of countries have established national programs to assist unemployed workers pursue self-employment as part of their Active Labor Market Programs. The British Enterprise Allowance Scheme, for example, provides a weekly allowance to unemployed individuals while they attempt to start a business; the Chomeurs Createurs program in France assists unemployed individuals to start a business by providing them start-up capital through a lump-sum payment in lieu of unemployment benefits (Elias and Whitfield, 1987; Benus, 1994; Meager, 1996). In Germany, the Start-Up Subsidy and Bridging Allowance programs provide periodic payments to unemployed individuals interested in starting their own business (Caliendo and Steiner, 2007; Baumgartner and Caliendo, 2008). Belgium, Denmark, Hungary, Italy, Poland, Spain, and New Zealand have implemented similar programs (Meager, 1996; O'Leary et al., 1998; Cueto and Mato, 2006; Perry, 2006; Wandner, 2008).

There have been a few evaluations of self-employment programs implemented in these countries, which provided promising evidence on their effectiveness in promoting new business starts and self-employment for unemployed workers. However, none of the existing studies involved the use of a rigorous experimental design; typically, the studies relied on non-experimental techniques to estimate program impacts (Meager, 1996; Perry, 2006; Baumgartner and Caliendo, 2008; Cueto and Mato, 2009). Moreover, as most of the existing self-employment programs only target unemployed individuals, these evaluations focused on the efficacy of these programs for the unemployed. To our knowledge, none of the studies examined the efficacy of such programs for non-unemployed individuals interested in self-employment.

This paper provides new evidence on the efficacy of self-employment training programs using data from Project GATE (Growing America Through Entrepreneurship). Project GATE is a recent experimental design demonstration program implemented in the U.S., which offered free self-employment training to a random sample of individuals who expressed a strong interest in self-employment. Project GATE accepted applications from all interested individuals – unemployed, employed, self-employed, and not in the labor force. The program’s design provides a unique opportunity to rigorously assess the effectiveness of self-employment training programs for unemployed individuals, who are the usual target of such programs, and for other individuals (employed, self-employed, and not in the labor force).

The remainder of this paper examines the impact of Project GATE on the following outcomes: likelihood of starting a new business, likelihood of self-employment in a new business, self-employment, salary employment, overall employment, and earnings. Section 1 describes the Project GATE design, including the program’s outreach campaign, the application process, random assignment, and the services offered to treatment group members. Section 2

provides an overview of the characteristics of program applicants and how these compare to the characteristics of the U.S. labor force and self-employed workers. Section 3 discusses the implementation of random assignment and Section 4 presents the labor market outcomes of unemployed and other program applicants. Section 5 presents our impact analyses and analyses of the sensitivity of our impact estimates. Finally, in Section 6, we summarize the findings and discuss policy implications.

## **1. Project GATE Overview**

In 2002, DOL partnered with the SBA to sponsor Project GATE, an experimental design demonstration program that offered an array of free training and counseling services to individuals interested in self-employment. The objective of this demonstration program was to assess the efficacy of offering free self-employment training through the public workforce development system to all individuals interested in self-employment (Benus et al., 2009). DOL implemented Project GATE from 2003 through 2005 in Pennsylvania, Minnesota, and Maine. Interested individuals registered for the program in seven designated One-Stop Career Centers (Philadelphia, Pittsburgh, Minneapolis/St. Paul, and northern Minnesota, and three sites in Maine).<sup>1</sup> Project GATE included an outreach campaign to identify and recruit individuals interested in self-employment, with One-Stop Career Centers serving as focal points of recruitment. Program sites advertised the program through brochures, fliers, and posters. Additionally, the outreach campaign included a website, a mass media marketing campaign

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<sup>1</sup> One-Stop Career Centers are designed to provide the full range of available public workforce development system services for job seekers, including UI application assistance, job training referrals, career counseling, job listings, and labor market information. One-Stop Career Centers were established under the Workforce Investment Act of 1998 (Public Law 105-220) and are coordinated by DOL.

(advertisements, media events, and public service announcements), and networking with local organizations and Government agencies.<sup>2</sup>

Following registration, individuals received an invitation to attend a mandatory orientation meeting at a designated One-Stop Career Center. To ensure that all potential applicants received consistent information, the orientation meeting included a video detailing the important features of Project GATE. The video provided information on the benefits and risks of self-employment, the application process, the random assignment process, and the services available through Project GATE for those randomly selected to participate. Following the orientation meeting, people wishing to participate in Project GATE had to complete an extensive application form. The application form included demographic characteristics, employment status, self-employment experience, and personal financial information. The application also included an informed-consent statement indicating that the applicant understood that only half of the applicants will be selected to receive GATE services and that selection will be based on a random process.

The required orientation and rigorous application process was designed to attract applicants who were willing to make a substantial effort to reach the random selection phase. Thus, this process ensured that program applicants had a strong interest in self-employment. A total of 4,198 individuals applied for Project GATE; 2,095 were randomly assigned to the treatment group and 2,103 were assigned to the control group. Project GATE thus represents the largest experimental design self-employment program implemented in the U.S., surpassing the 2,729 total applicants in the early 1990s demonstration programs in Washington and Massachusetts (Benus et al., 1995). Project GATE applicants assigned to the treatment were offered program services; those assigned to the control were not offered GATE services, but were free to seek services elsewhere.

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<sup>2</sup> For more details on the outreach campaign for Project GATE, see Bellotti et al. (2006), pp. 37-52.

Program services were designed to help treatment group participants gain a better understanding of the process of starting and operating a new business and to inform them of various business financing options (Bellotti et al., 2006; Benus et al., 2009). Following random assignment, treatment group members were invited to an individual assessment session with a business counselor. The objective of this assessment was for the counselor to recommend available program services that best met the participant's needs. Treatment group members were then offered an array of training courses about the different aspects of starting and operating a business, including developing a business plan, financing, marketing, hiring staff, and various legal issues. There were also advanced courses that covered topics such as business growth strategies, business planning, and customer relations. Additionally, the program offered a business counseling session that provided an opportunity for participants to meet one-on-one with a business counselor to discuss their business idea, receive help producing or refining their business plan, and obtain information on various financing sources, including the SBA MicroLoan program.

Findings from the Project GATE Interim Report (Bellotti et al., 2006) indicated that 90 percent of treatment group members attended the individual assessment session. Furthermore, approximately three-quarters (76 percent) of all treatment group members received program services: 42 percent attended training courses and received the business counseling session; 13 percent only attended training courses; and 21 percent received only the business counseling session. Overall, the average treatment group member received 13.0 hours of Project GATE services – 1.2 hours for the individual assessment, 10.5 hours to attend various training courses, and 1.3 hours for the business counseling session. Project GATE did not provide any monetary support or loans to program participants.



Local service providers, selected through a competitive process, provided Project GATE services. Interested service providers submitted capabilities statements, exhibiting their experience and capacity for providing self-employment services. Based on this information, five SBA Small Business Development Centers and nine nonprofit community-based organizations were selected to provide program services. These organizations provided experienced business counselors, who conducted the individual assessment and business counseling sessions, and the training courses. The average Project GATE cost per treatment group participant was \$859 (Benus et al., 2009). This average cost included the marketing costs for recruiting applicants, the amounts paid to service providers for providing program services, and all other costs related to providing services to program participants.

## **2. Characteristics of Project GATE Applicants**

Project GATE outreach efforts were designed to reach a broad group of individuals interested in obtaining self-employment assistance. However, since One-Stop Career Centers played a major role in the outreach effort, customers of the public workforce development system comprised a key target group for applicant recruitment. As a result, program applicants may not be broadly representative of all individuals interested in self-employment. To shed light on the representativeness of the Project GATE sample, Table 1 presents the characteristics of the U.S. labor force, the self-employment population, and Project GATE applicants.<sup>3</sup>

As shown in Table 1, the gender distribution of applicants mirrored the gender distribution of the U.S. civilian labor force in 2003: 54 percent men and 46 percent women. Women, however, accounted for only 34 percent of the self-employed in the U.S., indicating women were more likely to apply for Project GATE relative to their representation in the self-employed population.

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<sup>3</sup> The characteristics of the U.S. labor force and the self-employed population are from 2003 to correspond to the start of the program's implementation period.

The proportion of black applicants greatly exceeded the proportion of blacks in the labor force and in the self-employed population, indicating the program attracted a disproportionately high number of black applicants. Table 1 also shows that program applicants were younger than the self-employed population; 57 percent of applicants and 44 percent of the self-employed were younger than 45 years old. We also see that a lower proportion of program applicants had a high school diploma or lower education relative to labor force participants and the self-employed. Moreover, a higher proportion of program applicants were in the lowest household income bracket than labor force participants and the self-employed population.

The employment status of program applicants relative to the employment status of U.S. labor force participants is of particular interest. As shown in Table 1, 7 percent of the U.S. civilian labor force was unemployed in 2003 relative to 43 percent of Project GATE applicants. The high proportion of unemployed applicants may be due to a variety of factors, including the fact that One-Stop Career Centers were the focal point for outreach. This is also an indication that the unemployed had a strong interest in pursuing self-employment. The remaining program applicants were employed in a salary job (28 percent), self-employed (16 percent), or not in the labor force (13 percent) at the time of application. This employment status distribution of applicants distinguishes Project GATE from other self-employment training programs implemented in the U.S. and in other countries, which typically target the unemployed.

