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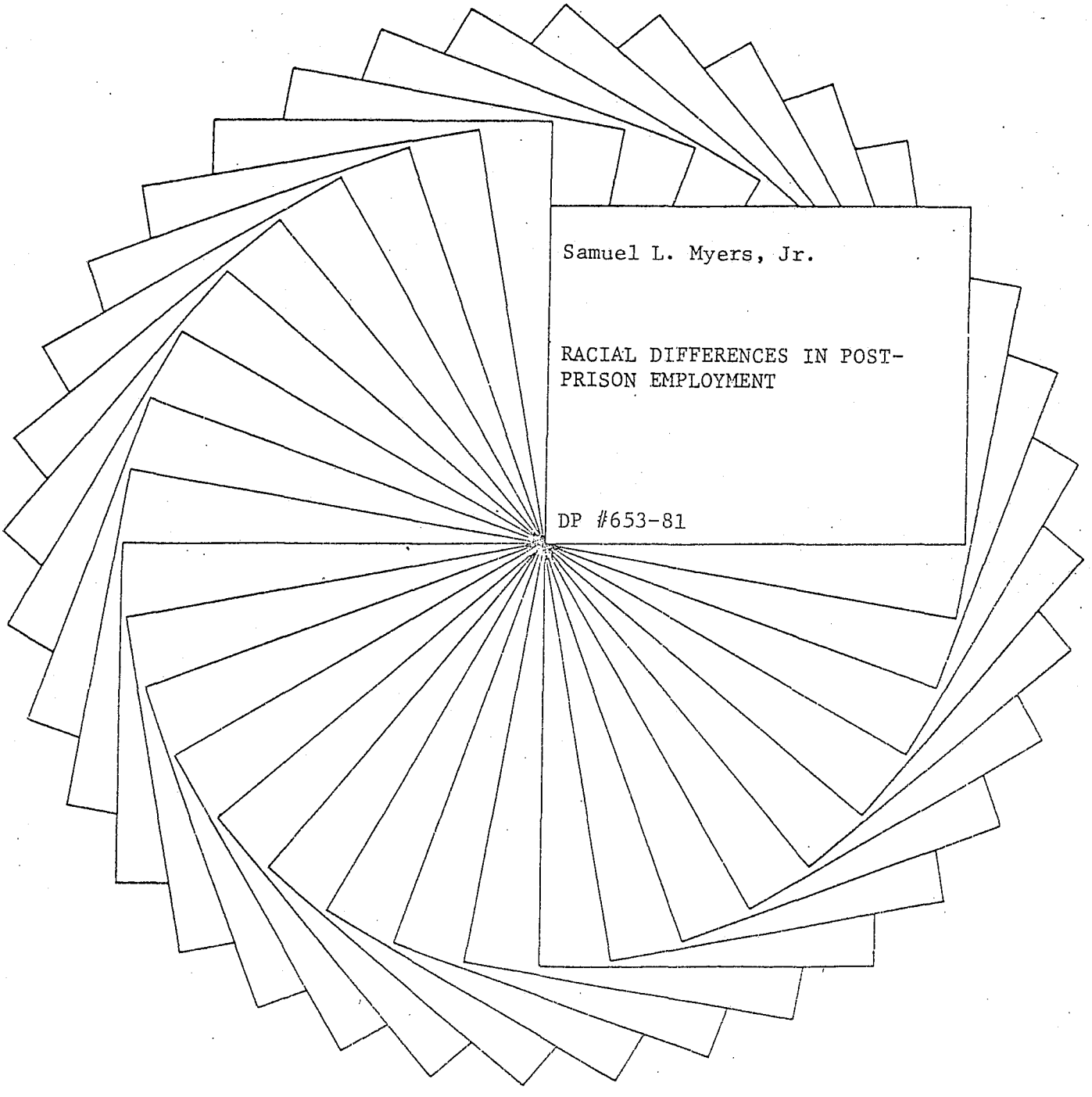

Racial Differences in Post-Prison Employment

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ABSTRACT

This paper explores the determinants of post-prison employment among a sample of ex-offenders released from Maryland prisons. A reduced-form equation for average weekly hours worked in the first year after release was estimated for blacks and whites.

The following results emerge. Background variables have strong effects on employment. In particular, race has a consistently strong impact on labor market success. Blacks are found to work fewer hours than whites. However, background variables including one capturing criminal behavior among relatives explain little of the variation in black hours worked, although they are a significant determinant of white hours worked. Criminal history generally has little explanatory power for the employment experiences of either blacks or whites, yet pre-prison employment experience does exert such an effect. Additional months of work experience before incarceration raise employment for both blacks and whites after prison, although more so for whites than for blacks. For blacks, the dominating factor influencing employment immediately following release from prison is whether a job was arranged. Regarding what happens after release from prison, experiences before prison mean practically nothing. Post-prison outcomes (average hours worked first six months) significantly affect black ex-offenders' employment success, even above and beyond any possible effect pre-prison disadvantage may have. White ex-offenders, on the other hand, are molded by their background: virtually nothing after prison release seriously alters their previously established pattern of employment experience.

Racial Differences in Post-Prison Employment

INTRODUCTION

One ill-fated effort of the War on Poverty and Great Society years was employment assistance for ex-offenders. Prison employment projects had a slow start. They were initially excluded from the funding for the Manpower Development Training Act (see U.S. Department of Labor, 1975). And even among those that were eventually implemented, many were failures (Martinson, 1974).

While support and enthusiasm for employment aids to released prisoners rebounded during the Carter administration, the pessimistic reports of the 1960s were nevertheless replicated. Many of the Comprehensive Employment and Training Assistance projects (CETA) and other federal efforts to reduce recidivism and unemployment via job assistance to ex-offenders have joined the ranks of unsuccessful endeavors of a bygone era.

Social activists and progressive researchers certainly attempted to formulate experiments and programs that captured many of the elements of the world faced by ex-offenders. They understood that the existence of a criminal record restricted the occupations that workers could enter (Portney, 1970), increased the chances of dismissal from a job (Leonard, 1967), and generally limited employment prospects (Leiberg, 1978). Other impediments, such as limited gate money upon release from prison, were recognized as barriers to successful reentry into the outside world (Lenihan, 1974). Thus, employment program initiatives sought to provide ex-offenders with financial and moral support in the belief that these

factors--missing in the efforts of the 1960s--were crucial in facilitating the success of the programs. Yet many of the most innovative initiatives, such as the Supported Work experiment (Piliavin and Gartner, 1981) and transitional aid for released prisoners (Rossi et al., 1980), report dismal employment results.

It has been suggested elsewhere that the many employment programs for ex-offenders, no matter how well designed, failed explicitly to account for the interface between racism in the criminal justice system and that in labor markets (Myers, forthcoming). Researchers may acknowledge racial discrimination in employment or even in the police stations, the courts, or prisons. Yet their research designs adopt the views that (1) black and white ex-offenders are homogeneous, and (2) the opportunities they face are identical. A recent survey of inmates in state prisons suggests that these are oversimplified views (U.S. Department of Justice, 1979). Clearly, black and white ex-offenders are more alike than are blacks and whites in the general population. They have low education, poor skills, and inadequate pre-prison training or prior employment. But in many respects these characteristics are descriptive of large portions of the black population whether criminal or not. One could draw from the black population virtually at random and obtain the existing demographic distribution of blacks in prison. To draw a sample representative of whites in prison, however, one would need to restrict the sampling to the lower reaches of the demographic distribution of whites in the general population. These findings suggest that it is appropriate to investigate the differential impact of employment aids for black and white ex-offenders. One would expect differential effects, for example, if racial discrimination in labor markets resulted in higher crime rates among

blacks; or if relatively larger numbers of innocent blacks were arrested because of discrimination by the police. A discovery of differential effects of employment aids or indeed of differential determinants of post-prison employment would thereby provide a convincing indication of why employment programs for ex-offenders have failed.

