

Preliminary and Incomplete
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The Role of Privatized Prison Industries in Post-Release Labor Market Reintegration

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Abstract:

As the prison population has rapidly expanded, the share of inmates participating in educational and vocational prison programming has declined. Collaborations with private organizations have the potential to provide new funding sources for prisoner rehabilitation. Since 1981, Florida has outsourced all of its prison industry programs to Prison Rehabilitative Industries and Diversified Enterprises, Inc (PRIDE). PRIDE does not receive any public funding, but instead finances its operations and training activities with the revenue from its prison industries. Using administrative data from the Florida Department of Corrections, I compare the post-release employment outcomes of offenders who participate in the PRIDE program to those of similar offenders who do not. I also instrument for prison industry participation by exploiting conditional random assignment to initial prison facility. I find that prison industry experience increases the probability of employment for white offenders. The results for minority offenders are less clear. There is evidence that any prison industry effect may interact with other forms of human capital.

Hear the phrase “prison industry” and the immediate image is a prisoner making license plates. Yet the term prison industry encompasses a much wider range of activities from working in sugar cane fields to manufacturing eye glasses. Viewed as exploitative by some and rehabilitative by others, prison industries are suggested as a solution to many of today’s incarceration problems. If looked at optimistically, prison industries can reduce the cost of incarceration, improve discipline within prisons, and provide inmates with marketable skills that improve their post-release outcomes. Yet it is not certain the extent to which participation in prison industries can actually improve an ex-offenders reintegration into the labor market.

Prison industries have been a feature of the penal system since the 1820s. In the early decades of prison industry, it was also a system with very little oversight or concern for the wellbeing of the inmates. Prison officials made contracts with private firms to provide inmate labor in return for payments to the state. In some cases, entire prisons were leased to private firms, and the state maintained no responsibility for overseeing the prisoners. While some argued that the industries could instill a good work ethic, the primary function of prison industries was to defray the cost of imprisonment. Perhaps not surprisingly, the 19th century prison industries “led to outrageous abuses. The profit motive superseded all concern for rehabilitation or even simple human decency” (Walker 1998, p85).

During this period, the overwhelming majority of incarcerated men worked in some prison industry. While there was backlash against human rights violation in the convict-leasing program, the strongest resistance to prison industries came from other private businesses that feared competition from the low-labor cost prison industries.

Private firms lobbied successfully, and the 1929 Hawes-Cooper law curtailed the growth in prison industries by allowing states to ban prison-made goods from other states.

Legislation on both the state and federal level greatly reduced the market for goods made with prison labor.

In 1900, over 85 percent of inmates worked in prison industries. This share had fallen to 44 percent by 1940 (Gallagher and Edwards 1997). By 2002, only 6 percent of inmates in state and federal prisons participated in prison industries (Pryor 2005). Part of the recent decline in prison industry participation can be explained by the rapid rise in prison population. The capacity of the prison industries has not expanded to keep pace with increased demand. While the prison industry program seems relatively small, it is still worth exploring. It is an important potential arena for collaboration with the private sector. These collaborations have been encouraged since the 1979 passage of the Prison Industry Enhancement Act (PIE).¹ Privately operated prison industries have the potential to provide additional needed revenue to state prison systems while at the same time offering training for inmates.

The evidence on the effectiveness of these industries is still very limited. Saylor and Gaes (1997) evaluate the federal prison industries (UNICOR) and vocational training programs. This study, which started in 1983, had a prospective, longitudinal design and included 7,000 inmates. Saylor and Gaes use propensity score matching to select a comparison group from the cohort of prisoners released at the same time as their study members. They find that prison industry participation reduces the risk of 1-year

¹ The Prison Industry Enhancement Certification Program (PIECP) exempts certified prison industries from the federal ban on the sale of prison-made goods in interstate commerce. Certified industries must pay prisoners the prevailing wage although up to 80 percent of the wage can be deducted to cover room and board, taxes, child support, and crime victim compensation. States with certified PIE programs can allow private firms to operate inside of correctional institutions.

recidivism (defined here as a return to Federal prison) by 35 percent. They also found that training participants were more likely to be employed, but that conditional on being employed there were no differences in earnings between the groups. At the end of Saylor and Gaes' 12 year post-release follow-up period, industry participants were 24 percent less likely to have recidivated. While the use of propensity score matching is certainly an advance over the non-experimental methodologies generally used in the criminology literature, it seems reasonable to worry about the unobservable differences between two individuals who appear similar but make different choices regarding prison industry participation.

Maguire, Flanagan, and Thornberry (1988)'s evaluation of the prison industries in the New York state prison system is less optimistic. They find that after including controls for prior criminal convictions, military service, and marital status the difference in recidivism rates between industry participants and non-participants disappears. Saylor and Gaes (2002) offer some possibilities to reconcile the results of these two studies: 1) the state and federal prison inmates are different populations, 2) the quality of the prison industry training programs may be different, 3) geographic differences in job opportunities post-release.