Table 2 presents selected characteristics of applicants who were unemployed at the time of application and of other applicants (employed, self-employed, and not in the labor force). The results indicate only minor differences across the four groups. For example, unemployed applicants were slightly more likely to be male than the other applicant groups. Unemployed applicants had similar age distribution as self-employed and not in the labor force applicants, but

were less likely than employed applicants to be in the two lower age categories. Only small differences appeared in the educational attainment distribution.

Only about a quarter of unemployed, employed, and not in the labor force applicants had previous self-employment experience indicating that many applicants lacked self-employment background and experience at the time of application. Lack of prior self-employment experience has been cited as an important obstacle in pursuing self-employment (Hout and Rosen, 2000; Dunn and Holtz-Eakin, 2000; Fairlie and Robb, 2007). Moreover, only about a fifth of unemployed applicants had a business plan at the time of application relative to 23 percent of employed and not in the labor force applicants and 29 percent of self-employed applicants.

Furthermore, nearly half of all applicants had poor credit history at the time of application and nearly half of all applicants received financial support from family members while pursuing self-employment. Most applicants in all four groups had annual household income of less than \$75,000 at the time of application. These figures suggest that many applicants likely had limited access to credit at the time of application, a major impediment in starting and sustaining a business (Blanchflower et al., 2003; Cavalluzzo and Walken, 2005).

### **3. Random Assignment**

Upon application, applicants were randomly assigned to the treatment or to the control group; of the 4,198 total applicants, 2,095 were assigned in the treatment and 2,103 were assigned in the control. To establish that random assignment (RA) of applicants was rigorously implemented, we produced a treatment-control means comparison of all available applicant characteristics at the time of application. Using t-tests, we found no statistically significant differences in available

characteristics between treatment and control group members.<sup>4</sup> Furthermore, we estimated a linear regression model where the dependent variable was the likelihood of being assigned in the treatment group and covariates included all available applicant characteristics. We estimated three versions of this model: using all program applicants, using only unemployed applicants, and using only other applicants. Regression results (available upon request) show that none of the estimated parameters was statistically significant, indicating RA was rigorously implemented.<sup>5</sup>

Finally, we employed multivariate analysis of variance (MANOVA) tests to assess whether treatment and control group members were similar in observed characteristics and in the interactions of those characteristics. We produced the MANOVA F-statistic for each applicant group (i.e., all applicants, unemployed applicants, and other applicants).<sup>6</sup> The null hypothesis is that there were no treatment-control group differences in characteristics and in the interactions of those characteristics. The MANOVA F-statistic for all program applicants was 0.89 with a p-value of 0.632, indicating that the null hypothesis cannot be rejected. Similarly, the MANOVA F-statistic for unemployed (0.79) and other applicants (0.87) produced p-values of 0.748 and 0.613, respectively, so we cannot reject the null hypothesis for these two groups. These results provide confidence that applicants were successfully randomized to the treatment group, thus any differences in post-RA outcomes between treatment and control group members can be attributed to the program.

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<sup>4</sup> These tests were produced for all applicants; for unemployed applicants only; and for other applicants only. Results are available upon request.

<sup>5</sup> Similar results were obtained when we estimated these models using logistic or probit regression models.

<sup>6</sup> The MANOVA F-test can be produced based on four statistics: 1) Wilks' lambda, 2) Lawley-Hotelling trace, 3) Pillai's trace, and 4) Roy's largest root. The four methods produced identical F-statistics and p-values.

#### **4. Applicant Responses to Follow-Up Surveys**

Three follow-up surveys, conducted 6 months (Wave 1), 18 months (Wave 2), and 60 months (Wave 3) after RA, documented applicants' post-RA labor market outcomes. Of the 4,198 applicants, 3,449 (or 82 percent) responded to the Wave 1 survey; 88 percent of Wave 1 respondents also responded to the Wave 2 survey; finally, 81 percent of Wave 2 respondents responded to the Wave 3 survey for a 58 percent cumulative 60-month response rate.

While the response rate at each survey exceeded 80 percent, reasonable concerns remain about potential cumulative non-response bias. A careful analysis of applicant characteristics shows that the characteristics of applicants at RA were nearly identical to the characteristics of the respondents at each survey (see Appendix Table A). This indicates that survey non-response did not lead to substantial changes in the characteristics distribution of program applicants. Furthermore, we produced MANOVA tests to assess whether there were disparities in characteristics between treatment and control group respondents at each survey; we did not find any significant treatment-control differences in the three follow-up surveys.<sup>7</sup> These analyses indicate that the treatment-control balance in observable characteristics was maintained for each group of program applicants, mitigating concerns about survey non-response bias.

Using responses to the three surveys, we constructed the following outcomes: started a new business between RA and the time of the survey; self-employed at the time of the survey in a business started within six months of RA; self-employed at the time of survey; employed in a salary job at the time of survey; and employed (i.e., self-employed or employed in a salary job) at the time of the survey. Table 3 presents these outcomes for unemployed and other applicants.

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<sup>7</sup> MANOVA F-statistics were produced for all applicants (p-values: Wave 1 = .789; Wave 2 = .777; and Wave 3 = .659), unemployed applicants only (p-values: Wave 1 = .664; Wave 2 = .479; and Wave 3 = .683), and other applicants only (p-values: Wave 1 = .533; Wave 2 = .780; and Wave 3 = .775).

As shown in Table 3, 22 percent of unemployed applicants and 15 percent of other applicants started a new business by Wave 1 (i.e., within 6 months of RA). As the right column of Table 3 shows, the difference was 6.9 percentage points and statistically significant. An additional 14 percent of unemployed and 12 percent of other applicants started a new business between Wave 1 and Wave 2. As a result, unemployed applicants were 8.5 percentage points more likely than their peers to start a new business by Wave 2 (i.e., within 18 months of RA). Similarly, unemployed applicants were 5.8 percentage points more likely than their peers to start a new business by Wave 3 (i.e., within 60 months of RA).

As shown in Table 3, of the 331 unemployed applicants who started a new business within six months of RA, 316 were self-employed in that business at Wave 1. As a result, 21 percent of unemployed applicants were self-employed at Wave 1 in a business started within six months of RA. About 18 percent and 13 percent of unemployed applicants were self-employed in a business started within six months of RA at Wave 2 and at Wave 3, respectively. These proportions significantly exceeded those of other applicants at each survey, reflecting the fact that unemployed applicants were more likely than others to start a new business following RA. A closer look at the numbers shows that, among those who started a new business within six months of RA, unemployed applicants were slightly more likely than other applicants to be self-employed in that business 18 and 60 months after RA.

Unemployed applicants were less likely to be self-employed at each survey relative to other applicants, despite the fact that they were more likely to become self-employed in a new business. The reason is that unemployed applicants can only become self-employed in a business started after RA, while other applicants can be self-employed in new business or in a business

they owned at RA.<sup>8</sup> In contrast, unemployed applicants were significantly more likely than other applicants to be employed in a salary job at the time of each survey. Finally, Table 3 shows unemployed applicants were 8.7 percentage points less likely to be employed (i.e., self-employed or in a salary job) at Wave 1 relative to other applicants. This gap was lower at Waves 2 and 3.

Survey respondents also provided information on their personal earnings at the time of each survey – these are reported in Table 4. Unemployed applicants had lower self-employment earnings at Wave 1 than other applicants, but there were no statistically significant differences in self-employment earnings at Waves 2 and 3. There was also no statistically significant difference in salary earnings or total earnings (i.e., self-employment earnings plus salary earnings) between unemployed and other applicants at Wave 1. Interestingly, unemployed applicants experienced a steeper growth in salary earnings and total earnings over time than their peers; as a result, at Waves 2 and 3, unemployed applicants had higher salary and total earnings than other applicants.

## **5. Impact Analyses**

The primary objective of this paper is to estimate Project GATE’s impacts on the post-RA outcomes of unemployed and other participants. Our focus is to estimate the program’s intent-to-treat effect on participant outcomes, that is, the effect of being offered Project GATE services.<sup>9</sup> Below, we first present preliminary estimates of the program’s impacts by comparing the post-RA outcomes between treatment and control group members; these analyses are produced separately for unemployed and for other participants. To refine our impact estimates, we then use linear regression models that estimate program impacts controlling for available characteristics. We then discuss a number of empirical exercises that assess the sensitivity of our

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<sup>8</sup> As shown in Table 2, 657 (or 28 percent) of other applicants were already self-employed at application.

<sup>9</sup> From this point on, *treatment effect* or *impact* refers to the *intent-to-treat effect*.

analyses, including: 1) examine if the program was effective for one or more of the participant groups in the “other participants” category (employed, self-employed, and not in the labor force), 2) examine if program impacts differed across key participant characteristics, 3) test sensitivity of results to the use of linear regression models instead of logistic or probit models for dichotomous outcomes, and 4) test sensitivity of results to survey non-response attrition.

### ***Impact Estimates Using Treatment-Control Differences***

Our previous analyses provide confidence that the program successfully implemented RA of applicants to the treatment or to the control group. Consequently, a treatment-control means comparison in post-RA outcomes provides consistent preliminary estimates of Project GATE’s impacts. Table 5 presents these comparisons for applicants who were unemployed at the time of application.