This paper summarizes a discovery of the sort described above. In a reanalysis of an unemployment insurance experiment involving ex-offenders in Baltimore, Maryland, Myers (1980) examined the well-known work disincentive effects of subsidies. Mallar and Thornton (1978) and Rossi et al. (1980) have adequately documented the fact that in both theory and in practice the effects of unemployment subsidies on recidivism are ambiguous. However, the work disincentive effects differ between blacks and whites. In fact, many of the determinants of labor supply differ markedly between the races. Thus, unemployment insurance, which lowers hours worked for whites but not for blacks in the Baltimore LIFE Sample, reduces black recidivism but not white recidivism. This may be why unemployment insurance programs serving heavily black populations have been more successful than those facing racially balanced clienteles. Below we examine in some detail the differing post-prison employment experiences that bring about in our data divergent responses to labor market aids among ex-offenders.

THE BALTIMORE LIFE DATA

From 1971 to 1974 the Department of Labor sponsored an experiment in Baltimore in which 432 high-risk male ex-offenders were divided into groups that received weekly stipends of up to $60 a week for 13 weeks, or received assistance in finding a job, received neither, or received both.

To minimize work disincentives, stipends (a form of unemployment insurance) were continued but reduced when employment was found, until a sum of $780 had been received. The sample is drawn from the Baltimore Living Insurance for the Ex-Prisoner experiment (LIFE) (see Mallar and Thornton, 1978).

The sample consists of males who were released from Maryland's state prisons to the Baltimore metropolitan area and who had low financial resources, were repeat offenders, had no known history of alcohol or narcotics abuses, and had not been on work release for more than three months. While the average age was 24, 37 percent of the ex-offenders were under 21 years of age and only 10 percent were over 35. On the average, 4.4 years were served in prison for the current offense. Eighty-one percent has served 5 years or less. The range of time served was 2 to 21 years. About 87 percent of the sample was black, most had been raised in families with male heads ($\bar{x}_i$ = 67.8 percent), and most had jobs arranged when they were released from prison ($\bar{x}_i$ = 57.9 percent). However, a significant fraction had been previously arrested for disorderly conduct or were subsequently rearrested for this crime ($\bar{x}_i$ = 17.6 percent). Most had held principally secondary labor market (relatively unskilled) jobs or were previously unemployed ($\bar{x}_i$ = 52.5 percent), and all had extensive criminal records. The average number of previous arrests was 8: 30 percent had 10 or more. The total number of arrests ranged to 40. Similarly, on the average the ex-offenders had been convicted 4 times, with a range of up to 25 previous convictions.

Work experience, denoted by the longest job held discounted by time since longest job held, averaged 17.5 months. It was calculated on the

basis of the following formula:

Y = work experience in months,

X = length of time on longest job in months,

Z = months since longest job; thus,

$$Y = X \cdot \exp[-.004167(Z)].$$

The discount rate was approximately 5 percent per year.

Ten percent had less than 2 months of discounted experience; 30 percent had less than 6 months; and about 50 percent had less than a year. A group of 10 percent had from 43 to 59 months of discounted experience.

The average school grade completed was the ninth, although 60 percent had completed less than 8 years of school.

At the end of the year following release from prison, 61 percent had been unemployed an entire month for at least 1 month. Of these, 25 percent had only 1 month of unemployment, 23 percent experienced 2 months; 16 percent, 3 months; 11 percent, 4 months; and 6 percent, 5 months; and nearly 20 percent, half a year or more of unemployment. Moreover, almost 100 of the ex-offenders experienced more than one nonadjacent month of continuous unemployment.

A Model of Post-Prison Employment

Recidivism depends, among other things, upon expected wages. The expected wage, though, depends upon hours worked (i.e., unemployment). The greater the average weekly hours worked, the higher will be the average weekly wage earnings. But hours worked depend upon time spent in crime. To the extent that people combine work and crime, this is no constraint. But what about the people who get caught and go to jail?

Being incarcerated reduces the hours available to work and thus, ceteris paribus, lowers the expected wage. To complete this model, a final equation is needed to determine days spent in jail per week. Those who get rearrested are more likely to spend days in jail than the survivors. Thus, there is a simultaneous equation system from which it is possible to solve for hours worked. An explicit derivation from the simultaneous equation system developed in Myers (1980) provides the hours-worked equation (6) below.

A straightforward manner of investigating the effects of employment experience and criminal history on post-prison performance is to examine closely the determinants of post-prison hours worked. We can test directly the explanatory power of each of the hypothesized determinants by constructing an F-statistic from pairs of R-squares obtained from regressions based on the following models.

$$h_t = f(\underset{\sim}{X}) \tag{1}$$

$$h_t = f(\underset{\sim}{X}, Y) \tag{2}$$

$$h_t = f(\underset{\sim}{X}, \underset{\sim}{Z}_1, \underset{\sim}{Z}_2) \tag{3}$$

$$h_t = f(\underset{\sim}{X}, \underset{\sim}{Z}_2) \tag{4}$$

$$h_t = f(\underset{\sim}{X}, \underset{\sim}{Y}, \underset{\sim}{Z}_1) \tag{5}$$

$$h_t = f(\underset{\sim}{X}, \underset{\sim}{Y}, \underset{\sim}{Z}_1, \underset{\sim}{Z}_2) \tag{6}$$

We denote hours worked--specifically, average weekly hours worked for the twelve months after release from prison--by h_t. General background characteristics can be described by the vector $\underset{\sim}{X}$. It includes age, race,

and whether a family member ever was in prison. The pre-prison experience vector is denoted by $\underset{\sim}{Y}$. It includes pre-prison employment experience (longest job held, discounted for time since that job), whether the last job held was a white-collar job, and the highest school grade completed. There are two crime vectors. Criminal history--which includes total times arrested, age at first arrest, and type of offense--is denoted by $\underset{\sim}{Z}_1$. Prison outcome, denoted by $\underset{\sim}{Z}_2$, includes whether a job was arranged while imprisoned, whether release was by parole, and time actually served upon release. Along with the family background variable, a control for receipt of unemployment insurance (treatment) is included in the vector $\underset{\sim}{X}$.

THE RESULTS

Ordinary least squares estimates for both the log of hours worked and hours worked specifications of equations (1)-(6) are displayed in tables 1-6. In addition to presenting the results obtained using the entire sample, we include estimates for blacks and whites.

The results can be conveniently summarized. Background characteristic variables tend to be more strongly related to hours worked than are variables for pre-prison experience, criminal history, or prison outcome. In the total sample, unemployment insurance (whether a stipend was received) lowers hours worked, being black reduces hours worked, while the effects of age and having a family member who was ever in prison are mixed (although older workers generally work more hours). With the exception of employment experience and job arranged while imprisoned, there is no statistically significant pattern seen in the other vectors of variables.

TABLE 1

ORDINARY LEAST SQUARES ESTIMATES OF POST-PRISON EMPLOYMENT: MODEL 1

(t-statistics in parentheses)

Independent Variables	HOURS WORKED			LN(HOURS WORKED)		
	Total	Blacks	Whites	Total	Blacks	Whites
General background						
Treatment	-1.592 (-1.846)	-1.019 (-1.084)	-6.390 (-3.286)	-.081 (-1.379)	-.053 (-.815)	-.319 (-3.359)
Race	-1.727 (-1.379)	--	--	-.139 (-1.55)	--	--
Age	.243 (3.423)	.260 (3.337)	.066 (.432)	.009 (1.961)	.010 (1.904)	.000 (.046)
Family member ever in prison	-.763 (-.862)	-.415 (-.451)	-4.665 (-2.243)	-.032 (-.542)	-.012 (-.183)	-.252 (-2.480)
Constant	21.777 (9.740)	19.189 (9.135)	29.710 (6.796)	3.045 (19.865)	2.862 (19.468)	3.459 (19.167)
F-statistic Significance level	4.565 (.001)	4.189 (.006)	4.841 (.005)	2.204 (.068)	1.427 (.234)	5.072 (.004)
Multiple R R^2 Adjusted R^2	.202 .041 .032	.180 .032 .024	.478 .228 .181	.142 .020 .021	.106 .011 .003	.486 .236 .190

Note: Data for all tables are from the Baltimore LIFE experiment.