My analysis will focus on the Florida prison industries. In 1981, Florida became the first state to contract out all state prison industries. Prison Rehabilitative Industries and Diversified Enterprises, Inc (PRIDE), the recipient of the contract, is a privately run non-profit. It operates 38 industries in 22 correctional facilities. PRIDE serves approximately 4,000 inmates a year. The industries provide inmates training in fields ranging from digital information services to traffic painting. PRIDE also provides job-

placement and support upon release. The state does not provide any direct funding to PRIDE (although they do provide space inside the prisons for the industries to operate). The profits of the prison industries fund the training and job placement services.

This analysis of PRIDE contributes to the existing literature by placing a much greater emphasis on labor market reintegration. The Saylor and Gaes study had access to self-reported earnings, but they focused on recidivism, not employment outcomes. If the link between prison industries and recidivism operates through the labor market, it seems important to investigate this link directly. I am also able to improve on prior attempts to correct for selection into treatment by exploiting conditional random assignment to initial prison facility. Not all Florida correctional facilities house a prison industry. An individual's first prison assignment affects the probability that he will work in a prison industry before he is released. This allows me to instrument for PRIDE participation with the number of training slots at an inmate's first facility. I find that prison industry experience increases the probability of employment for white offenders. The employment outcomes for minority offenders are less clear. There is also evidence that any prison industry effect may interact with other forms of human capital.

Conceptual Framework

Prison industries play many different roles in today's prison system. They help reduce inmate idleness, they provide a motivation for good behavior, and they attempt to reduce the total costs of incarceration. While this alone may justify the existence of the prison industries, administrators of prison industry programs go one-step further: they claim that participation gives inmates industry specific skills and general work

experience that will improve their post-release labor market outcomes and decrease the likelihood of recidivism.

Most inmates gain experience in one industry. They might be trained in garment cutting, beef cattle herd management, or wood furniture manufacturing. While this industry specific training should have positive returns, the applicability of this training may be limited. The first issue is that prisoners may receive training in the wrong industries. Much of this is due to political pressure. To address the criticism of other firms, prison industries have entered into markets where businesses have shifted production overseas. While this strategy may reduce fears about unfair competition from prison industries employing low-cost labor, it causes inmates to receive training in industries that are no longer hiring workers domestically. This type of industry-specific skill has little return in the outside labor market. Prison industries have also done a poor job preparing inmates for positions in the growing service economy. Clearly inmates cannot hold positions that require customer contact. Attempts to bring “back-room” service industries into prisons have also been problematic. While there are prison industries dedicated to digitizing government documents, there has been substantial concern whenever the industry requires giving inmates access to confidential information.

In some cases, prison inmates may be receiving training in the right industries, but using the wrong technology. Pressure from prison officials and politicians to employ as many workers as possible forces prison industries to concentrate on labor-intensive forms of production. With a low marginal cost of labor, there is little incentive for prison industries to invest in modern labor-saving technologies (Pryor 2005).

While prison industries emphasize industry-specific training, they also claim that one of the greatest benefits of participation is that inmates gain general work skills. Florida's prison industry PRIDE aims to duplicate "as nearly as possible, the operating activities of a free-enterprise type of profit-making enterprise" (PRIDE Annual Report). They emphasize general work skills: arriving on-time, working cooperatively, respecting management, etc. Gaining these general work skills may substantially enhance the productivity of offenders, but this type of human capital may not be observable to employers at the hiring stage. Prison industry experience may help an ex-inmate keep a job, but it may not affect the probability of getting a job.²

Data

I evaluate the Florida prison industries using detailed administrative data from the Florida Department of Corrections. This data, originally created for a Tyler and Kling (2006) study of the returns to a prison GED, include detailed information on all aspects of an offender's criminal history as well as the information from the prison intake record and prison administrative files. Essentially the dataset includes all the information in the Florida DOC mainframe. Using Social Security Numbers, the DOC has matched these inmate files to earnings data from the Florida Unemployment Insurance (UI) System.³

My sample includes all males who entered prison after 1993 and are released by 1999. My analysis excludes youthful offenders⁴ as well as inmates that are not initially

² Here I am referring to work experience in prison. Prison industry programs often have job placement services that may affect the probability of being employed immediately after prison release.

³ The UI earnings system does not include out-of-state earnings, self-employment, or informal employment.

⁴ A youthful offender is a person sentenced for their first felony between the ages of 14 and 24 and classified by the court to be a youthful offender.

assigned to a major correctional institution.⁵ I also need to exclude inmates assigned to one of the five private prisons in Florida because the DOC data does not include information on the incarceration experience of these individuals. This results in an analytic sample of 16,290 of which 565 individuals with participation in prison industries.

Analytical Methods

While participation in prison industries could theoretically influence many aspects of the reintegration of an offender into the community, here I focus on labor market outcomes. Specifically, I use administrative Unemployment Insurance (UI) Earnings records to define the two outcome variables: employment and total quarterly earnings. I classify an individual as “employed” if he has non-zero earnings that quarter. I will examine the impact of PRIDE on employment during the three years after an inmate’s forecasted release date. This data allow me to test for a PRIDE effect while controlling for a rich set of potential covariates. The variables are defined as follows:

- Y_{it} = employment indicator or annual UI earnings for individual i in time t
- $PRIDE_i$ = a (0, 1) indicator for PRIDE participation
- AGE_{it} = a vector of two variables containing age and age squared
- $EDUC_i$ = a vector of education dummies for years of completed education
- $WHITE_i$ = a (0, 1) indicator for being a non-Hispanic white
- X_i =
 - predicted sentence length,
 - type of offense,

⁵ This exclusion eliminates individuals who are assigned to work camps, work release centers, or road prisons. These facilities do not offer prison industries, so these inmates are ineligible for the treatment.