As shown in Table 5, Project GATE led to significant gains in the likelihood of starting a new business for unemployed participants immediately following RA. About 27.4 percent of unemployed in the treatment and 16.9 percent of unemployed in the control started a new business by Wave 1; the 10.5 percentage-point difference was statistically significant. The treatment-control group differential in the likelihood of starting a new business slightly declined over time but remained statistically significant – 8.8 percentage points at Wave 2 and 7.6 percentage points at Wave 3. The small decline in the treatment-control gap over time suggests that the program’s impact on starting a new business occurred within six months of RA; there was no positive treatment-control group differential in new business starts following Wave 1.<sup>10</sup>

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<sup>10</sup> In fact, a comparison of Wave 3 and Wave 1 new business starts proportions shows that 23.2 percent of unemployed in the treatment and 26.1 percent of unemployed in the control started their new business between Wave 1 and Wave 3.



As a result of the program's large impact on starting a new business soon after RA, unemployed participants were significantly more likely than their peers to become self-employed in a business started within six months of RA. Specifically, unemployed in the treatment were 10.0 percentage points more likely than their peers to be self-employed at Wave 1 in a business started within six months of RA. This significant effect declined over time, but remained statistically significant – 7.9 percentage points at Wave 2 and 6.6 percentage points at Wave 3. Since unemployed applicants could only become self-employed in a business started following RA, the treatment-control difference in the likelihood of self-employment at Wave 1 was identical to the treatment-control difference in the likelihood of self-employment at Wave 1 in a business started within six months of RA. The program's effect on self-employment followed a declining pattern over time but remained statistically significant at Wave 2 and at Wave 3. This decline is associated with the fact that, following Wave 1, there was no positive program impact on new business starts while there was a slight reduction in the program's impact on the likelihood of self-employment in a business started within six months of RA.

Table 5 shows that the program had no impact on the likelihood of employment in a salary job for unemployed participants at Wave 1 or at Wave 2; however, there was a marginal treatment-control group negative differential in this outcome at Wave 3. We also find that, due to the program's impact on self-employment, unemployed in the treatment group were 7.1 percentage points more likely than their peers to be employed (i.e., self-employed or employed in a salary job) at Wave 1. However, no statistically significant differences in employment appear at Wave 2 and Wave 3. This reflects the fact that following Wave 1, treatment-control positive differentials in self-employment declined and were offset by marginal treatment-control negative differentials in salary employment. Our comparisons also show Project GATE had a

marginally significant impact on self-employment earnings for unemployed applicants at Wave 1 and at Wave 3. However, there is no evidence that unemployed participants experienced gains in salary earnings or total earnings following RA.

Table 6 presents the treatment-control comparisons in post-RA outcomes for other applicants (i.e., employed, self-employed, or out of the labor force at the time of application). For these applicants, no significant treatment-control differences appeared in the likelihood of starting a new business, the likelihood of becoming self-employed in a new business, self-employment, salary employment, and overall employment. Furthermore, there is no evidence indicating non-unemployed participants experienced gains in total earnings following RA.

These preliminary estimates are consistent with the treatment-control group comparisons reported in the final evaluation report of Project GATE (Benus et al., 2009). That report showed that Project GATE was effective in assisting unemployed participants become self-employed, but did not lead to significant impacts on total earnings; no impacts were detected for non-unemployed participants. The report did not present treatment-control comparisons of new business starts or self-employment in a business started within six months of RA. The Project GATE evaluation report concluded that the program was an effective intervention for assisting unemployed participants become self-employed.

### ***Regression-Adjusted Impact Estimates***

To refine our impact estimates, we used regression models that estimated the program's impacts while controlling for available applicant characteristics. These models allow us to eliminate any treatment-control differences in outcomes that may result from differences in observed characteristics and to assess whether the program had a differential impact for

unemployed and other participants. For each post-RA outcome, we estimated the following regression model:

$$Y_i = \alpha \cdot T_i + X_i \cdot \beta + \gamma \cdot T_i \cdot UNEMP_i + e_i$$

The dependent variable is the post-RA outcome for participant  $i$  ( $Y_i$ ).<sup>11</sup> The first control variable is  $T_i$ , a dummy indicating whether applicant  $i$  was in the treatment group. The model also controls for the program site and all available applicant characteristics ( $X_i$ ), including  $UNEMP_i$ , a dummy indicating whether applicant  $i$  was unemployed at application. The model includes the  $T_i \cdot UNEMP_i$  interaction, which indicates whether applicant  $i$  was in the treatment group and unemployed at application. The parameter of  $T_i$  ( $\alpha$ ) is the baseline treatment effect, while the parameter of the  $T_i \cdot UNEMP_i$  interaction ( $\gamma$ ) is the additional treatment effect for unemployed participants.

We estimated each regression model by weighted least squares, using weights reported in the data to adjust for the potential of survey non-response bias.<sup>12</sup> Table 7 reports the two parameters of interest,  $\alpha$  and  $\gamma$ , for the following dependent variables: likelihood of starting a new business, likelihood of self-employment in a business started within six months of RA, likelihood of self-employment, likelihood of employment in a salary job, and likelihood of employment.<sup>13</sup> The right column of Table 7 reports the treatment effect for unemployed participants on each

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<sup>11</sup> For convenience, we use linear regression models to estimate program impacts on participant outcomes. For dichotomous outcomes, we also estimated program impacts using logistic and probit models – these results are discussed in the *Sensitivity Analyses* section below.

<sup>12</sup> Survey non-response weights were designed to adjust for treatment-control differences in survey non-response. These weights were constructed based on all available applicant socioeconomic characteristics (e.g., gender, race, ethnicity, education, age, employment status, etc.) at the time of application. See Benus et al. (2009) for a detailed description of the methodology used to construct the weights. Note that we did not find any significant differences between impact estimates based on weighted least squares models and impact estimates based on least squares models without weights.

<sup>13</sup> Complete regression results are reported in Appendix Tables B through F.

outcome ( $\alpha + \gamma$ ) and, where this effect is significant, the treatment effect expressed as a percentage of the outcome's control group mean for unemployed participants.

As Table 7 shows, Project GATE significantly increased the likelihood of starting a new business following RA for unemployed participants, but had no impact for other participants. For example, the baseline treatment effect at Wave 1 was .021 but statistically insignificant, whereas the interaction treatment effect for the unemployed was .080 and significant. The total treatment effect for the unemployed was 10.1 percentage points and significant at the 1 percent level. Dividing the total treatment effect by the control group mean likelihood of starting a new business for unemployed participants (16.9 percent, see Table 5), we find that the program led to a 60 percent increase in this outcome for unemployed participants. The program's impact on the likelihood of starting a new business for unemployed participants declined over time (8.8 and 6.5 percentage points by Wave 2 and by Wave 3, respectively), but remained statistically significant.

Our results also show that, due to the program's large impact on starting a new business in the early months following RA, the program was very effective in assisting unemployed participants become self-employed in a business started within six months of RA. Specifically, unemployed participants experienced a 9.7 percentage-point (or 60 percent) increase in the likelihood of being self-employed at Wave 1 in a business started within six months of RA. Moreover, the program led to a 54 percent and a 53 percent increase in this outcome for unemployed participants 18 months and 60 months following RA. In contrast, the program had no significant impact on this outcome for non-unemployed participants.

These results show that the program was quite effective in assisting unemployed participants start their own business and become self-employed soon after RA, but had no similar impacts for non-unemployed participants. A number of underlying factors may cause these disparities. For

example, unemployed participants likely had a lower opportunity cost to start their own business and become self-employed in the early months following RA relative to participants employed in a salary job or those already self-employed at application.<sup>14</sup> Furthermore, many unemployed participants had no self-employment experience and limited access to credit, both major obstacles in pursuing self-employment. Project GATE services were designed to assist participants overcome these obstacles. Therefore, it appears likely that, as a result of the low opportunity cost to pursue self-employment combined with the effectiveness of program services in overcoming lack of self-employment experience and limited access to financing, unemployed participants were more likely than their peers to benefit from program participation.

Due to the program's impact on new business starts and on self-employment in a business started within six months of RA, unemployed participants experienced significant increases in self-employment, even five years after RA. Specifically, Project GATE increased self-employment for the unemployed by 59 percent at Wave 1, 24 percent at Wave 2, and 16 percent at Wave 3. Notably, the program's impact on self-employment declined over time, reflecting the fact that, following Wave 1, the program had no effect on new business starts while the program's effect on the likelihood of self-employment in a business started within six months of RA declined. Again, the baseline treatment effects were not statistically significant, indicating there was no impact on self-employment for non-unemployed participants.

There is no evidence the program had an effect on salary employment for unemployed or other participants. But, our results show that Project GATE led to a 9.5 percentage-point (or 11 percent) increase in the Wave 1 employment likelihood for unemployed participants. This

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<sup>14</sup> The view that unemployed workers may have a low opportunity cost to pursue self-employment is hardly a new concept. Previous research suggests that, due to lack of acceptable employment options, unemployed workers may view self-employment as the best alternative to return to productive employment (Meager, 1992; Bates and Servon, 2000; Rissman, 2003; Glocker and Steiner, 2007).

impact is directly tied to the program’s impact on the likelihood of self-employment at Wave 1 for unemployed participants. However, partly due to the declining program impact on self-employment, the program did not have a statistically significant impact on total employment for unemployed participants at Wave 2 and at Wave 3.