TABLE 2

ORDINARY LEAST SQUARES ESTIMATES OF POST-PRISON EMPLOYMENT: MODEL 2

(t-statistics in parentheses)

	HOURS WORKED			LN (HOURS WORKED)		
Independent Variable	Total Sample	Blacks	Whites	Total	Blacks	Whites
General Background						
Treatment	-1.598 (-1.883)	-1.016 (-1.098)	-5.875 (3.0041)	-.082 (-1.399)	-.053 (-.813)	-.297 (-3.066)
Race	-1.672 (-1.297)	--	--	-.136 (-1.532)	--	--
Age	.120 (1.539)	.130 (1.522)	-.116 (-.656)	.002 (.474)	.002 (.482)	-.007 (-.839)
Family member ever in prison	-.873 (-.998)	-.638 (-.670)	-4.043 (-1.950)	-.038 (-.637)	-.023 (-.354)	-.225 (-2.192)
Pre-Prison Experience						
Experience	.097 (3.207)	.100 (3.037)	.140 (1.818)	.005 (2.705)	.006 (2.572)	.005 (1.561)
White collar	-2.208 (-1.762)	-2.696 (2.006)	3.699 (1.044)	-.102 (-1.185)	-.125 (-1.319)	.150 (.857)
Education	.398 (1.765)	.318 (1.289)	.417 (.779)	.015 (.993)	.010 (.625)	.019 (.716)
Constant	19.845 (6.656)	18.258 (5.989)	27.300 (4.098)	2.993 (14.525)	2.866 (13.322)	3.345 (10.125)
F-statistic significance level	5.153 (.000)	4.690 (.000)	3.368 (.008)	2.726 (.009)	2.201 (.042)	3.201 (.010)
Multiple R	.280	.265	.552	.207	.185	.542
R^2	.078	.070	.305	.043	.034	.294
Adjusted R^2	.063	.055	.214	.027	.018	.202

TABLE 3

ORDINARY LEAST SQUARES ESTIMATES OF POST-PRISON EMPLOYMENT: MODEL 3

(t-statistics in parentheses)

Independent Variable	HOURS WORKED			LN(HOURS WORKED)		
	Total	Blacks	Whites	Total	Blacks	Whites
General background						
Treatment	-1.558 (-1.797)	-.963 (-1.01)	-6.615 (-3.294)	-.079 (-1.343)	-.050 -.765)	-.333 (-3.400)
Race	-2.169 (-1.612)	--	--	-.167 (-1.811)	--	--
Age	.211 (.076)	.218 (2.571)	.051 (.326)	.008 (1.612)	.008 (1.494)	-.000 (-.052)
Family member ever in prison	-.749 (-.844)	-.349 (-.362)	-5.395 (-2.393)	-.032 (-.541)	-.008 (-.125)	-.294 (-2.676)
Criminal history						
Total times arrested	-.028 (.071)	-.028 (-.355)	-.127 (-.921)	-.003 (-.780)	-.004 (-.762)	-.007 (-1.061)
Age at first arrest	.159 (1.307)	.179 (1.355)	-.026 (-.072)	.006 (.820)	-.007 (-.881)	.000 (.015)
Robbery, burglary, larceny, auto theft	-.000 (.000)	.009 (.009)	-1.224 (-.562)	.010 (.165)	.011 (.164)	.064 (-.602)
Constant	20.625 (7.093)	17.497 (6.059)	33.112 (4.574)	3.011 (15.092)	2.800 (13.844)	3.622 (10.257)
F-statistic significance level	2.969 (.005)	2.542 (.020)	2.506 (.035)	1.540 (.152)	1.044 (.396)	2.685 (.026)
Multiple R	.216	.198	.496	.157	.128	.509
R^2	.046	.039	.246	.024	.016	.259
Adjusted R^2	.030	.023	.148	.008	.0007	.162

TABLE 4

ORDINARY LEAST SQUARES ESTIMATES OF POST-PRISON EMPLOYMENT: MODEL 4

(t-statistics in parentheses)

Independent Variable	HOURS WORKED			LN(HOURS WORKED)		
	Total	Blacks	Whites	Total	Blacks	Whites
General Background						
Treatment	-1.878 (-2.22)	-1.307 (-1.433)	-6.354 (-3.045)	-.098 (-1.703)	-.070 (-1.099)	-.319 (-3.131)
Race	-1.635 (-1.279)	--	--	-.132 (-1.506)	--	--
Age	.203 (2.737)	.229 (2.846)	.097 (.569)	.007 (1.453)	.008 (1.539)	.002 (.348)
Family member ever in prison	-.375 (-.431)	-.131 (-.140)	-4.957 (-2.208)	-.007 (-.123)	.006 (.0984)	-.275 (-2.514)
Prison Outcome						
Job arranged	4.273 (4.618)	4.788 (4.873)	-.445 (-.160)	.269 (4.229)	.383 (4.378)	-.063 (-.466)
Paroled	.231 (.215)	.712 (.617)	-1.762 (-.625)	.008 (.118)	.031 (.390)	-.049 (-.360)
Time served	-.149 (-.755)	-.191 (-.920)	-.000 (.000)	-.012 (-.913)	-.014 (-.980)	-.005 (-.171)
Constant		17.510 (8.042)	30.623 (6.413)	2.981 (18.966)	2.767 (18.023)	3.502 (15.087)
F-statistic significance level	6.310 (.000)	7.061 (.000)	2.445 (.039)	4.286 (.000)	4.557 (.000)	2.590 (.030)
Multiple R	.307	.319	.491	.257	.261	.502
R^2	.094	.102	.241	.066	.068	.252
Adjusted R2	.079	.087	.142	.0506	.053	.155

TABLE 5

ORDINARY LEAST SQUARES ESTIMATES OF POST-PRISON EMPLOYMENT: MODEL 5
(t-statistics in parentheses)