- cumulative years in prison prior to the target spell,
 - number of disciplinary reports ever accumulated in prison prior to target spell,
 - marital status at time of prison entry,
 - years in Florida prior to prison spell, and
 - whether individual is a Florida resident at time of prison entry
- $ASSIGN_i =$
 - health status at prison entry,
 - custody class, and
 - prison reception center

The most basic specification compares the employment outcomes of PRIDE participants and non-participants.

$$Y_{it} = \beta_{10} + \delta_1 PRIDE_i + \varepsilon_{1it} \quad ^6$$

The second specification includes the basic set of controls (age, education, and race) that are included in any evaluation of vocational training. I have also included a vector of year dummies to control for macroeconomic conditions. While these control variables are far from comprehensive, this model does correct for basic demographic differences between PRIDE participants and non-participants.

$$Y_{it} = \beta_{20} + \delta_2 PRIDE_i + Age_{it} \beta_{21} + Educ_i \beta_{22} + \beta_{23} White_i + Year_{it} \beta_{24} + \varepsilon_{2it}$$

The third specification includes the richer controls available in the Florida DOC controls. These variables include many characteristics recorded at prison intake as well as details of the individual's incarceration history and current criminal offenses.

$$Y_{it} = \beta_{30} + \delta_3 PRIDE_i + Age_{it} \beta_{31} + Educ_i \beta_{32} + \beta_{33} White_i + Year_{it} \beta_{34} + X_i \beta_{35} + ASSIGN_i \beta_{36} + \varepsilon_{3it}$$

Although the inclusion of the additional controls may lessen the omitted variable concerns, the selection into treatment is still voluntary. The inmates need to apply for

⁶ In all regressions, I cluster the standard errors at the facility-year level to allow for arbitrary correlations of the error terms within a prison facility. I cluster at the facility-year level since it is the level at which PRIDE programming varies. The standard errors are also robust to heteroskedasticity.

prison industry positions and the PRIDE administrators need to accept them. Both points of selection suggest that there may be important unobservable differences between participants and non-participants. It is possible that the inmates who volunteer for PRIDE are the ones committed to rehabilitation. The post-release outcomes of these individuals will likely be better even in the absence of the prison industry participation. But, since a prison industry job is the only way to make money in prison, it may be more reasonable to worry about selection on the part of prison industry administrators.

I use pre-prison earnings to estimate individual fixed effects models. This corrects for any unobserved heterogeneity between the two groups that is constant across time. The individual fixed effects specification includes five years of UI data – two years prior to incarceration and three years following release. I include an indicator variable AFT to capture the main difference between the pre and post prison period. I interact this AFT indicator with the vector of control variables to allow these time invariant characteristics, like education level, to have time-varying coefficients.

$$Y_{it} = AFT_{it} \beta_{40} + \delta_4 PRIDE_i + Age_{it} \beta_{41} + Educ_i \beta_{42} + \beta_{43} White_i + Year_{it} \beta_{44} + AFT_{it} * X_i \beta_{45} + ASSIGN_i \beta_{46} + \alpha_i + \varepsilon_{4it}$$

Unfortunately, the fixed effects model cannot correct for time-varying heterogeneity. Time-varying heterogeneity seems particularly important here since arrest and incarceration happens between the pre and post period. This experience may affect people very differently, and you might worry that individuals who volunteer for the PRIDE program have been affected differently than non-participants.

To address this concern, I instrument for PRIDE participation. Here I exploit the conditional random assignment of prisoners to their first prison facility. When an offender is ordered to report to prison, they start the process at one of Florida's four

reception centers. These reception centers collect the initial intake information from the inmate and administer a battery of tests. Once the initial processing is complete, the inmate is essentially sent off on the next empty bus. Conditional on his medical status and custody class, the bus schedule randomly assigns the inmate to one of the prisons in the region. I limit my sample to individuals assigned to a state-run major correctional institute. There are 47 possible destinations.