Table 8 reports the treatment effects for self-employment earnings, salary earnings, and total earnings.<sup>15</sup> Our results show that Project GATE had a positive impact on self-employment earnings of unemployed participants at Wave 1, but no significant impacts at Waves 2 and 3. We also find that the program did not have any significant impacts on salary earnings and total earnings for unemployed participants. These results indicate that, although Project GATE was effective in assisting unemployed participants return to productive employment earlier than they would in the absence of the program, it did not have any impact on their total earnings. Furthermore, there is no evidence the program led to any significant impacts on total earnings for non-unemployed participants.

### *Sensitivity Analyses*

Our impact analyses show that the program had positive impacts for unemployed participants but no impacts for other participants. However, it is possible that the program was effective for one or more of the groups in the ‘other participants’ category (i.e., employed in salary job, self-employed, and not in the labor force). To examine this possibility, we re-estimated our regression models, allowing for differential treatment effects for unemployed, self-employed, and not in the labor force participants. Specifically, we included in each model treatment interaction terms for unemployed, for self-employed, and for non-labor force participants. Our analyses (available upon request) show that none of the estimated treatment effects were

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<sup>15</sup> Complete regression results are reported in Appendix Tables G through I.

statistically positive for participants who were employed, self-employed, and not in the labor force at the time of application. These analyses confirm that the program was not effective for any of these participant groups.

There is a reasonable concern that there may be variation in program impacts across key participant characteristics. If such variation exists, omitting interactions between key characteristics and the treatment from the impact analyses could produce biased treatment effects for unemployed and other participants. Therefore, it is important to test if program impacts varied by key participant characteristics such as education, self-employment experience, business plan, credit history, income, and program site. We estimated numerous models that, in addition to the treatment-unemployed interaction, included interactions between key characteristics and the treatment. In some models, we included treatment interactions for a single characteristic (e.g., self-employment experience, credit history, etc.) and in other models we included treatment interactions with multiple characteristics (e.g., self-employment experience and business plan, self-employment experience and credit history, etc.). Our results show that the program's treatment effect did not vary across participant key characteristics or across combinations of these characteristics; thus, the reported program impacts for unemployed participants were not biased by omitted treatment-characteristics interactions.

To produce the regression-adjusted treatment effects for unemployed and other participants we used linear regression models, which are easier to interpret, especially since interaction terms are involved. This may raise concerns that the impact estimates for dichotomous outcomes (e.g., start a new business, self-employment, etc) were influenced by the choice of a linear regression model instead of a logistic or a probit model. To eliminate these concerns, we also estimated program impacts on dichotomous outcomes using logistic and probit models. Our results

(available upon request) show that the baseline treatment effects (i.e., the treatment effects for non-unemployed participants) were not statistically significant for any of the dichotomous outcomes. Furthermore, the treatment effects for unemployed participants were statistically significant and similar in size to the impact estimates obtained using linear regression models. These results indicate that there are no significant differences in the impact estimates for dichotomous outcomes across the three estimation methods.

Finally, one important concern about the validity of our impact analyses is whether sample attrition may be causing some of the treatment-control group differences in outcomes for unemployed participants. To mitigate these concerns, we showed that: 1) the characteristics distribution of respondents to each survey reflected the characteristics distribution of all program applicants and 2) there were no differences in characteristics between treatment and control group respondents to each survey. Furthermore, we estimated program impacts using weights that account for treatment-control group differences in survey non-response based on all available applicant characteristics. To produce additional evidence that sample attrition did not taint our impact estimates, we estimated program impacts at Wave 1 using data only for those who responded to Wave 2; furthermore, we estimated program impacts at Wave 1 and at Wave 2 using data only for those who responded to Wave 3. These results (available upon request) did not produce impacts that were statistically different from those produced using the full sample of respondents. These empirical exercises indicate that there was no systematic relationship between sample attrition and the outcomes of interest, providing confidence that sample attrition did not taint our analyses.



## **6. Conclusion**

Project GATE was a demonstration program designed to examine the efficacy of offering free self-employment training through the public workforce development system to individuals interested in self-employment. The program, implemented from 2003 through 2005 in Maine, Minnesota, and Pennsylvania, included an outreach campaign for recruiting applicants, with designated One-Stop Career Centers serving as central points of recruitment. At the end of the recruitment period, 4,198 individuals applied for program participation and were randomly assigned to the treatment or to the control group; only those in the treatment group were offered program services. Program services included training courses to help participants understand the different aspects of starting and operating a business and an individual business counseling session. Besides these services, Project GATE did not offer any type of financial support to program participants.

Using Project GATE data, we estimated the program's impact on the outcomes of unemployed and other (employed, self-employed, and not in the labor force) participants. Our analyses show that Project GATE was very effective in assisting unemployed participants start their own business and become self-employed in that business soon after random assignment. As a result, in the early months following random assignment, unemployed participants experienced significant gains in self-employment. However, this impact declined over time, indicating that Project GATE was effective in accelerating the process of starting a new business and transitioning into self-employment for unemployed participants.

We also find that Project GATE's impact on self-employment for unemployed participants led to a significant increase in total employment following random assignment. However, this effect was short-lived, partly due to the fact that the program's impact on self-employment

declined over time. Despite the program's effect on the rapid reemployment of unemployed participants through self-employment, we find no evidence that the program led to significant impacts on total earnings.

Our impact estimates for participants who were employed, self-employed, or not in the labor force at the time of application are substantially different from the results for the unemployed. We find no evidence that the program had a significant impact on new business starts, self-employment, salary employment, or total employment for these participants. Furthermore, there is no evidence the program led to a significant impact on total earnings for these participants. These results suggest that Project GATE was not an effective intervention for participants who were employed, self-employed, or not in the labor force at the time of application.

Although there have been numerous self-employment programs implemented in the U.S. and in other countries, there are very few rigorous impact evaluations of such programs. This paper used data from a large experimental design self-employment program to provide rigorous evidence on the efficacy of offering free self-employment training through the public workforce development system. Based on our findings, we conclude that such programs are an effective strategy for promoting the rapid reemployment of unemployed individuals interested in self-employment. However, these programs are unlikely to have long-term impacts on employment or any impact on total earnings. Finally, we conclude that self-employment training programs are not effective for individuals who are employed, self-employed, or not in the labor force.

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Table 1: Characteristics of U.S. Labor Force Participants, Self-Employed Workers, and Project GATE Applicants

	U.S. Civilian Labor Force in 2003†	Self-Employed in 2003†	Project GATE Applicants††
Total	140.1 million	13.8 million	4,198
Men	54%	66%	54%
Women	46%	34%	46%
Race: White	78%	86%	57%
Race: Black	11%	5%	31%
Race: Other	11%	9%	11%
Hispanic	13%	9%	5%
Married	58%	72%	44%
Child Under 18	44%	47%	46%
Age: Less 25 Yrs	13%	3%	4%
Age: 25-34 Yrs	23%	14%	21%
Age: 35-44 Yrs	26%	27%	33%
Age: 45-54 Yrs	23%	29%	31%
Age: 55+ Yrs	15%	27%	11%
Less than High School	12%	11%	4%
High School Diploma	52%	49%	22%
Associate Degree/Some College	8%	7%	37%
College Degree	18%	19%	18%
Post-Graduate Degree	10%	14%	19%
Born in U.S.	85%	84%	90%
Disabled	2%	3%	8%
Income: < \$25,000	18%	17%	35%
Income: \$25,000-\$74,999	49%	43%	51%
Income: \$75,000 >	33%	40%	14%
Unemployed	7%	--	43%
Employed	83%	--	28%
Self-Employed	10%	--	16%
Not in the Labor Force	--	--	13%

Note: Reported are proportions of: the U.S. civilian labor force in 2003 (ages 18 years old or older); self-employed workers (ages 18 years old or older), and Project GATE applicants. Source: †American Community Survey, 2003; †† Project GATE application data.

Table 2: Selected Characteristics of Project GATE Applicants

	Unemployed	Employed	Self-Employed	Not in the Labor Force
Total Applicants	1,817	1,185	657	539
Treatment Group	49%	51%	49%	53%
Male	59%	45%	55%	50%
Race: White	65%	43%	61%	59%
Race: Black	26%	44%	26%	27%
Race: Other	9%	13%	12%	14%
Hispanic	5%	5%	4%	5%
Age: Less 25 Yrs	3%	8%	3%	4%
Age: 25-34 Yrs	19%	26%	17%	22%
Age: 35-44 Yrs	33%	33%	32%	31%
Age: 45-54 Yrs	34%	24%	34%	32%
Age: 55+ Yrs	12%	8%	14%	12%
Less than High School	3%	3%	2%	8%
High School Diploma	24%	21%	16%	27%
Associate Degree/Some College	36%	38%	38%	35%
College Degree	18%	20%	20%	14%
Post-Graduate Degree	19%	17%	24%	16%
Ever Self-Employed	25%	26%	100%	23%
Business Plan	20%	23%	29%	23%
Bad/No Credit History	44%	46%	42%	47%
Family Support	45%	43%	46%	48%
Income: < \$25,000	33%	33%	40%	43%
Income: \$25,000-\$74,999	52%	56%	47%	43%
Income: \$75,000 >	15%	11%	13%	14%
Site: Philadelphia	24%	38%	24%	27%
Site: Pittsburgh	16%	14%	11%	12%
Site: Minneapolis/St. Paul	42%	36%	47%	29%
Site: Rural Minnesota	6%	4%	4%	5%
Site: Maine	12%	8%	15%	27%

Note: Reported are proportions of Project GATE applicants.