Independent Variable	HOURS WORKED			LN(HOURS WORKED)		
	Total	Blacks	Whites	Total	Blacks	Whites
General Background						
Treatment	-1.591 (-1.861)	-.985 (-1.055)	-6.033 (-2.949)	-.082 (-1.390)	-.051 (-.786)	-.308 (-3.053)
Race	-1.833 (-1.379)	--	--	-.148 (-1.622)	--	--
Age	.117 (1.458)	.123 (1.373)	.115 (-.630)	.002 (.534)	.003 (.515)	-.007 (-.809)
Family member ever in prison	-.878 (-.999)	-.606 (-.632)	-4.620 (-2.002)	-.039 (-.657)	-.022 (-.328)	-.262 (-2.301)
Pre-prison Experience						
Experience	.094 (2.974)	.095 (2.741)	.132 (1.618)	.005 (2.546)	.005 (2.376)	.005 (1.350)
White collar	-2.249 (-1.786)	-2.753 (-2.037)	3.929 (1.032)	-.106 (-1.229)	-.129 (-1.363)	.166 (.882)
Education	.377 (1.643)	.291 (1.154)	.347 (.595)	.0138 (.870)	.008 (.488)	.0143 (.497)
Criminal History						
Total times arrested	-.024 (-.343)	-.028 (-.356)	-.100 (-.728)	-.003 (-.748)	-.004 (-.774)	-.006 (-.886)
Age at first arrest	.077 (.622)	.084 (.628)	.031 (.848)	.002 (.262)	.001 (.202)	.000 (.0495)
Incarcerated for:						
Robbery, burglary, larceny, auto theft	.252 (.277)	.193 (.195)	-.156 (-.066)	-.031 (.496)	.030 (.440)	-.017 (-.151)
Prison Outcome						
Job arranged	3.951 (4.221)	4.528 (4.556)	-3.694 (-1.188)	.252 (3.885)	.288 (4.077)	-.204 (-1.322)
Paroled	-.141 (-.130)	.290 (.250)	-2.624 (-.914)	-.014 (-.102)	.005 (.063	-.084 (-.592)
Time served	.110 (.516)	.056 (.250)	1.164 (1.457)	-.000 (-.023	-.002 (-.182)	.045 (1.132)
Constant	17.141 (4.896)	14.507 (4.004)	28.171 (2.845)	2.872 (11.820)	2.693 (10.461)	3.425 (6.937)
F-statistic significance level	4.508 (.000)	4.531 (.000)	2.071 (.042)	2.848 (.001)	2.749 (.001)	1.931 (.060)
Multiple R	.350	.359	.619	.285	.287	.605
R^2	.122	.129	.383	.081	.082	.366
Adjusted R^2	.095	.100	.198	.052	.052	.176

TABLE 6

ORDINARY LEAST SQUARES ESTIMATES OF POST-PRISON EMPLOYMENT: MODEL 6
(t-statistics in parentheses)

Independent Variable	HOURS WORKED			LN(HOURS WORKED)		
	Total	Blacks	Whites	Total	Blacks	Whites
General Background						
Treatment	-1.880 (-2.238)	-1.344 (-1.474)	-4.715 (-2.180)	-.099 (-1.709)	-.727 (-1.122)	-.250 (-2.327)
Race	-1.813 (-1.389)	--	--	.144 (-1.596)	--	--
Age	0.657 (.738)	.084 (.861)	-.247 (-1.169)	.001 (.175)	.002 (.300)	-.012 (-1.139)
Family member ever in prison	-.586 (-.675)	-.407 -.434)	-5.524 (-2.373)	-.018 (-.312)	-.007 (.106)	-.308 (-2.655)
Pre-Prison Experience						
Experience	.076 (2.309)	.074 (2.677)	.249 (2.439)	.004 (1.807)	.004 (1.688)	.010 (2.186)
White collar	-1.909 (-1.543)	-2.248 (-1.702)	5.164 (1.331)	-.084 (-.986)	-.098 (-1.044)	.209 (1.081)
Education	.450 (1.985)	.393 (1.583)	.475 (.802)	.017 (1.108)	.014 (.797)	.021 (.717)
Criminal History						
Total times arrested	.003 (.498)	.016 (-.212)	-.091 (-.715)	-.002 (-.438)	-.001 (-.327)	-.005 (-.834)
Age at first arrest	.039 (-1.861)	.058 (.425)	-.063 (-.180)	.000 (.0468)	.000 (.0790)	-.001 (-.0733)
Incarcerated for:						
Robbery, burglary, larceny, auto theft	.085 (.092	-.022 (-.022	-.579 (-.242)	.017 (.274)	.013 (.187)	-.037 (-.321)
Constant	19.800 (5.726)	18.051 (5.067)	30.711 (3.273)	3.023 (12.655)	2.892 (11.511)	3.524 (7.595)
F-statistic significance level	3.617 (.000)	3.157 (.001)	2.190 (.042)	1.973 (.035)	1.546 (.130)	2.125 (.048)
Multiple R	.281	.267	.560	.211	.190	.554
R^2	.079	.071	.314	.044	.036	.307
Adjusted R^2	.057	.048	.170	.022	.012	.163

Although there are some differences between the log-linear and linear models, the most striking differences in results arise when the black and white samples are compared. Unemployment insurance works as a systematic work disincentive for whites. Even in the total sample, it is found that being in the treatment group and receiving a cash subsidy upon release from prison tends to reduce the weekly average of hours worked for the year. This is the typical employment disincentive effect discovered in numerous other studies. However, for blacks in the sample the work disincentive appears inoperative. The estimated coefficient for receipt of unemployment insurance (treatment) is significant at the weak 10 percent statistical level in only two of twelve separate equations.

Another revealing difference between the black and white samples is evidenced. Whereas having a family member who was ever in prison has no appreciable effect on the hours worked by blacks, this general background characteristic consistently lowers hours worked by whites. In addition, having a job arranged increases the hours worked by blacks, but has no effect on white workers. And, to further highlight apparent black-white differences in hours worked, the pre-prison employment experience variable, which increases employment for both whites and blacks, generally has a smaller coefficient for blacks than for whites. What this means is that an extra month of pre-prison employment assures more work after prison for whites than for blacks.

It is clear from inspection that general background characteristics, as we have measured them, are more consistently related to post-prison performance than are pre-prison employment experiences, criminal history, or prison outcomes. But in light of the significance of the employment experience variable and the job-arranged variable, we might ask to what

extent factors other than general background characteristics help explain the variation in hours worked. Collectively, do criminal history variables, or pre-prison experience variables, or prison outcome variables significantly improve the equations' explanatory power beyond that provided by background characteristics alone?

One technique for addressing these questions has been described by Goldberger (1968) and Kmenta (1971). Model 1, for example, states that hours worked depends only on general background characteristics. Model 2, on the other hand, asserts that hours worked depends on both general background characteristics and previous experience. We can rewrite those competing models as

$$(1)' \quad h_t = \beta' X + \gamma + \varepsilon_i, \text{ and}$$

$$(2)' \quad h_t = \beta' X + \gamma' Y + \varepsilon_i,$$

where β is a $K \times 1$ vector of parameters to be estimated, γ is a $(Q-K) \times 1$ vector, and ε_i is the error term. A test of model 2--whether the Q-K additional explanatory variables are significant--suggests that the null hypothesis,

$$H_o: \quad \gamma = o$$

be tested against the alternative hypothesis

$$H_1: \quad \gamma \neq o.$$

The appropriate test statistic is

$$F = \left[\frac{R_Q^2 - R_K^2}{1 - R_Q^2}\right]\left[\frac{n - Q}{Q - K}\right]$$

where the R-squares are unadjusted and the Q subscript denotes model 2, in which there are Q independent variables, and K corresponds to model 1, in which there are K independent variables. From Table 1, we see that for background characteristics alone the R-squared value is .041. This value rises to .078 when pre-prison experience variables are added, as seen in Table 2. The F-statistic in Table 2 is 5.153, which is significant at the 1 percent level. We reject, therefore, the hypothesis that the coefficients of the additional variables capturing pre-prison experience are zero. In other words, model 2 is correct: Hours worked depends not only on general characteristics but also previous experiences.

The identical F-test can be performed for different combinations of models 1 through 6. The F-statistics are computed and displayed in Table 13. The results can be conveniently summarized. The addition of criminal-history variables adds little to the explanatory power of the hours-worked equations. Even when combined with employment experience, the added contribution of information on criminal history is minor. On the other hand, prison outcomes--capturing information on method of release from prison, time served, and whether a job was arranged--significantly add to the explanatory power of the hours-worked equations. This is true whether the equation includes background characteristics alone or background characteristics combined with pre-prison experience and criminal history. However, this finding is only true for blacks and

the total sample. There is no statistically significant change in the R-squared value for white hours worked regardless of which new explanatory variables are added.