Since only half of the facilities have a PRIDE industry, I can use this initial facility assignment to instrument for PRIDE participation. Instead of using the actual facility as the instrument, I use the facility's PRIDE slots per prisoner. The labor demand of the different industries range from 3 inmates for a beef cattle industry to 130 inmates for a sugar cane industry. The facility's PRIDE slots per prisoner is a stronger instrument than the facility itself and seems more plausibly excludable from the second stage earnings' equation. The availability of PRIDE offerings should have no impact on post-release outcomes other than the direct affect through PRIDE participation.

$$PRIDE_i = \alpha_1 + \alpha_2 PRIDESLOTSPC_i + Age_{it} \alpha_3 + Educ_i \alpha_4 + \alpha_5 White_i + Year_{it} \alpha_6 + X_i \alpha_7 + ASSIGN_i \alpha_8 + \eta_i$$

$$Y_{it} = \beta_{40} + \delta_5 PRIDEHAT_i + Age_{it} \beta_{41} + Educ_i \beta_{42} + \beta_{43} White_i + Year_{it} \beta_{44} + X_i \beta_{45} + ASSIGN_i \beta_{46} + \varepsilon_{i4}$$

Since numerous studies have found that returns to educational and vocational programs vary by race/ethnicity, I will estimate all of the above models for the entire population and then for whites and minorities separately.⁷

Descriptive Statistics

⁷ Since only 5 percent of Florida inmates are Hispanic, my sample size is not large enough to examine separately whites, blacks, and Hispanics. Instead I include Hispanics in the minority offender group.

Table 1 compares basic descriptive statistics of PRIDE and non-PRIDE offenders. Of the 16,296 individuals in my sample, 565 individuals (3.6 percent) spent some time working in a prison industry. Among PRIDE participants, the average exposure to the program was over 1000 hours.⁸ The descriptive statistics indicate that taking the naïve approach and comparing the post-release outcomes of PRIDE participants with non-participants could be very problematic. Inmates in PRIDE are in prison for different reasons. PRIDE participants are more likely to have committed a property crime and less likely to have a drug conviction. PRIDE participants also look different on key demographic variables. Relative to non-participants, the group with PRIDE experience is whiter and slightly younger. Another important distinction is that PRIDE inmates have a sentence length that is four months longer on average. Interestingly, the inmates who participate in PRIDE are also more likely to take additional general academic, GED, or vocational classes.

One nice feature of the data is the ability to compare participants and non-participants prior to incarceration. Figure 1 graphs quarterly earnings in the 12 quarters prior to prison entry. It is important to highlight how low quarterly earnings are before prison. In the three years prior to incarceration, earnings average 600 dollars a quarter. These low earnings are a combination of low hours worked and low hourly wage. While UI earnings data does not allow me to separate these two effects, Figure 2 demonstrates the importance of zero-earners. Only 30 percent of the sample has positive earnings in the 12 quarters prior to prison. The average earnings of the two groups are comparable over the three-year period, but the PRIDE participants have a spike in earnings one year prior

⁸ On average, PRIDE inmates work 6.7 hours per day in their prison industry position (PRIDE Annual Report).

to incarceration. The earnings of PRIDE participants generally look more volatile, but the average is estimated from a much smaller sample.

While PRIDE participants and non-participants look similar prior to incarceration, their labor market outcomes diverge post release. Figure 3 charts quarterly earnings for the 12 quarters following release. Here PRIDE participants have consistently higher earnings. Figure 4 suggests that higher rates of employment for PRIDE participants may generate the earnings differential observed in Figure 3. Figure 5 examines whites and minorities separately. PRIDE participants have more favorable labor market outcomes in both groups, but the gap between participants and non-participants is larger for minorities. An unconditional comparison of PRIDE participants and non-participants certainly suggest a large PRIDE treatment, but there are still important selection concerns to address.

Results

Table 2 displays the OLS regression results for employment models. The dependent variable is a binary indicator for whether an individual has positive earnings during the year. The naïve model in the first panel replicates the observations from Figure 4. Industry participation is associated with a 9 percentage point increase in the probability of employment. Adding basic demographic controls and detailed criminal history covariates dampens the estimated treatment effect, but PRIDE is still associated with a statistically significant 6.5 percentage point increase in employment rates. While the estimates are higher for whites than minorities, they are not statistically distinguishable. In the final panel of Table 2, I estimate an individual fixed effects model that includes

two years of pre-prison earnings. Allowing for a time-invariant individual effect again lowers the estimated employment effect, but it has a bigger impact on the estimated effect for minorities. In the fixed effects specification, the employment effect for minorities is insignificant while the employment effect for whites is robust to the inclusion of the individual fixed effect.

Employment may be an important outcome in itself, but a binary employment outcome fails to distinguish between an individual with 100 dollars in annual earnings and a full-time worker. To address this concern, I estimate the same models using annual earnings in 2002 dollars as the dependent variable.⁹ Table 3 presents the results. When few covariates are included, there is a significant difference in earnings between PRIDE participants and non-participants. PRIDE participants earn almost 1000 dollars more per year. While 1000 dollars may seem like a relatively modest increase in earnings, it is 25 percent of baseline earnings. With the inclusion of more detailed covariates, the earnings effect is no longer significant.

Observable differences between PRIDE participants and non-participants seem to explain much of the gap in earnings for whites. When the full set of controls is included, the earnings effect falls from 783 dollars to 246 dollars and is no longer significant. While the earnings effect for minorities is also insignificant, the coefficient is much larger and the p-value is 0.17. The inclusion of individual fixed effects does not alter the results. With only 319 minority inmates with prison industry experience, the absence of a significant earnings effect may be more an issue of statistical power than the absence of a true treatment effect.

⁹ All individuals are included in the earnings models, including those with zero earnings. This creates a large mass at zero, since almost 50 percent of the sample is not working in any given year.