Table 3: Post-Random Assignment Outcomes of Project GATE Applicants

	Unemployed	Other	<i>Difference</i>
Started New Business			
By Wave 1	331 (22%)	297 (15%)	.069 [.013]***
By Wave 2	468 (36%)	465 (27%)	.085 [.017]***
By Wave 3	505 (47%)	565 (41%)	.058 [.020]***
Started New Business by Wave 1			
Self-Employed at Wave 1	316 (21%)	285 (15%)	.065 [.013]***
Self-Employed at Wave 2	232 (18%)	193 (11%)	.064 [.013]***
Self-Employed at Wave 3	140 (13%)	116 (8%)	.046 [.012]***
Self-Employed			
At Wave 1	316 (21%)	858 (44%)	-.228 [.016]***
At Wave 2	386 (29%)	794 (46%)	-.169 [.018]***
At Wave 3	300 (28%)	594 (43%)	-.154 [.019]***
Employed in Salary Job			
At Wave 1	714 (48%)	658 (34%)	.141 [.017]***
At Wave 2	577 (44%)	518 (30%)	.137 [.017]***
At Wave 3	523 (49%)	522 (38%)	.106 [.020]***
Employed			
At Wave 1	1,030 (69%)	1,516 (78%)	-.087 [.015]***
At Wave 2	963 (73%)	1,312 (76%)	-.032 [.016]**
At Wave 3	823 (76%)	1,116 (81%)	-.048 [.017]***

Note: Reported is the number of respondents with proportion of all respondents in parenthesis. The right column reports the means difference between unemployed and other applicants with standard errors in brackets – statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%. Wave 1 respondents = 3,449 (1,495 unemployed, 1,954 other); Wave 2 respondents = 3,038 (1,318 unemployed, 1,720 other); Wave 3 respondents = 2,450 (1,076 unemployed, 1,374 other).

Table 4: Post-Random Assignment Earnings of Project GATE Applicants

	Unemployed	Other	<i>Difference</i>
<b>Self-Employment Earnings</b>			
At Wave 1	\$1,821 (8,781)	\$2,621 (13,258)	-800 [396]**
At Wave 2	\$2,483 (10,257)	\$2,812 (11,176)	-329 [395]
At Wave 3	\$3,505 (13,733)	\$3,729 (13,582)	-224 [556]
<b>Salary Earnings</b>			
At Wave 1	\$20,709 (27,729)	\$21,458 (26,397)	740 [927]
At Wave 2	\$27,990 (34,500)	\$23,409 (29,816)	4,581 [1,169]***
At Wave 3	\$40,472 (44,275)	\$35,321 (39,536)	5,151 [1,697]**
<b>Total Earnings</b>			
At Wave 1	\$22,530 (28,122)	\$24,079 (28,544)	-1,549 [975]
At Wave 2	\$30,473 (34,500)	\$26,221 (30,689)	4,252 [1,195]**
At Wave 3	\$43,978 (44,636)	\$39,051 (40,147)	4,927 [1,717]**

Note: Reported is the mean with standard deviation in parenthesis. The right column reports the means difference between unemployed and other applicants with standard errors in brackets – statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%. Wave 1 respondents = 3,449 (1,495 unemployed, 1,954 other); Wave 2 respondents = 3,038 (1,318 unemployed, 1,720 other); Wave 3 respondents = 2,450 (1,076 unemployed, 1,374 other). Source: Project GATE survey data.



Table 5: Treatment-Control Differences in Outcomes, Unemployed Applicants

	Treatment Group	Control Group	<i>Difference</i>
Started New Business			
By Wave 1	.274 (.016)	.169 (.014)	.105 [.021]***
By Wave 2	.398 (.019)	.310 (.018)	.088 [.026]***
By Wave 3	.506 (.021)	.430 (.022)	.076 [.030]**
Started New Business by Wave 1			
Self-Employed at Wave 1	.262 (.016)	.161 (.013)	.100 [.021]***
Self-Employed at Wave 2	.214 (.016)	.136 (.014)	.079 [.021]***
Self-Employed at Wave 3	.162 (.016)	.096 (.013)	.066 [.018]**
Self-Employed			
At Wave 1	.262 (.016)	.161 (.013)	.100 [.021]***
At Wave 2	.321 (.018)	.263 (.017)	.058 [.025]**
At Wave 3	.306 (.020)	.250 (.019)	.057 [.027]**
Employed in Salary Job			
At Wave 1	.463 (.018)	.492 (.018)	-.029 [.026]
At Wave 2	.425 (.019)	.452 (.020)	-.027 [.027]
At Wave 3	.459 (.021)	.514 (.022)	-.054 [.030]*
Employed			
At Wave 1	.725 (.016)	.653 (.017)	.071 [.024]***
At Wave 2	.746 (.017)	.715 (.018)	.031 [.024]
At Wave 3	.766 (.018)	.764 (.019)	.002 [.026]
Self-Employment Earnings			
At Wave 1	2,253 (366)	1,392 (269)	861 [454]*
At Wave 2	2,876 (428)	2,070 (364)	806 [565]
At Wave 3	4,177 (679)	2,790 (471)	1,387 [837]*
Salary Earnings			
At Wave 1	20,537 (1,011)	20,881 (1,018)	-344 [1,435]
At Wave 2	28,567 (1,365)	27,381 (1,319)	1,184 [1,901]
At Wave 3	41,290 (1,883)	39,602 (1,937)	1,688 [2,701]
Total Earnings			
At Wave 1	22,790 (1,029)	22,273 (1,028)	517 [1,455]
At Wave 2	31,443 (1,387)	29,451 (1,338)	1,992 [1,930]
At Wave 3	45,466 (1,913)	42,932 (1,935)	3,075 [2,723]

Note: Reported are means with standard errors in parenthesis. Difference is the treatment-control means comparison, with standard error in brackets. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

Table 6: Treatment-Control Differences in Outcomes, Other Applicants

	Treatment Group	Control Group	<i>Difference</i>
Started New Business			
By Wave 1	.160 (.012)	.143 (.11)	.017 [.016]
By Wave 2	.282 (.015)	.258 (.015)	.024 [.021]
By Wave 3	.416 (.018)	.406 (.019)	.010 [.027]
Started New Business by Wave 1			
Self-Employed at Wave 1	.154 (.011)	.137 (.011)	.017 [.016]
Self-Employed at Wave 2	.120 (.011)	.104 (.011)	.015 [.015]
Self-Employed at Wave 3	.093 (.011)	.075 (.010)	.018 [.015]
Self-Employed			
At Wave 1	.436 (.016)	.442 (.016)	-.006 [.022]
At Wave 2	.457 (.017)	.467 (.017)	-.010 [.024]
At Wave 3	.437 (.019)	.427 (.019)	.010 [.027]
Employed in Salary Job			
At Wave 1	.334 (.015)	.340 (.015)	-.006 [.021]
At Wave 2	.306 (.015)	.297 (.016)	-.010 [.022]
At Wave 3	.364 (.018)	.397 (.018)	-.033 [.026]
Employed			
At Wave 1	.770 (.013)	.782 (.013)	-.012 [.019]
At Wave 2	.762 (.014)	.764 (.015)	-.001 [.021]
At Wave 3	.801 (.015)	.824 (.015)	-.023 [.023]
Self-Employment Earnings			
At Wave 1	1,901 (396)	3,395 (452)	-1,495 [599]**
At Wave 2	2,254 (366)	3,407 (288)	-1,153 [539]**
At Wave 3	3,678 (512)	3,786 (525)	-108 [734]
Salary Earnings			
At Wave 1	21,401 (833)	21,520 (857)	-119 [1,195]
At Wave 2	23,289 (1,037)	23,536 (993)	-247 [1,439]
At Wave 3	35,768 (1,506)	34,831 (1,508)	936 [2,136]
Total Earnings			
At Wave 1	23,302 (904)	24,916 (922)	-1,614 [1,292]
At Wave 2	25,542 (1,041)	26,943 (1,051)	-1,401 [1,481]
At Wave 3	39,446 (1,544)	38,617 (1,513)	829 [2,169]

Note: Reported are means with standard errors in parenthesis. Difference is the treatment-control means comparison, with standard error in brackets. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