These results suggest further that the dominating factor explaining post-prison hours worked, for blacks at least, is an outcome related more to recent employment--specifically, whether a job was arranged. The other elements of the prison-outcome vector--whether paroled and time served--have very low t-statistics associated with their estimated coefficients. Factors related to pre-prison employment certainly are not as strong explanatory variables as is the job-arranged variable. The previous experience factors are extremely sensitive to choice of the functional form for the hours-worked equation. The prison-outcome vector, which includes the job-arranged variable, is robust with respect to functional form in our F-tests.

This conclusion suggests that more recent, perhaps even post-prison, experiences are more relevant in explaining post-prison employment of ex-offenders than are previous experiences. In tables 7 to 11 we explicitly test the hypothesis that post-prison experiences explain post-prison employment. First, we consider the following model:

$$h_t = f(\underset{\sim}{X}, \bar{h}_{t-1}). \tag{7}$$

Here, hours worked in a given period depends both on background characteristics and hours worked in the previous period. Let us relate h_t to the second six months out to prison; the $\bar{h}_{t-1}$ is the hours worked the first six months out of prison. For purposes of discussion, we concentrate on the log-linear form of the black hours-worked equation. From estimates of model 1 based on the second six months' hours worked, we

obtained an R-squared value of .01. This jumps to .198 in Table 7, where $\bar{h}_{t-1}$, has been added as an explanatory variable. The F-statistic for this change in R-squares is 101.41 and is significant at the 1 percent level.

There are other post-prison outcomes that could potentially affect employment. Although previous criminal record was found to have little effect in determining post-prison employment, what about post-prison arrest? Denote the event of having been arrested in the first six months out of prison by $\bar{A}_{t-1}$. Then an alternative to model 1 is

$$h_t = f(\underset{\sim}{\bar{X}}, A_{t-1}). \tag{8}$$

Recall that for blacks the R-squared value for model 1 (log-linear form) is .01. From Table 8, we compute an R-squared value of .012; this, it is easily seen, is not a statistically significant change. Another alternative is the following model:

$$h_t = f(\underset{\sim}{X}, \bar{W}_{t-1}), \tag{9}$$

where $\bar{W}_{t-1}$ is the average weekly salary in the first six months. The R-squared value rises to .085, not quite as much as the rise when including $\bar{h}_{t-1}$.

Further experimentation yields similar results. The following models capture the added influence of post-prison outcomes on hours worked the second six months:

$$h_t = f\ (\underset{\sim}{X}, \underset{\sim}{Y}, \underset{\sim}{Z}_1, \underset{\sim}{Z}_2; \bar{h}_{t-1}, \tag{10}$$

TABLE 7

ORDINARY LEAST SQUARES ESTIMATES OF POST-PRISON EMPLOYMENT: MODEL 7
(t-Statistics in Parentheses)

	Hours Worked Second Six Months			LN(Hours Worked Second Six Months)		
Independent Variable	Total	Blacks	Whites	Total	Blacks	Whites
General Background Treatment	-.529 (-.587)	-.480 (-.501)	-3.318 (-1.173)	-.005 (-.080)	-.007 (-.108)	-.187 (-.929)
Race	-.781 (-.572)	--	--	-.056 (-.555)	--	--
Age	.046 (.625)	.075 (.941)	-.165 (-.801)	.001 (.195)	.002 (.427)	-.010 (-.700)
Family Member Ever in Prison	-.404 (-.437)	-.102 (-.104)	-4.620 (-1.643)	.011 (.173)	.035 (.488)	-.303 (-1.518)
Post-Prison Outcome Hours Worked First Six Months Out	.447 (10.489)	.468 (10.451)	.178 (1.211)	.029 (9.326)	.031 (9.403)	.006 (.647)
Constant	16.661 (6.776)	14.539 (6.435)	31.514 (4.671)	2.465 (13.455)	2.323 (13.719)	3.521 (7.329)
F-statistic Significance level	24.184 (.000)	29.477 (.000)	1.862 (.132)	18.502 (.000)	23.208 (.000)	1.072 (.380)
Multiple R	.470	.481	.366	.422	.445	.268
R^2	.221	.239	.134	.178	.198	.082
Adjusted R^2	.211	.231	.062	.168	.190	.005

TABLE 8

ORDINARY LEAST SQUARES ESTIMATES OF POST-PRISON EMPLOYMENT: MODEL 8

(t-statistics in parentheses)

Independent Variable	Hours Worked Second Six Months			LN(Hours Worked Second Six Months)		
	Total	Blacks	Whites	Total	Blacks	Whites
General Background Treatment	-1.264 (-1.258)	-.830 (-.764)	-4.687 (-1.605)	-.055 (-.757)	-.034 (-.428)	-.249 (-1.335)
Race	(-1.762) (-1.154)	--	--	-.118 (-1.066)	--	--
Age	.185 (2.246)	.217 (2.423)	-.121 (-.582)	.010 (1.696)	.012 (1.840)	-.008 (-.547)
Family Member Ever in Prison	-.790 (-.766)	-.354 (-.319)	-5.308 (-1.868)	-.013 (-.173)	.019 (.236)	-.337 (-1.700)
Postprison Outcome Arrested First Six Months Out	1.827 (1.634)	2.060 (1.722)	.001 (.0465)	.090 (1.107)	.100 (1.140)	.053 (.233)
Constant	24.506 (9.358)	21.484 (8.762)	35.664 (5.898)	2.993 (15.653)	2.808 (15.562)	3.663 (8.708)
F-statistic Significance Level	2.276 (.046)	2.434 (.047)	1.459 (.229)	1.165 (.326)	1.219 (.302)	.974 (.430)
Multiple R	.161	.159	.329	.116	.113	.274
R^2	.026	.025	.108	.0134	.012	.075
Adjusted R^2	.014	.014	.034	.00191	.002	-.001

TABLE 9

ORDINARY LEAST SQUARES ESTIMATES OF POST-PRISON EMPLOYMENT: MODEL 9
(t-statistics in parentheses)

	Hours Worked Second Six Months			LN(Hours Worked Second Six Months)		
Independent Variable	Total	Blacks	Whites	Total	Blacks	Whites
General Background Treatment	-1.167 (-1.199)	-1.126 (-1.078)	-4.829 (-1.822)	-.045 (-.660)	-.051 (-.675)	-.229 (-1.117)
Race	-1.699 (-1.150)	--	--	-.117 (-1.089)	--	--
Age	.073 (.888)	.094 (1.053)	-.114 (-.549)	.002 (.395)	.003 (.516)	-.008 (-.604)
Family Member Ever in Prison	-.671 (-.671)	-.323 (-.302)	-5.396 (-1.917)	-.005 (-.075)	.020 (.266)	-.326 (-1.630)
Post-Prison Outcome						
Average Salary First Months Out	.058 (5.512)	.064 (5.607)	.556 (.172)	.004 (5.313)	.004 (5.407)	.000 (.128)
Constant	24.149 (9.557)	21.395 (9.147)	35.536 (5.950)	2.958 (16.021)	2.779 (16.184)	3.669 (8.613)
F-statistic	7.932	9.681	1.451	6.623	8.270	.936
Significance level	(.000)	(.000)	(.232)	(.000)	(.000)	(.436)
Multiple R	.291	.306	.328	.268	.285	.272
R^2	.085	.093	.107	.0721	.081	.074
Adjusted R^2	.074	.084	.033	.0612	.071	-.002

$$h_t = f\ (\underset{\sim}{X},\ \underset{\sim}{Y},\ \underset{\sim}{Z}_1,\ \underset{\sim}{Z}_2;\ \bar{A}_{t-1},\ \bar{h}_{t-1}), \tag{11}$$

$$h_t = f\ (\underset{\sim}{X},\ \underset{\sim}{Y},\ \underset{\sim}{Z}_1,\ \underset{\sim}{Z}_2;\ \bar{A}_{t-1},\ \bar{h}_{t-1},\ \bar{W}_{t-1}). \tag{12}$$