The inclusion of detailed control variables and pre-prison earnings does not eliminate concerns about time-varying unobserved heterogeneity. I try to address this by instrumenting for prison industry participation. In the first-stage, I predict whether an individual has prison industry experience using the availability of prison industries at the individual's first prison. Specifically, I use the number of industry slots per prisoner. This gives a strong first stage with an F-stat of 37. I present the second-stage results in Table 4. I estimate employment and annual earnings models including the full set of covariates. The estimates are generally noisy; only the employment effect for whites is statistically significant, but few of the other estimates are tightly estimated zeros. In the IV model, PRIDE participants have employment rates that are 38 percentage points higher. This IV point estimate is more than 5 times larger than the OLS and FE estimates. For minorities, the IV results are less optimistic. While the OLS results suggested that there might be a positive earnings effect for minorities that I did not have the statistical power to detect, the IV earnings effect is actually negative, although very insignificant.

Discussion

In my final specification, the IV model with all controls, I find two surprising results: a large positive PRIDE employment effect, but an effect that is only operating for white offenders. It is possible that the OLS and FE effects results are contaminated by selection bias. If white offenders in PRIDE are negatively selected, the IV result could be more positive. But it seems difficult to tell a story that would generate this level of negative selection. Another possibility is that the PRIDE effect for the marginal industry participant exceeds the estimated average effect. The IV specification estimates a Local

Average Treatment Effect (LATE). The actual effect of PRIDE may be greater for the marginal worker who participates due to an excess availability of slots than for the individual who selects into PRIDE because he is committed to rehabilitation. The motivated individual may have the same post-release outcomes regardless of PRIDE participation.

I do find evidence that the PRIDE treatment effect is heterogeneous along some observable dimensions. In addition to race, I examine offense type, criminal history, education level, and age. PRIDE participants with fewer than 11 years of schooling seem to get the greatest employment boost from prison industry work. This difference in employment rates does not translate into a greater increase in annual earnings. In the case of education, PRIDE may be able to substitute for low educational attainment. On the other hand, older works seem to benefit more from prison industry work. After stratifying the sample into two groups based on the age of prison entry, a PRIDE earnings effect seems to exist for inmates older than 25, but not for younger inmates. These results highlight the need to consider how prison industry work experience might interact with other forms of human capital.

Finding a positive labor market effect for whites and not minorities is a departure from previous work. Tyler and Kling (2006) find a positive GED effect only for minority offenders. Sayles and Gaes (2004) have a similar finding. In their study of federal prison industries, they find a larger reduction in recidivism for minority participants than for white participants.

It is possible to reconcile my PRIDE results with Tyler and Kling. While prison GED and industry programs are both designed (at least in part) to develop the human

capital of inmates, any positive treatment effect may operate differently for the two programs. An inmate who obtains his GED while in prison has a new educational credential, and education may be a more valuable signal for blacks than for whites (Lang and Manove 2006).

PRIDE's human capital training operates differently. If PRIDE programming is effective, the inmate increases his industry specific knowledge and receives general work experience. The value of this general work experience may not be immediately evident to employers. While the work experience may increase an individual's productivity and wages, it may not alter the probability of being hired.

This distinction may be particularly important for minority offenders. In a labor market audit study, Pager (2003) finds that the criminal record penalty is 40 percent greater for blacks than for whites. In Pager and Western's follow-up, they note that employers even prefer white applicants with a felony record to black applicants with no criminal history. The testers' qualitative reports suggest that employers are willing to take a chance on the white felon viewing the earlier offense as a mistake in the past. PRIDE experience may increase the likelihood that employers are willing to give the white offender a second chance. If employers are unwilling to hire minority offenders, minorities with PRIDE experience will not see any return to their human capital investment.

Another possible explanation for the racial difference in the PRIDE effect would be if white and minority offenders had different experiences within the PRIDE program. There are at least a few different channels to explore. White and minorities could be working in different industries, and the returns to PRIDE may vary by industry. It is also

possible that white participants are receiving better training opportunities in a given industry. A third channel to explore is PRIDE's employment placement service. If white PRIDE participants are getting greater access to or taking better advantage of the PRIDE placement service, this could also account for the differential treatment effect.

Conclusion

Very little is known about how to stop the revolving prison door. Individuals leave prison with low levels of education, little work experience, and weak social networks. Many struggle with substance abuse problems or other mental health issues. They face a labor market where employers have demonstrated reluctance to hiring workers with criminal records. Prison industry programs hope to provide workers with industry-specific skills and general work experience that will help offenders successfully join the legal labor market. My Florida results suggest that prison industry experience may increase the employment rates of white offenders. The results for minority offenders are less clear. While minority offenders with prison industry experience have higher rates of employment, much of this gap can be explained by observable differences between participants and non-participants. There may be an earnings effect for minority offenders, but it is not statistically significant in this data. Additionally, evidence that the effect of prison industry participation varies by observable characteristics highlights the importance of considering how this work experience may interact with other forms of human capital.