Table 7: Regression-Adjusted Treatment Effects, Self-Employment and Employment

Dependent Variable	Regression Parameters		Treatment Effect, Unemployed Applicants
	Treatment	Treatment x Unemployed	
Started New Business			
By Wave 1	.021 (.016)	.080 (.026)***	.101 [.021]*** +60%
By Wave 2	.031 (.022)	.057 (.034)*	.088 [.026]*** +28%
By Wave 3	.010 (.028)	.055 (.042)	.065 [.031]** +15%
Started New Business by Wave 1			
Self-Employed at Wave 1	.022 (.016)	.075 (.026)***	.097 [.020]*** +60%
Self-Employed at Wave 2	.017 (.015)	.056 (.025)**	.073 [.020]*** +54%
Self-Employed at Wave 3	.018 (.015)	.034 (.024)	.051 [.019]*** +53%
Self-Employed			
At Wave 1	.011 (.019)	.084 (.028)***	.095 [.020]*** +59%
At Wave 2	-.004 (.022)	.066 (.033)**	.062 [.026]** +24%
At Wave 3	.004 (.026)	.037 (.032)	.041 [.026]* +16%
Employed in Salary Job			
At Wave 1	-.016 (.020)	-.004 (.033)	-.020 [.026] --
At Wave 2	.009 (.022)	-.040 (.035)	-.031 [.028] --
At Wave 3	-.029 (.027)	-.022 (.042)	-.051 [.032] --
Employed			
At Wave 1	-.005 (.018)	.080 (.030)***	.075 [.024]*** +11%
At Wave 2	.005 (.021)	.024 (.033)	.029 [.025] --
At Wave 3	-.025 (.022)	.012 (.036)	-.013 [.028] --

Note: Reported are the regression parameters for *Treatment* and *Treatment x Unemployed* with standard errors in parenthesis – see Appendix for complete estimation results. The right column reports the treatment effect for the unemployed with standard errors in brackets and, where statistically significant, the treatment effect as a percentage of the control group mean. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

Table 8: Regression-Adjusted Treatment Effects, Earnings

	Regression Parameters		Treatment Effect, Unemployed Applicants
	Treatment	Treatment x Unemployed	
Self-Employment Earnings			
At Wave 1	-1,364 (607)**	2,302 (747)***	938 [449]** +67%
At Wave 2	-738 (526)	1,538 (760)**	800 [540] --
At Wave 3	337 (679)	876 (1,042)	1,214 [796] --
Salary Earnings			
At Wave 1	38 (1,140)	-778 (1,837)	-740 [1,438] --
At Wave 2	-157 (1,365)	222 (2,256)	64 [1,784] --
At Wave 3	1,493 (2,039)	-911 (3,260)	581 [2,507] --
Total Earnings			
At Wave 1	-1,326 (1,238)	1,524 (1,907)	197 [1,451] --
At Wave 2	-895 (1,401)	1,759 (2,293)	864 [1,803] --
At Wave 3	1,830 (2,059)	-35 (3,257)	1,795 [2,489] --

Note: Reported are the regression parameters for *Treatment* and *Treatment x Unemployed* with standard errors in parenthesis – see Appendix for complete estimation results. The right column reports the treatment effect for the unemployed with standard errors in brackets and, where statistically significant, the treatment effect as a percentage of the control group mean. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

## Appendix

Table A: Characteristics of Project GATE Applicants and Survey Respondents

	Project GATE Applicants			
	All	Respondents to Wave 1	Respondents to Wave 2	Respondents to Wave 3
Total Applicants	4,198	3,449	3,038	2,450
Treatment Group	50%	51%	51%	52%
Unemployed	43%	43%	43%	44%
Employed	28%	27%	27%	26%
Self-Employed	16%	17%	17%	18%
Not in the Labor Force	13%	13%	13%	13%
Male	54%	53%	52%	52%
Race: White	57%	60%	61%	65%
Race: Black	31%	30%	29%	26%
Race: Other	11%	10%	10%	9%
Hispanic	5%	5%	5%	5%
Age: Less 25 Yrs	4%	4%	3%	3%
Age: 25-34 Yrs	21%	20%	19%	17%
Age: 35-44 Yrs	33%	32%	32%	31%
Age: 45-54 Yrs	31%	32%	34%	36%
Age: 55+ Yrs	11%	12%	12%	13%
Less than High School	4%	3%	3%	2%
High School Diploma	22%	21%	21%	19%
Associate Degree/Some College	37%	37%	36%	35%
College Degree	18%	19%	20%	22%
Post-Graduate Degree	19%	20%	20%	22%
Ever Self-Employed	37%	38%	39%	39%
Business Plan	23%	22%	22%	21%
Bad/No Credit History	45%	43%	42%	40%
Family Support	45%	45%	46%	46%
Income: < \$25,000	35%	34%	33%	31%
Income: \$25,000-\$74,999	51%	52%	52%	53%
Income: \$75,000 >	14%	14%	15%	16%

Note: Reported are proportions of Project GATE applicants.

Table B: Regression Results, Started New Business

	Started New Business		
	By Wave 1	By Wave 2	By Wave 3
Treatment	.021 (.016)	.031 (.022)	.010 (.028)
Treatment x Unemployed	.080 (.026)***	.057 (.034)*	.055 (.042)
Unemployed	.039 (.020)**	.078 (.026)***	.072 (.034)**
Self-Employed	-.001 (.023)	-.024 (.030)	-.022 (.038)
Not in LF	.087 (.023)***	.133 (.030)***	.158 (.037)***
Male	.027 (.013)**	.020 (.017)	-.007 (.022)
Black	-.047 (.018)***	-.009 (.024)	-.002 (.032)
Other Race	-.070 (.022)***	-.073 (.032)**	-.019 (.041)
Hispanic	-.017 (.030)	-.044 (.037)	-.047 (.047)
Married	-.002 (.017)	.020 (.022)	.044 (.027)*
Child Under 18 Yrs	-.031 (.014)**	-.008 (.019)	.018 (.023)
Age: Less 25 Yrs	-.001 (.033)	.040 (.050)	.078 (.068)
Age: 25-34 Yrs	.010 (.019)	.043 (.025)*	.147 (.032)***
Age: 45-54 Yrs	-.031 (.014)	-.028 (.021)	-.041 (.026)*
Age: 55+ Yrs	-.072 (.022)***	-.049 (.029)*	-.061 (.036)*
Disabled	.004 (.024)	-.010 (.031)	-.005 (.039)
Born in the U.S.	.019 (.024)	.002 (.034)	-.002 (.042)
Less than High School	-.019 (.034)	-.064 (.045)	-.065 (.067)
Some College	.044 (.017)***	.052 (.023)**	.077 (.029)***
College Degree	.020 (.021)	.027 (.027)	.031 (.033)
Post-Graduate Degree	.058 (.021)***	.074 (.027)***	.064 (.033)*
Ever Self-Employed	.033 (.017)*	.081 (.022)***	.119 (.026)***
Business Plan	.050 (.016)***	.056 (.021)***	.031 (.026)
Bad/No Credit History	-.032 (.014)**	-.056 (.019)***	-.035 (.024)
Family Support	.007 (.015)	.011 (.020)	.005 (.024)
Income: < \$25,000	-.059 (.014)***	-.056 (.020)***	-.061 (.026)**
Income: \$75,000 >	.074 (.024)***	.069 (.020)**	.096 (.031)***
R-squared	.070	.064	.069
Observations	3,449	3,038	2,450
Mean (Standard Deviation)	.182 (.386)	.307 (.461)	.437 (.496)

Note: Dependent variable is the likelihood of starting a new business by Wave 1/Wave 2/Wave 3. Reported are weighted linear regression estimates with standard errors in parenthesis. Site fixed effects also included but not reported. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

Table C: Regression Results, Started New Business by Wave 1, Self-Employed

	Started New Business by Wave 1, Self-Employed		
	At Wave 1	At Wave 2	At Wave 3
Treatment	.022 (.016)	.017 (.015)	.018 (.015)
Treatment x Unemployed	.075 (.026)***	.056 (.025)**	.034 (.024)
Unemployed	.034 (.019)*	.039 (.018)**	.031 (.018)*
Self-Employed	-.001 (.022)	.002 (.021)	.007 (.019)
Not in LF	.087 (.023)***	.089 (.023)***	.073 (.022)***
Male	.028 (.013)**	.015 (.012)	.017 (.012)
Black	-.047 (.017)***	-.033 (.016)**	-.023 (.015)
Other Race	-.073 (.022)***	-.093 (.020)***	-.088 (.017)***
Hispanic	-.016 (.029)	-.011 (.027)	-.033 (.024)
Married	-.006 (.016)	.007 (.016)	-.017 (.016)
Child Under 18 Yrs	-.032 (.014)**	-.029 (.013)**	-.028 (.013)**
Age: Less 25 Yrs	-.014 (.031)	-.042 (.025)*	.003 (.032)
Age: 25-34 Yrs	.005 (.019)	.012 (.018)	.026 (.019)
Age: 45-54 Yrs	-.017 (.016)	-.004 (.016)	-.008 (.015)
Age: 55+ Yrs	-.065 (.022)***	-.050 (.021)**	-.034 (.020)*
Disabled	.006 (.023)	-.018 (.022)	-.046 (.018)***
Born in the U.S.	.010 (.024)	.008 (.023)	.002 (.020)
Less than High School	-.011 (.033)	.017 (.035)	-.001 (.031)
Some College	.039 (.017)**	.022 (.016)	.026 (.015)*
College Degree	.015 (.021)	.024 (.020)	.023 (.019)
Post-Graduate Degree	.056 (.021)***	.057 (.021)***	.047 (.019)**
Ever Self-Employed	.021 (.017)	.025 (.016)	.020 (.015)
Business Plan	.046 (.016)***	.039 (.015)**	.034 (.015)**
Bad/No Credit History	-.036 (.014)**	-.047 (.014)***	-.026 (.013)**
Family Support	.012 (.015)	.002 (.014)	.009 (.014)
Income: < \$25,000	-.052 (.014)***	-.032 (.014)**	-.042 (.014)***
Income: \$75,000 >	.071 (.024)***	.055 (.023)**	.030 (.021)
R-squared	.068	.067	.055
Observations	3,449	3,038	2,450
Mean (Standard Deviation)	.174 (.379)	.140 (.347)	.104 (.306)