These models are fully loaded in the sense that they include general background, pre-prison experience, criminal history, and prison-outcome characteristics. The results are displayed in Tables 10 to 12. To fully appreciate what the highly significant coefficients on post-prison outcomes really mean, it is useful to consult Table 14. Here, the F-test results for the change in R-squares are displayed. In every case in which the post-prison outcome variables are added to the fully loaded model, there is a statistically significant change in the R-square value. The implication is straightforward. There is a substantial contribution to the explanation of differing hours worked among ex-offenders by their varying experiences immediately following release from prison. This contribution is above and beyond that found by differences in background characteristics, criminal histories, pre-prison experiences, or recent prison outcomes. Indeed for blacks at least, these other factors explain very little of their post-prison employment prospects. This is not true for whites, however. A fully loaded model like model 6 does well in explaining differences in white hours worked. It does so well, in fact, that when it is reestimated for the second six months, the post-prison outcomes, including hours worked the first six months, contribute virtually nothing to the explanatory power of the model. This suggests that while post-release intervention strategies can be very powerful in assisting minorities in improving their employment prospects, for whites the die is cast. Their past has cast their employment profiles in a mold that is difficult to alter.

TABLE 10

ORDINARY LEAST SQUARES ESTIMATES OF POSTPRISON EMPLOYMENT: MODEL 10

(t-statistics in parentheses)

Independent Variable	Hours Worked Second Six Months			LN(Hours Worked Second Six Months)		
	Total	Blacks	Whites	Total	Blacks	Whites
General Background Treatment	-.607 (-.669)	-.618 (-.641)	-1.191 (-.408)	-.015 (-.234)	-.019 (-.266)	-.054 (-.254)
Race	-.732 (-.521)	--	--	-.050 (-.484)	--	--
Age	.070 (-.731)	-.039 (-.378)	-.586 (-2.204)	-.004 (-.581)	-.001 (-.229)	-.042 (-2.149)
Family Member Ever in Prison	-.588 (-.631)	-.364 (-.367)	-6.781 (-2.277)	.007 (.109)	.026 (.354)	-.394 (-1.802)
Preprison Experience Experience	.021 (.594)	.009 (.243)	.365 (2.815)	-.000 (-.246)	-.001 (-.657)	.024 (2.554)
White Collar	-3.029 (-2.281)	-3.345 (-2.397)	7.419 (1.516)	-.190 (-1.929)	-.207 (1.985)	.510 (1.421)
Education	.227 (.932)	.195 (.744)	.515 (.691)	.004 (.242)	.000 (.005)	.034 (.621)
Criminal History Total Time Arrested	.0599 (.800)	.086 (1.034)	-.105 (-.613)	.004 (.797)	.005 (.903)	-.004 (.372)
Age at First Arrest	.080 (.603)	.083 (.586)	.204 (.437)	.006 (.849)	.009 (.919)	.010 (.292)
Incarcerated for: Robbery, Burglary, Larceny Auto Theft	-.379 (-.387)	-.373 (-.357)	-.505 (-.170)	.002 (.037)	.014 (.179)	.058 (-.270)
Prison Outcomes Job Arranged	1.325 (1.292)	1.776 (1.651)	-7.099 (-1.815)	.159 (2.087)	.173 (2.154)	-.300 (-1.046)
Paroled	-1.890 (-1.631)	-1.417 (-1.154)	-5.295 (-1.465)	-.152 (-1.761)	-.118 (-1.294)	-.438 (-1.652)
Time Served	.346 (1.572)	.314 (1.326)	2.033 (2.021)	.013 (.777)	.009 (.548)	.139 (1.886)
Postprison Outcome Hours Worked First Six Months Out	.436 (9.773)	.453 (9.60)	.115 (.815)	.028 (8.657)	.030 (8.656)	.002 (.216)
Constant	15.561 (4.091)	13.414 (3.476)	30.301 (2.351)	2.410 (8.512)	2.261 (7.832)	3.513 (3.711)
F-statistic Significance Level	9.523 (.000)	10.074 (.000)	1.805 (.007)	7.459 (.000)	8.097 (.000)	1.260 (.277)
Multiple R	.492	.513	.612	.447	.473	.543
R^2	.242	.264	.375	.200	.223	.295
Adjusted R^2	.216	.237	.167	.173	.196	.061

TABLE 11

ORDINARY LEAST SQUARES ESTIMATES OF POSTPRISON EMPLOYMENT: MODEL 11

(t-statistics in parentheses)

Independent Variable	Hours Worked Second Six Months			LN(Hours Worked Second Six Months)		
	Total	Blacks	Whites	Total	Blacks	Whites
General Background						
Treatment	-.476 (-.528)	-.375 (-.390)	-1.338 (-.450)	-.008 (-.132)	-.006 (-.087)	-.067 (.310)
Race	-.926 (-.663)	--	--	-.060 (-.582)	--	--
Age	-.066 (-.694)	-.039 (-.385)	-.573 (-2.111)	-.003 (-.553)	-.001 (-.232)	-.040 (-2.047)
Family Member Ever in Prison	-.636 (-.687)	-.381 (-.389)	-6.928 (3.036)	.005 (.072)	.025 (.343)	-.407 (-1.828)
Preprison Experience						
Experience	.029 (.852)	.021 (.571)	.368 (2.802)	-.000 (-.079)	-.001 (-.425)	.024 (2.553)
White Collar	-2.990 (-2.265)	-3.370 (-2.438)	7.471 (1.509)	-.188 (-1.912)	-.208 (-2.005)	.515 (1.419)
Education	.194 (.800)	.124 (.475)	.576 (.746)	.002 (.146)	-.003 (-.186)	.039 (.697)
Criminal History						
Total Time Arrested	.041 (.552)	.056 (.676)	-.103 (-.597)	.003 (.621)	.004 (.646)	-.004 (-.357)
Age at First Arrest	.050 (.382)	.047 (.333)	.188 (.397)	.006 (.692)	.007 (.739)	.008 (.247)
Robbery, Burglary, Larceny Auto Theft	-.337 (-.346)	-.366 (-.353)	1.202 (.375)	.004 (.058)	.014 (.184)	-.043 (-.195)
In Prison						
Job Arranged	1.292 (1.268)	1.720 (1.613)	-7.244 (-1.822)	.157 (2.070)	.170 (2.125)	-.313 (-1.075)
Paroled	-1.761 (-1.528)	-1.259 (-1.034)	-5.280 (-1.444)	-.145 (-1.685)	-.110 (-1.206)	-.437 (-1.630)
Time Served	.317 (1.395)	.271 (1.154)	2.061 (2.021)	.0117 (.690)	.007 (.422)	.141 (1.896)
Postprison Outcomes						
Arrested First Six Months Out	2.549 (2.528)	3.024 (2.823)	1.202 (.375)	.133 (1.774)	.160 (1.987)	.108 (.461)
Hours Worked First Six Months Out	.443 (9.976)	.463 (9.874)	.105 (.720)	.029 (8.774)	.031 (8.815)	.001 (.123)
Constant	15.488 (4.098)	13.537 (3.540)	29.537 (2.239)	2.406 (8.511)	2.267 (7.877)	3.444 (3.558)
F-statistic	9.430	10.103	1.649	7.207	7.862	1.161
Significance Level	(.000)	(.000)	(.110)	(.000)	(.000)	(.342)
Multiple R	.503	.529	.614	.454	.481	.547
R^2	.253	.279	.378	.206	.232	.299
Adjusted R^2	.226	.252	.148	.177	.202	.041