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Figure 1
Quarterly Earnings (\$2002) of Offenders Prior to Incarceration
By PRIDE Participation Status

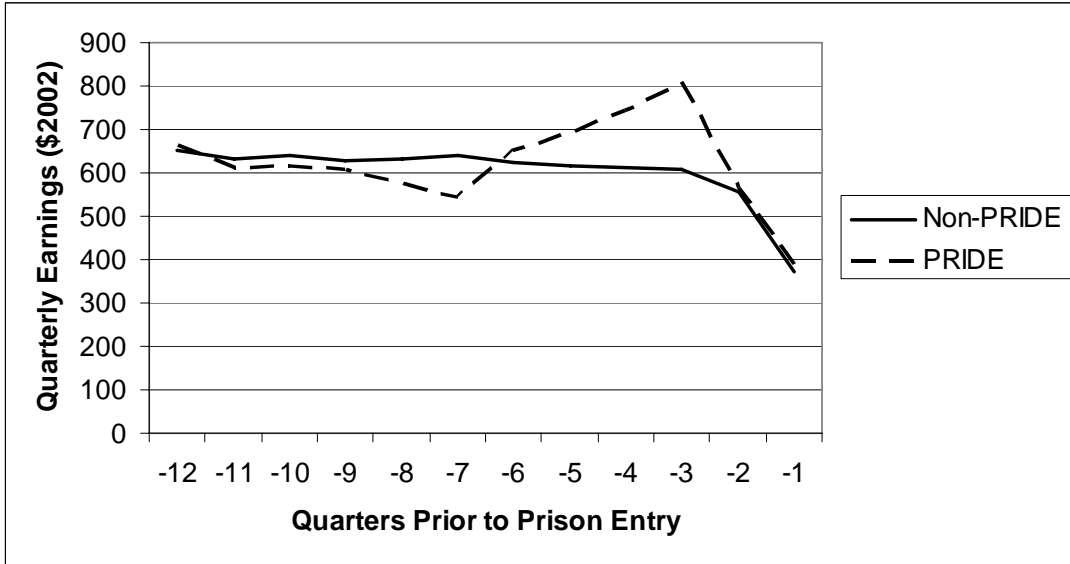


Figure 2
Employment Rates of Offenders Prior to Incarceration
By PRIDE Participation Status



Figure 3
Quarterly Earnings (\$2002) of Offenders Post Release
By PRIDE Participation Status

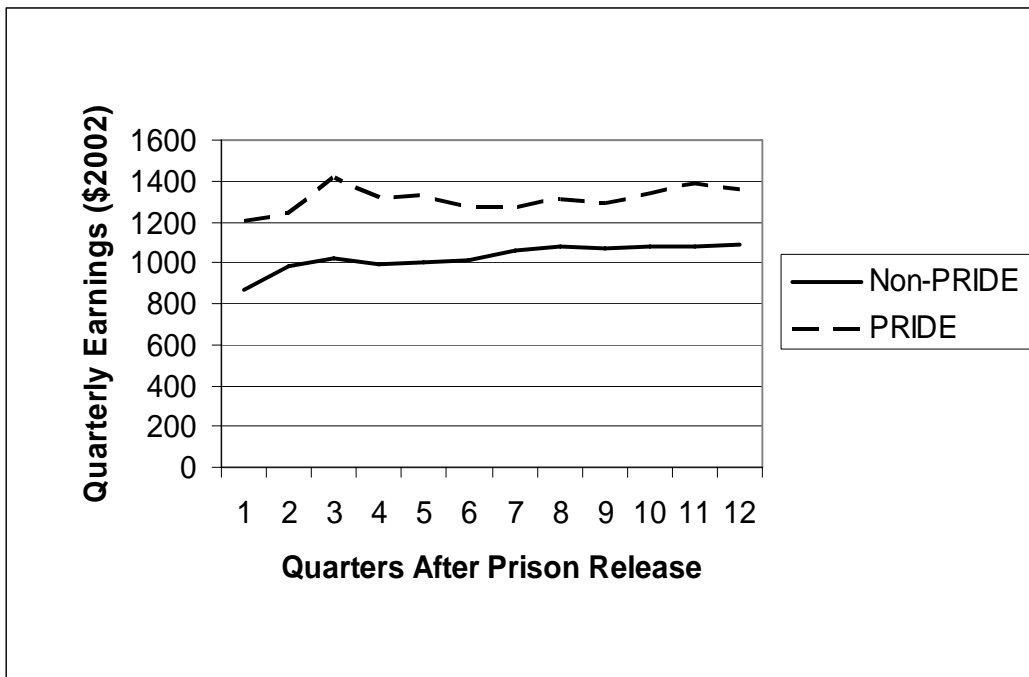


Figure 4
Employment Rates of Offenders Post Release
By PRIDE Participation Status