Note: Dependent variable is the likelihood of starting a new business by Wave 1, which is still in operation at Wave 1/Wave 2/Wave 3. Reported are weighted linear regression estimates with standard errors in parenthesis. Site fixed effects also included but not reported. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

Table D: Regression Results, Self-Employed

	Self-Employed		
	At Wave 1	At Wave 2	At Wave 3
Treatment	.011 (.019)	-.004 (.022)	.004 (.026)
Treatment x Unemployed	.084 (.028)***	.066 (.033)**	.037 (.038)
Unemployed	-.092 (.022)***	-.066 (.027)**	.034 (.031)
Self-Employed	.474 (.037)***	.323 (.031)***	.288 (.037)***
Not in LF	.176 (.027)***	.147 (.031)***	.145 (.036)***
Male	.032 (.015)**	.045 (.017)***	.017 (.020)
Black	-.053 (.020)***	-.021 (.024)	-.017 (.029)
Other Race	-.087 (.026)***	-.087 (.031)***	-.076 (.036)**
Hispanic	-.011 (.032)	-.040 (.035)	-.042 (.043)
Married	.014 (.018)	.031 (.022)	.018 (.026)
Child Under 18 Yrs	-.045 (.016)***	-.034 (.018)*	-.023 (.022)
Age: Less 25 Yrs	-.046 (.038)	-.053 (.047)	.028 (.065)
Age: 25-34 Yrs	-.002 (.019)	.018 (.025)	.054 (.030)*
Age: 45-54 Yrs	-.034 (.017)*	-.014 (.021)	-.047 (.023)**
Age: 55+ Yrs	-.090 (.025)***	-.043 (.029)	-.034 (.034)
Disabled	-.058 (.026)**	-.082 (.031)***	-.100 (.035)***
Born in the U.S.	.072 (.027)***	.036 (.034)	.008 (.030)
Less than High School	-.007 (.041)	-.049 (.048)	-.051 (.059)
Some College	.041 (.019)**	.034 (.023)	.051 (.027)*
College Degree	.066 (.023)***	.061 (.027)**	.086 (.030)***
Post-Graduate Degree	.093 (.023)***	.085 (.028)***	.099 (.031)***
Ever Self-Employed	.075 (.019)***	.115 (.022)***	.112 (.025)***
Business Plan	.068 (.018)***	.037 (.020)*	.026 (.024)
Bad/No Credit History	-.046 (.016)***	-.060 (.019)***	-.023 (.022)
Family Support	-.003 (.016)	-.010 (.019)	.015 (.023)
Income: < \$25,000	-.049 (.016)***	-.041 (.020)**	-.039 (.023)*
Income: \$75,000 >	.090 (.024)***	.055 (.028)**	.053 (.030)*
R-squared	.265	.173	.129
Observations	3,449	3,038	2,450
Mean (Standard Deviation)	.340 (.474)	.388 (.487)	.365 (.481)

Note: Dependent variable is the likelihood of being self-employed at Wave 1/Wave 2/Wave 3. Reported are weighted linear regression estimates with standard errors in parenthesis. Site fixed effects also included but not reported. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.



Table E: Regression Results, Employed in Salary Job

	Employed in Salary Job		
	At Wave 1	At Wave 2	At Wave 3
Treatment	-.016 (.020)	.009 (.022)	-.029 (.027)
Treatment x Unemployed	-.004 (.033)	-.040 (.035)	-.022 (.042)
Unemployed	-.054 (.027)**	.026	-.046 (.035)
Self-Employed	-.393 (.027)***	.249 (.028)***	-.275 (.036)***
Not in LF	-.364 (.026)***	.246 (.029)***	-.269 (.036)***
Male	.004 (.016)	-.023 (.018)	-.049 (.021)**
Black	.054 (.024)**	.074 (.026)***	-.034 (.031)
Other Race	.021 (.030)	.030 (.033)	-.008 (.041)
Hispanic	.017 (.037)	.039 (.039)	-.033 (.047)
Married	-.019 (.020)	-.016 (.022)	.009 (.027)
Child Under 18 Yrs	.029 (.018)*	.015 (.019)	.058 (.023)**
Age: Less 25 Yrs	.063 (.047)	.085 (.054)	-.010 (.067)
Age: 25-34 Yrs	.027 (.024)	.031 (.026)	.008 (.032)
Age: 45-54 Yrs	-.001 (.020)	.004 (.022)	.012 (.025)
Age: 55+ Yrs	.007 (.028)	-.010 (.030)	-.084 (.034)**
Disabled	-.093 (.028)***	-.084 (.031)***	-.089 (.037)**
Born in the U.S.	.013 (.031)	.008 (.035)	-.029 (.044)
Less than High School	-.001 (.050)	.017 (.058)	.158 (.067)**
Some College	-.035 (.022)	-.015 (.025)	-.025 (.030)
College Degree	-.067 (.026)**	-.100 (.028)***	-.013 (.033)
Post-Graduate Degree	-.092 (.026)**	-.122 (.028)***	-.006 (.034)
Ever Self-Employed	-.047 (.021)**	-.071 (.023)***	-.052 (.026)**
Business Plan	-.019 (.019)	-.011 (.021)	-.035 (.025)
Bad/No Credit History	.061 (.018)***	.063 (.020)***	-.010 (.023)
Family Support	.013 (.018)	.037 (.020)*	-.044 (.024)*
Income: < \$25,000	.057 (.019)***	.042 (.022)*	-.059 (.026)**
Income: \$75,000 >	-.121 (.024)***	-.103 (.025)***	-.040 (.031)
R-squared	.161	.132	.097
Observations	3,449	3,038	2,450
Mean (Standard Deviation)	.398 (.490)	.360 (.480)	.427 (.495)

Note: Dependent variable is the likelihood of being employed in a salary job at Wave 1/Wave 2/Wave 3. Reported are weighted linear regression estimates with standard errors in parenthesis. Site fixed effects also included but not reported. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

Table F: Regression Results, Employed

	Employed		
	At Wave 1	At Wave 2	At Wave 3
Treatment	-.005 (.018)	.005 (.021)	-.025 (.022)
Treatment x Unemployed	.080 (.030)***	.024 (.033)	.012 (.036)
Unemployed	-.146 (.025)***	-.040 (.027)	-.081 (.028)***
Self-Employed	.081 (.023)***	.073 (.026)***	.013 (.029)
Not in LF	-.188 (.028)***	-.099 (.030) ***	-.123 (.033)***
Male	.036 (.015)**	.021 (.016)	-.034 (.018)*
Black	.001 (.023)	.054 (.024)**	-.051 (.028)*
Other Race	-.066 (.029)**	-.055 (.033)	-.084 (.034)**
Hispanic	.006 (.035)	-.001 (.039)	-.075 (.040)*
Married	-.004 (.019)	.014 (.021)	.026 (.022)
Child Under 18 Yrs	-.015 (.017)	-.019 (.018)	.035 (.020)*
Age: Less 25 Yrs	.017 (.039)	.033 (.043)	.006 (.062)
Age: 25-34 Yrs	.025 (.021)	.050 (.023)**	.062 (.026)**
Age: 45-54 Yrs	-.035 (.019)*	-.009 (.020)	-.036 (.021)*
Age: 55+ Yrs	-.083 (.027)***	-.052 (.029)*	-.119 (.0310)***
Disabled	-.151 (.030)***	-.166 (.033)***	-.188 (.038)***
Born in the U.S.	.086 (.030)***	.048 (.034)	-.022 (.034)
Less than High School	-.008 (.048)	-.032 (.052)	.091 (.058)
Some College	.007 (.021)	.018 (.022)	.026 (.027)
College Degree	-.000 (.024)	-.039 (.026)	.071 (.028)***
Post-Graduate Degree	.001 (.025)	-.037 (.027)	.091 (.028)***
Ever Self-Employed	.028 (.020)	.044 (.021)**	.060 (.022)***
Has Business Plan	.049 (.017)***	.026 (.019)	-.007 (.022)
Bad/No Credit History	.015 (.017)	.003 (.018)	-.031 (.020)
Family Support	.009 (.017)	.028 (.018)	-.025 (.020)
Income: < \$25,000	.007 (.018)	.001 (.019)	-.099 (.022)***
Income: \$75,000 >	-.031 (.025)	-.050 (.025)*	.009 (.023)
R-squared	.087	.058	.110
Observations	3,449	3,038	2,450
Mean (Standard Deviation)	.738 (.440)	.748 (.434)	.792 (.406)