TABLE 12

ORDINARY LEAST SQUARES ESTIMATES OF POSTPRISON EMPLOYMENT: MODEL 12

(t-statistics in parentheses)

	Hours Worked Second Six Months			LN(Hours Worked Second Six Months)		
Independent Variable	Total	Blacks	Whites	Total	Blacks	Whites
General Background Treatment	-.477 (-.528)	-.357 (-.372)	-2.147 (-.694)	-.000 (-.132)	-.006 (-.095)	-.121 (-.534)
Race	-.881 (-.628)	--	--	-.061 (-.584)	--	--
Age	-.062 (-.657)	-.034 (-.336)	-.583 (-2.145)	-.003 (-.555)	-.001 (-.226)	-.041 (-2.074)
Family Member Ever in Prison	-.627 (-.676)	-.372 (-.379)	-7.123 (-2.338)	.004 (.714)	.025 (.343)	-.420 (-1.876)
Preprison Experience Experience	.030 (.864)	.023 (.608)	.382 (2.807)	-.000 (-.084)	-.001 (-.419)	.025 (2.624)
White Collar	-3.000 (-2.270)	-3.394 (-2.450)	8.439 (1.669)	-.188 (-1.909)	-.208 (-2.002)	.580 (1.559)
Education	.203 (.831)	.130 (.498)	.683 (.875)	.002 (.141)	-.003 (-.183)	.046 (.812)
Criminal History Total Time Arrested	.041 (.551)	.055 (.667)	-.093 (-.539)	.003 (.620)	.004 (.644)	-.003 (-.304)
Age at First Arrest	.048 (.364)	.045 (.323)	.054 (.111)	.006 (.693)	-.001 (-.226)	-.000 (-.007)
Incarcerated for: Robbery, Burglary, Larceny Auto Theft	-.362 (-.371)	-.385 (-.371)	-.791 (-.259)	.005 (.071)	.014 (.182)	-.073 (-.326)
In Prison Job Arranged	1.338 (1.303)	1.771 (1.648)	-6.961 (-1.745)	.157 (2.048)	.170 (2.113)	-.294 (-1.005)
Paroled	-1.731 (-1.498)	-1.218 (-.996)	-5.558 (-1.515)	-.145 (-1.683)	-.110 (-1.198)	-.455 (-1.688)
Time Served	.321 (1.409)	.272 (1.155)	2.238 (2.158)	.011 (.687)	.007 (.421)	.153 (2.014)
Postprison Outcome Arrested First Six Months Out	2.424 (2.295)	2.868 (2.525)	1.525 (.473)	.135 (1.709)	.159 (1.860)	.129 (.548)
Hours Worked First Six Months Out	.457 (8.160)	.479 (7.892)	.149 (.979)	.029 (6.929)	.031 (6.833)	.004 (.382)
Average Salary First Six Months Out	-.005 (-.399)	-.006 (-.415)	-.031 (-.963)	.000 (.055)	.000 (-.038)	-.002 (-.871)
Constant	15.298 (4.012)	13.359 (3.468)	31.024 (2.334)	2.408 (8.441)	2.266 (7.813)	3.543 (3.624)
F-statistic Significance Level	8.832 (.000)	9.420 (.000)	1.598 (.122)	6.741 (.000)	7.317 (.000)	1.128 (.367)
Multiple R	.502	.529	.627	.454	.481	.560
R^2	.254	.280	.393	.206	.232	.313
Adjusted R^2	.225	.250	.147	.175	.200	.035

TABLE 13

F-TESTS OF COMPETING MODELS OF HOURS WORKED

Added Variable Set	Hours Worked			LN(Hours Worked)		
	Total	Blacks	Whites	Total	Blacks	Whites
Pre-Prison Experience	5.685*** F(3,415)	5.347*** F(3,323)	1.961* F(3,47)	3.708** F(3,425)	2.762** F(3,323)	1.287 F(3,47)
Criminal History	.742 F(3,425)	1.164 F(3,323)	.373 F(3,47)	.508 F(3,425)	.631 F(3,323)	.486 F(3,47)
Prison Outcome	8.287*** F(3,425)	9.968*** F(3,323)	.268 F(3,47)	6.977*** F(3,425)	7.604*** F(3,323)	.335 F(3,47)
Pre-Prison Experience, Prison Outcome and Criminal History	4.294*** F(9,410)	4.634*** F(9,370)	1.015 F(9,44)	3.090** F(9,410)	3.153** F(9,370)	.933 F(9,44)
Pre-Prison Experience and Criminal History	2.901*** F(6,423)	2.721** F(6,373)	.919 F(6,47)	1.765* F(6,423)	1.599* F(6,373)	1.599* F(6,47)

* Significant at 10 percent level.
** Significant at 5 percent level.
***Significant at 1 percent level.

TABLE 14

F-TESTS FOR COMPETING MODELS OF HOURS WORKED: POST-PRISON OUTCOMES

	Hours Worked Second Six Months			LN(Hours Worked Second Six Months)		
Added Variables	Total	Blacks	Whites	Total	Blacks	Whites
Hours Worked First Six Months	95.952* F(1,417)	68.076* F(1,365)	.640 F(1,39)	75.240* F(1,417)	74.895* F(1,365)	4.536 F(1,38)
Hours Worked First Six Months and Arrested First Six Months	51.636* F(2,416)	50.877* F(2,364)	.407 F(2,38)	39.389* F(2,416)	39.222* F(2,364)	.111 F(2,38)
Hours Worked First Six Months, Arrest First Six Months, Average Salary First Six Months	35.404* F(3,415)	34.040* F(3,363)	.584 F(3,37)	26.826* F(3,415)	26.542* F(3,363)	.645 F(3,37)
Arrested First Six Months	3.074* F(1,427)	3.075* F(1,375)	0 F(1,49)	1.281 F(1,427)	1.162 F(1,375)	0 F(1,49)
Average Salary First Six Months	31.256* F(1,427)	35.550* F(1,375)	.049 F(1,49)	28.523* F(1,427)	29.362* F(1,375)	0 F(1,49)

*Significant at 1 percent level.

DISCUSSION

Three findings are prominent in our results. A criminal record has no effect on post-prison employment. Pre-prison disadvantage--being young, with little work experience or education--has little effect on employment among black ex-offenders. And post-prison experiences affect black but not white employment. We discuss these findings in return.

1. No Effect of Criminal Record on Employment

Suppose that we had hypothesized that there is discrimination against ex-offenders. Then, the finding that there is no effect of criminal record on post-prison employment could be evidence against that hypothesis. But clearly we have not performed an adequate test. Such a test would require information on both criminals and noncriminals. Those individuals with no criminal records--if discrimination were operative--would experience more favorable employment outcomes. Among ex-offenders alone, however, the only insight that can be learned about discrimination by examining a criminal record is whether discrimination is based on degree or seriousness of a record, not whether discrimination is based on the existence of a record. The evidence is moot concerning whether having a criminal record reduces employment prospects. Furthermore, there does not seem to be support for the view that there is increased discrimination according to the degree of seriousness of a record.

Testing whether there is an effect of criminal record on employment is consistent with tests of other hypotheses, of course. Criminal record might be a proxy for prior participation in crime. If there is some sort of accumulation of criminal human capital arising from prior par-

ticipation in crime, then through time the gains to crime will be higher for those with more extensive criminal records. Relative to participation in legitimate activity, therefore, crime would be more attractive. Thus, the lower hours worked, if found for more extensive criminal histories, would mean that more active criminals chose not to allocate larger fractions of their time to legal pursuits. Since we did not find that a more extensive criminal history lowers hours worked, this may mean (a) that those with more extensive criminal histories do not necessarily accumulate additional criminal human capital, or (b) that the gains to illegitimate activities through accumulation of criminal human capital do not outweight any losses to legitimate activity when criminal records are lengthened, or (c) that criminal record is not a satisfactory proxy for prior participation in crime, or even (d) that the decision to engage in crime is unresponsive to changes in relative returns to crime.