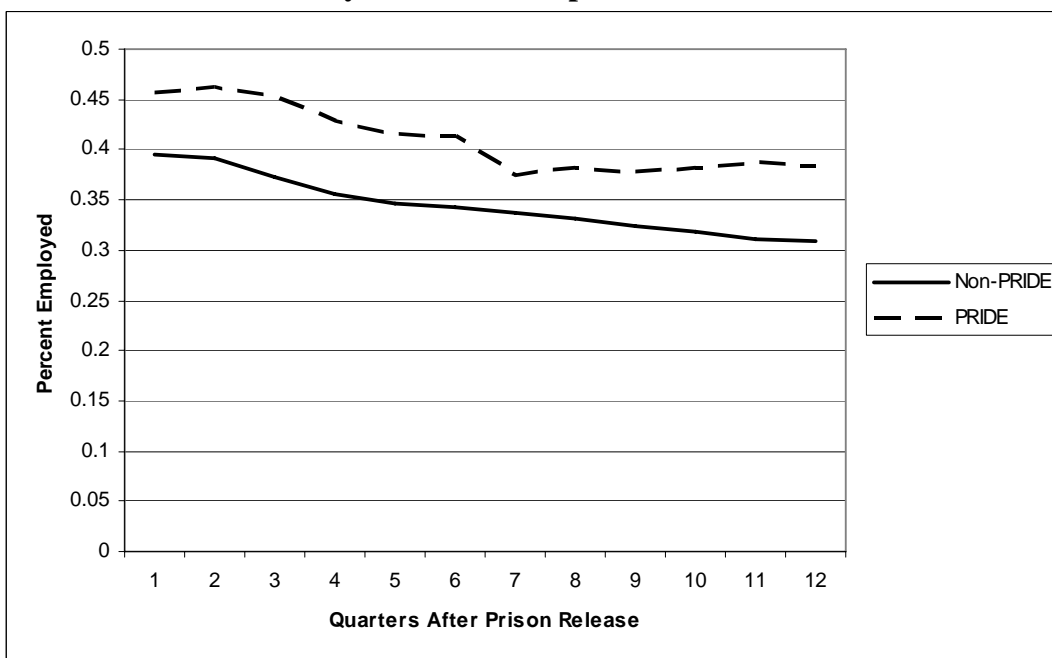


Figure 5
Quarterly Earnings (\$2002) of Offenders Post Release
By PRIDE Participation Status

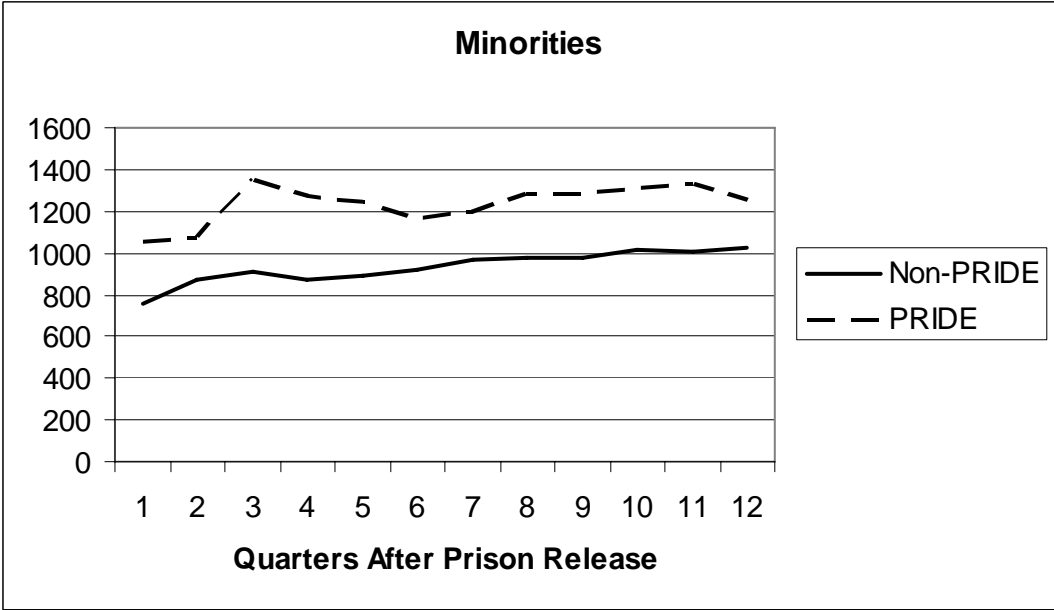
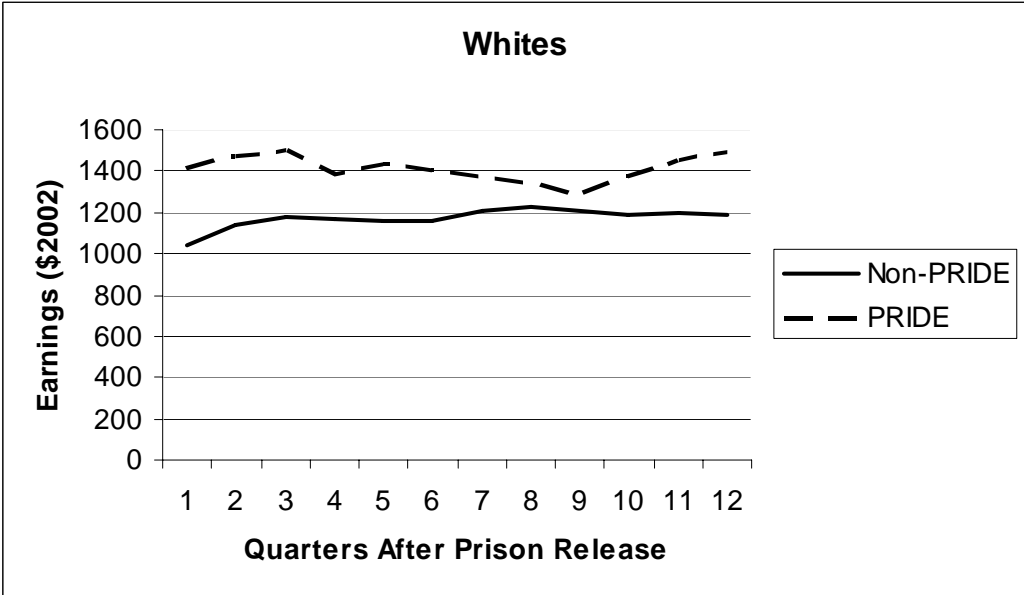