Note: Dependent variable is the likelihood of being employed (in a salary job or self-employed) at Wave 1/Wave 2/Wave 3. Reported are weighted linear regression estimates with standard errors in parenthesis. Site fixed effects also included but not reported. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

Table G: Regression Results, Self-Employment Earnings

	Self-Employment Earnings		
	At Wave 1	At Wave 2	At Wave 3
Treatment	-1,364 (607)**	-738 (526)	337 (679)
Treatment x Unemployed	2,302 (747)***	1,538 (760)**	876 (1,042)
Unemployed	-1,557 (622)**	-337 (542)	739 (665)
Self-Employed	2,322 (876)***	2,558 (857)***	3,805 (922)***
Not in LF	132 (601)	362 (520)	2,76 (1,001)***
Male	1,994 (394)***	1,444 (366)***	1,802 (500)***
Black	-732 (497)	-366 (441)	-836 (765)
Other Race	-157 (790)	-928 (627)	-1,761 (778)**
Hispanic	-763 (532)	-803 (559)	362 (781)
Married	-212 (539)	-77 (450)	-882 (585)
Child Under 18 Yrs	3 (406)	781 (395)**	-396 (1,230)
Age: Less 25 Yrs	-131 (649)	514 (956)	396 (1,230)
Age: 25-34 Yrs	626 (707)	23 (508)	1,480 (834)*
Age: 45-54 Yrs	609 (480)	529 (512)	-176 (626)
Age: 55+ Yrs	-581 (586)	-1,212 (544)**	-2,657 (711)***
Disabled	-1,119 (419)***	-872 (517)*	-1,321 (719)*
Born in the U.S.	1,341 (581)**	541 (696)	546 (720)
Less than High School	92 (664)	-11 (1,025)	-1,774 (868)**
Some College	656 (542)	-498 (549)	174 (715)
College Degree	-773 (554)	87 (662)	-570 (774)
Post-Graduate Degree	-551 (593)	-58 (699)	-114 (877)
Ever Self-Employed	237 (466)	835 (462)*	510 (553)
Business Plan	1,543 (573)***	1,477 (544)***	-114 (877)
Bad/No Credit History	-766 (394)*	-625 (382)	510 (553)
Family Support	-1,330 (467)***	-470 (478)	567 (614)
Income: < \$25,000	-781 (445)*	-400 (398)	-638 (500)
Income: \$75,000 >	3,033 (1,153)***	2,348 (797)***	5,818 (1,174)***
R-squared	.042	.041	.059
Observations	3,449	3,038	2,450
Mean (Standard Deviation)	2,274 (11,538)	2,670 (10,787)	3,631 (13,646)

Note: Dependent variable is self-employment earnings at Wave 1/Wave 2/Wave 3. Reported are weighted linear regression estimates with standard errors in parenthesis. Site fixed effects also included but not reported. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

Table H: Regression Results, Salary Earnings

	Salary Earnings		
	At Wave 1	At Wave 2	At Wave 3
Treatment	38 (1,140)	-157 (1,365)	1,493 (2,039)
Treatment x Unemployed	-778 (1,837)	222 (2,256)	-911 (3,261)
Unemployed	-10,562 (1,477)***	-5,033 (1,785)***	-5,265 (2,717)*
Self-Employed	-16,102 (1,681)***	-12,632 (1,873)***	-13,154 (2,812)***
Not in LF	-20,493 (1,327)***	-15,362 (1,786)***	-14,338 (2,654)***
Male	3,079 (912)***	3,080 (1,127)***	4,713 (1,630)***
Black	-2,106 (1,231)*	-3,552 (1,485)**	-1,279 (2,200)
Other Race	527 (1,788)	-110 (2,069)	-3,043 (2,871)
Hispanic	-2,109 (1,982)	-417 (2,152)	-3,383 (3,404)
Married	-1,685 (1,167)	920 (1,359)	-373 (2,046)
Child Under 18 Yrs	1,061 (1,022)	1,395 (1,261)	1,382 (1,776)
Age: Less 25 Yrs	-1,198 (2,225)	1,010 (2,645)	-2,952 (4,597)
Age: 25-34 Yrs	2,970 (1,366)**	-196 (1,534)	-374 (2,938)
Age: 45-54 Yrs	-673 (1,167)	140 (1,459)	828 (2,009)
Age: 55+ Yrs	-6,374 (1,470)***	-6,607 (1,887)***	-8,773 (2,440)***
Disabled	-5,887 (1,399)***	-9,013 (1,411)***	-10,166 (2,569)***
Born in the U.S.	60 (1,924)	3,428 (2,015)*	-1,814 (3,182)
Less than High School	-1,623 (1,919)	-665 (2,124)	4,941 (4,553)
Some College	1,032 (1,122)	3,851 (1,352)***	7,408 (1,876)***
College Degree	3,048 (1,447)**	6,901 (1,841)***	12,124 (2,593)***
Post-Graduate Degree	3,918 (1,512)***	6,322 (1,756)***	13,759 (2,449)***
Ever Self-Employed	-1,927 (1,134)*	-3,205 (1,375)**	-5,541 (2,027)***
Business Plan	-937 (1,091)	-1,224 (1,299)	-824 (1,979)
Bad/No Credit History	1,112 (997)	1,055 (1,145)	1,604 (1,714)
Family Support	-1,090 (1,020)	-3 (1,260)	-1,321 (1,809)
Income: < \$25,000	-5,676 (995)***	-4,445 (1,196)***	-9,057 (1,759)***
Income: \$75,000 >	2,882 (1,740)*	8,865 (2,419)***	9,638 (3,234)***
R-squared	.120	.099	.103
Observations	3,449	3,038	2,450
Mean (Standard Deviation)	21,134 (26,981)	25,396 (32,007)	37,584 (41,753)

Note: Dependent variable is salary earnings at Wave 1/Wave 2/Wave 3. Reported are weighted linear regression estimates with standard errors in parenthesis. Site fixed effects also included but not reported. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.

Table I: Regression Results, Total Earnings

	Total Earnings		
	At Wave 1	At Wave 2	At Wave 3
Treatment	-1,326 (1,238)	-895 (1,401)	1,830 (2,059)
Treatment x Unemployed	1,524 (1,907)	1,759 (2,293)	-35 (3,257)
Unemployed	-12,119 (1,530)***	-5,370 (1,803)***	-4,527 (2,701)*
Self-Employed	-13,780 (1,814)***	-10,074 (1,952)***	-9,350 (2,807)***
Not in LF	-20,361 (1,419)***	-15,000 (1,810)***	-11,573 (2,742)***
Male	5,073 (959)***	4,524 (1,146)***	6,515 (1,638)***
Black	-2,838 (1,283)**	-3,918 (1,525)***	-2,114 (2,240)
Other Race	370 (1,885)	-1,038 (2,191)	-4,803 (2,902)*
Hispanic	-2,872 (2,010)	-1,221 (2,175)	-5,106 (3,375)
Married	-1,896 (1,226)	844 (1,369)	-10 (2,076)
Child Under 18 Yrs	1,064 (1,058)	2,175 (1,266)*	500 (1,804)
Age: Less 25 Yrs	-1,329 (2,228)	1,523 (2,729)	-2,556 (4,573)
Age: 25-34 Yrs	3,597 (1,477)**	-173 (1,559)	1,105 (2,408)
Age: 45-54 Yrs	-64 (1,217)	669 (1,485)	652 (1,986)
Age: 55+ Yrs	-6,955 (1,533)***	-7,819 (1,903)***	-11,448 (2,422)***
Disabled	-7,006 (1,446)***	-9,885 (1,490)***	-11,487 (2,659)***
Born in the U.S.	1,402 (1,972)	3,968 (2,086)*	-1,267 (3,201)
Less than High School	-1,531 (1,993)	-676 (2,206)	3,167 (4,541)
Some College	1,688 (1,190)	3,352 (1,413)**	7,582 (1,884)***
College Degree	2,274 (1,482)	6,988 (1,879)***	11,553 (2,564)***
Post-Graduate Degree	3,367 (1,564)**	6,265 (1,810)***	13,645 (2,487)***
Ever Self-Employed	-1,690 (1,173)	-2,370 (1,388)*	-5,031 (1,998)**
Business Plan	606 (1,166)	253 (1,309)	-258 (1,956)
Bad/No Credit History	346 (1,034)	430 (1,175)	1,548 (1,737)
Family Support	-2,420 (1,072)**	-474 (1,276)	-2,655 (1,836)
Income: < \$25,000	-6,457 (1,060)***	-4,844 (1,220)***	-9,696 (1,751)***
Income: \$75,000 >	5,915 (1,961)***	11,212 (2,446)***	15,501 (3,219)***
R-squared	.120	.108	.121
Observations	3,449	3,038	2,450
Mean (Standard Deviation)	23,408 (28,368)	28,066 (32,704)	41,215 (42,239)

Note: Dependent variable is total earnings (self-employment plus salary earnings) at Wave 1/Wave 2/Wave 3. Reported are weighted linear regression estimates with standard errors in parenthesis. Site fixed effects also included but not reported. Statistical significance: \*, \*\*, \*\*\* = 10%, 5%, 1%.