Another hypothesis is that criminal history is a proxy for time out of the labor market. While more time engaged in crime may not increase criminal human capital, it may result in more time in court, in jail, or in prison. This means time not working. Time out of the labor market may represent deterioration of work skills, less experience, and therefore may lower probabilities of having a successful employment profile in the future. By this reasoning, our finding that pre-prison employment experiences have a weak impact on post-prison employment is consistent with the finding that criminal history does not affect employment.

While policies and programs designed to eliminate licensing restrictions and other employment barriers posed by criminal records are commendable in their own right, there is nothing in the findings reported here to suggest that these initiatives will affect the post-prison employment

prospects of ex-offenders. Expungement of criminal records, for example, would make sense in order to reduce the criminal-labeling effect on rearrest, but the evidence does not reveal whether such an effort would reduce the unemployment rates of ex-offenders. Indeed, if the only significant use of criminal records is made by law-enforcement agencies or prosecutors' offices, a legitimate complaint could be raised that eliminating access to this information concerning an individual's past may not only reduce crime-solving efficiency but may also reduce the deterrent effectiveness of criminal sanctions. In the absence of a strong finding that criminal records diminish employment prospects, the case for the substantial beneficial effects of expungement is weakened.

2. No Effect of Disadvantage on Black Employment

We found that varying background characteristics and degrees of pre-prison disadvantage explain little of the variation in post-prison employment experiences of blacks. We also note that when we control for these factors--which explain much of the variation in post-prison employment experiences among whites--there is among whites little added explanatory power of such post-prison events as having been employed or rearrested during the first six months out of jail. One explanation for this result could be that the process by which blacks are arrested, convicted, or incarcerated is a random one (i.e., without regard to actual participation in crime), and that the process affecting white involvement in the criminal justice system clearly discriminates between crime-prone and non-crime-prone individuals. Since being disadvantaged and an ex-offender as opposed to being disadvantaged and a nonoffender is somewhat a matter of chance for a black, luck plays much more of a role in deter-

mining whether blacks get hired after prison than in the case of whites. Those blacks who are lucky enough to have a job arranged when they leave prison or who are lucky enough to find a job within a few months after release can expect to have more favorable subsequent employment experiences than the unlucky ones. This has nothing to do with relative disadvantage, criminal record, or previous employment experience. It is consistent with the view that their ex-offender status is not strongly predicted by their backgrounds or work experiences. It is also predictive of the view, discussed earlier, that criminal records or other measures of ex-offender status are poor predictors of employment performance.

3. Post-Prison Experiences Determine Black, but not White, Employment

The explanations as to why background variables do not explain black post-prison employment can also be marshalled to explain why post-prison experiences do have explanatory power. But we can go beyond these explanations and look at how pre-prison employment experiences affect white post-prison employment. This examination will suggest why post-prison experiences do not affect white offenders. Recall that more months of pre-prison employment experience and having had a white collar job before imprisonment tend to increase post-prison employment for white ex-offenders. Moreover, among whites, ever having a family member in prison reduces employment. Work experience and background count among whites. Perhaps employers, at least for whites, go beyond workers' recent pasts. Perhaps they look for indications of stability and prior successful job performance. Yet even if they do not, white workers with successful pasts appear more apt to start out with success upon release. This means that any explanatory power of post-prison variables in determining

ex-offenders' employment arises because of the correlation of these variables with pre-prison work experience and background characteristics.

It should be easy to see that there are both demand-side and supply-side effects of background and work experience on post-prison employment. White ex-offenders with more favorable work experiences and background may be more willing to work. And their prior success--in spite of their current ex-offender status--makes employers more willing to hire them. If previous work experiences and background have a sufficiently strong effect on ex-offender labor supply decisions, or if employers base their ex-offender hiring decisions strongly upon information on prior work history and family background, then there is little wonder that these variables predict post-prison employment well. But generalizing this result beyond the Baltimore sample should be avoided because white ex-offenders represented a small fraction of the participants in the LIFE experiment, and they appear to be somewhat more disadvantaged--with respect to educational attainment and prior work experience--as a group than white ex-offenders generally.

There are a number of more explicit reasons why post-prison employment can be so significantly affected by blacks' early post-prison outcomes. The first has to do with affirmative action. Assume that through time there is a lessening of discrimination against blacks as a group that results in general improvement of the economic well-being of blacks. Then those blacks who have been out of the labor market because of incarceration may enjoy improved employment conditions relative to their pre-prison conditions, even taking into account their current ex-offender status. This phenomenon does not explain why their background characteristics or pre-prison experiences do not explain much of the

variation in their post-prison employment experiences in the first place. But it suggests why the post-prison outcomes matter for blacks but not for whites.

A second related reason is that some firms, engaging in affirmative action, may seek to kill two birds with one stone by hiring workers who are both ex-offenders and black. This makes sense if implicit subsidies are offered to firms hiring miniorities or ex-offenders. Not enough is known about the job market in Baltimore at the time to permit anything more than a suggestion, but numerous training and job assistance programs for both blacks and ex-offenders existed side-by-side in Baltimore during the 1970s. Indeed, in one CETA program providing job placement services for disadvantaged workers in Baltimore City and Baltimore County it was found that ex-offenders received higher wages and more job offers than nonoffenders (Phillips and Myers, 1978). If black ex-offenders are perceived to be more productive than black nonoffenders who participate in the CETA program, then it makes more sense to hire them.

A third reason, derived by the use of opposing logic, may be that black ex-offenders are more likely to quit and therefore would supply a continuous flow of labor for the firm which hires them but which does not wish to invest in their specific human capital. The higher quit rates among blacks are consistent with the fewer hours they work, as compared to white ex-offenders. And the higher turnover rates would be consistent with the secondary labor market jobs they hold. Note, too, that those blacks who had previously held white-collar jobs are less likely than other blacks to be employed and work fewer hours, as one would expect if this preferential hiring practice applies only to jobs in the secondary labor market.

Other reasons why post-prison outcomes affect black post-prison employment but not that of whites include the following: (1) employers need additional evidence of satisfactory performance among blacks, and this evidence must be recent; and (2) white criminals are very different from whites generally, and background characteristics adequately mirror these differences; but black criminals are more like other blacks generally, so their backgrounds tell little about their likely performance.

CONCLUSION

It is generally recognized that employment opportunities and labor market decisions differ between blacks and whites. However, black and white ex-offenders appear so similar at first glance that it seems reasonable to view their employment problems collectively as problems faced by all ex-offenders. The reasonableness of such an approach is challenged in this paper. The determinants of hours worked differ markedly between black and white ex-offenders. Labor market intervention has opposite effects on them. And the implications for policy clearly diverge: Immediate post-prison aids such as job referrals or direct job placements will help blacks but not whites.

There is a suspicion that many of the employment programs, particularly those for ex-offenders, may be a result of oversimplified views of the processes by which racial discrimination or racism becomes suffused in the economy. Admittedly we offer no better view of these processes. But a continued failure to do so will doom subsequent efforts to intervene in the economy on behalf of those who disproportionately fare

poorly in it. Recent experience suggests that when governmental budget cuts must be made, the ax falls first on innovative though unsuccessful efforts to assist such members of the underclass as ex-offenders and not on such tried and true traditional methods as very certain and very severe punishment. Findings such as those in this paper clearly justify a radical reexamination of all programs for the poor and disadvantaged.

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