Table 1
Descriptive Statistics
By PRIDE Participation Status

	<u>No PRIDE</u>	<u>PRIDE</u>
N	15,731	565
% White	40	44
% Black	56	51
% Hispanic	4	5
% Other Race	0.2	0.2
Mean Years of Education	10.3	10.4
Sample SD	1.9	1.9
Mean Age at Admission	31.6	30.6
Sample SD	9.2	9.0
% Age 18-20	6	10
% Age 21-25	22	27
% Age 26-30	19	16
% Age 31-35	19	17
% Age 36-40	16	15
% Age 40+	16	15
% With Prior Prison Spell	51	50
% With Prior Disciplinary Report	26	26
% With Violent Offense this Spell	35	36
% With Property Crime Offense this Spell	33	37
% With Drug Crime Offense this Spell	27	24
% With Other Offense this Spell	5	3
% Participated in GED Classes this Spell	9	10
% Participated in Vocational Classes this Spell	8	13
% Participated in Academic Classes this Spell	19	21
Mean Sentence Length in Months	15	19
Sample SD	11	22

Table 2
OLS and Fixed Effects Results
Dependent Variable = Employment

	All	Whites	Minorities
Naïve Model			
controls for race	0.09*** (0.016)	0.107*** (0.023)	0.077*** (0.022)
Basic Model			
adds controls for age, education, and year	0.086*** (0.016)	0.099*** (0.023)	0.075*** (0.021)
OLS with All Controls			
adds full set of covariates	0.065*** (0.016)	0.077*** (0.023)	0.054** (0.021)
Fixed Effects Model			
includes two years of pre-prison earnings	0.047** (0.021)	0.073** (0.029)	0.023 (0.028)
N	16290	6466	9824

Notes: All entries in column 1 are from models that also control for race/ethnicity. The employment effects are estimated from three years of post-prison UI records. Standard errors clustered at the prison facility-year level. *= $p < 0.1$, **= $p < 0.05$, ***= $p < 0.01$

Table 3
OLS and Fixed Effects Results
Dependent Variable = Annual Earnings (\$2002)

	All	Whites	Minorities
Naïve Model controls for race	1103*** (403)	957* (503)	1215** (596)
Basic Model adds controls for age, education, and year	948** (388)	783 (490)	1058* (579)
OLS with All Controls adds full set of covariates	638 (405)	246 (463)	826 (595)
Fixed Effects Model includes two years of pre-prison earnings	600 (400)	263 (433)	786 (608)
N	16290	6466	9824

Notes: All entries in column 1 are from models that also control for race/ethnicity. The earnings effects are estimated from three years of post-prison UI records. Standard errors clustered at the prison facility-year level. *= $p < 0.1$, **= $p < 0.05$, ***= $p < 0.01$

Table 4
IV Results

	All	Whites	Minorities
Employment	0.191 (0.128)	0.381** (0.189)	0.036 (0.153)
Annual Earnings	1086 (2224)	3341 (3204)	-919 (2778)
F-Stat	37	30	32

Notes: All entries in column 1 are from models that also control for race/ethnicity. All models include the full set of covariates. The models are estimated using three years of post-prison UI records. Standard errors clustered at the prison facility-year level. *= $p < 0.1$, **= $p < 0.05$, ***= $p < 0.01$

Table 5
Heterogeneity in PRIDE Effect

	Employment	Annual Earnings
Offense Type		
Violent	0.088*** (0.026)	453 (622)
Property	0.078*** (0.027)	891** (449)
Drug	0.049 (0.037)	789 (1189)
Prior Prison Spell		
Yes	0.084*** (0.023)	815* 415
No	0.071*** (0.022)	656 (702)
Education		
9th or 10th	0.112*** (0.021)	332 (381)
11th+	0.041* (0.024)	858 (746)
Age at Prison Entry		
<25	0.091*** (0.024)	53 (544)
25+	0.062*** (0.021)	939* (555)

Notes: All models include the full set of controls. The models are estimated using three years of post-prison UI records. Standard errors clustered at the prison facility-year level. *= $p < 0.1$, **= $p < 0.05$, ***= $p < 0.01$