Factors Influencing Prison Industry

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FACTORS INFLUENCING PRISON INDUSTRY

by

Erik Dill

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On a related note, special thanks are needed for the Correctional Industries Association (yep, that's the CIA for the folks at home). Detailed information about prison labor is provided by their
Acknowledgments--Continued

directory, which is published annually. For information on the CIA, please write:

    Correctional Industries Association, Inc.
    1420 North Charles Street, Suite 415
    Baltimore, MD 21201-5779

Or visit the CIA website at http://www.corrections.com/industries.

And to my friends, associates, and comrades. You've given me discussion time, technical support (and then some), and helped me relax (something I'm still getting used to).

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Erik Dill
FACTORS INFLUENCING PRISON INDUSTRY

Erik Dill, M.A.

Western Michigan University, 1999

Prison industry has a sporadic history in the United States. Interstate trade of prison made goods was banned from 1940 until 1979; business and labor opposed slavelike competition from early programs. This thesis studies competitive prisoner work, deemed prison industry, as different from state-use labor.

Formal theory on prison industry is inadequate. Rusche would suggest that unemployment directly effects incarceration, and prison industry develops to provide labor in economic upswings. Since 1980 prison industry expanded and unemployment fell, but incarceration did not decline. Therefore, this study focuses on theory-genesis. Explanations for incarceration can assume prison is exploitative. Legal history suggests labor strength and incarceration policy might predict prison industry.

This study uses state level rates to predict survey data measuring the nature and extent of prison industry. Multiple regression found a significant relationship between incarceration and the prison industry rate. Logistic regression tied employment to the existence of prison industry and job training. Theory must find more links to conditions promoting prison industry.
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CHAPTER I

INTRODUCTION

Competitive prison industry has seen a marked resurgence in the past twenty years. It has seen redress in the media, in political rhetoric, and in legislation at both the state and federal level. From a business aspect, several management models have been generated, and a few have found application in existing prison industry programs. However, explanations for why prisoners are used in competitive industry, whether they be Rusche and Kirchheimer's formal theory or the conventional wisdom that prison labor provides a cheap and/or exploitable workforce, have largely been accepted at face value. This study aims to question the motivations for prison industry, with a goal of steering research in the direction of better theory.

Formal theory on the creation of modern prison industry programs is limited to the theories of Rusche and Kirchheimer (1967), which link prison industry programs inversely with unemployment via the incarceration rate. In other words, as unemployment falls, so too does incarceration, albeit more slowly. Prison industry programs form in order to satisfy some of the demand for labor, created by low unemployment, by placing the incarcerated in the workforce. As unemployment rises, criminals are removed from the general population and the workforce, and put into prisons where they are large-
ly idle.

By observing rates over the past twenty years, we see that prison industry programs are now operating in most states. However, incarceration rates have not begun to fall. This is not indicative of the political and economic environment that Rusche and Kirchheimer deemed necessary for incarceration to switch from oppressive punishment to rehabilitative employment. In simple terms, we are currently tapping inmates due to the shortage of workers, yet we are still punishing as if we needed criminals removed from the economy.

This theoretical inconsistency led the author to search for other ways to explain this recent growth in prison industry. Without other theoretical explanations (save the conventional wisdom that employers tend to seek cheaper, or more exploitable, labor sources; an idea more readily studied by an economist), focus was shifted to theory explaining why we incarcerate. The most obvious answers involve the calls for the punishment or rehabilitation of criminals. Theorists suggest that socio-economic conditions can predict who goes to prison. Lichtenstein (1996), for example, suggests that incarceration, and subsequent prisoner labor, has historically been a form of racial oppression, and functioned as a replacement for slavery. Reiman (1990) argues that motivation for incarceration lies in economics, that crimes of the poor receive the harshest sentences. William Julius Wilson (Tonry, 1995, pp. 68-80) looks at the race and economic questions from a slightly different angle, with the micro-level theory of marriageable males. Rather than
trying to find structural causes, this theory suggests that men who are employed and married are less likely to be incarcerated. Tonry (1995) extrapolates this theory to the macro level. Low employment, rather than high unemployment, becomes the reason minorities and the poor are over-represented in the prison population; the difference being that unemployment rates measure those who recently lost their jobs and are seeking new ones, while employment rates measure those who are currently holding jobs.

While the combined statistics of unemployment and employment leave a good portion of the population unaccounted for, it is undeniable that these two statistics extensively covaried. If one took the logical flaw of Rusche and Kirchheimer to heart, it would make sense that employment may not serve as a macro-level predictor of incarceration. Uncertain as to what macro-level predictor of incarceration would explain the conditions that produced prison industry, I felt two things must be done. First, a measure of incarceration policy, the incarceration rate, should be included. Secondly, I felt that the critical literature must be re-examined, to determine if a different explanation of prison industry could be found.

While I knew Rusche and Kirchheimer should not yield accurate results, I did not feel the theorists were too far from the truth about the conditions that yield prison industry. Rather than using measures of worker status to predict prison industry, I decided to explore the use of a measure of labor market strength, the ability of workers to make demands. At first, workers who could make de-
mands would resist the occurrence of prison industry. However, once prison industry did inject itself into the economy, organized labor would then attempt to make the prison industry program's competition a fair competition, in which wages and other costs of production would be similar to those incurred by the private sector. To measure labor market strength, I chose the labor union membership rate. Labor union membership seemed the most accessible of macro-level indicators of labor strength. Also, labor unions have been historically linked to the legal restrictions on prison industry, being a force pushing for several pieces of legislation which effectively banned the practice from 1940 until the 1980's (Misrahi, 1996).

With the independent variables determined (incarceration, labor union membership, employment, and unemployment rates), the next step was to collect data on the conditions of current prison industry programs. In an effort to not only get the most recent data, but to also help ensure that this researcher's division between competitive and non-competitive labor was properly accounted for, a phone survey of state prison officials was conducted. Officials were asked both demographic data about their state's programs and also about the conditions of their state's prison industry programs (where applicable). After data were collected and coded, the goal was to weigh this information against the selected independent variables in order to look for patterns, on which new theory could be built.

The preliminary nature of this study cannot be stressed enough.
While regression techniques are used in the analysis, there has been a lack of study in this field, and I feel that generalizing conclusions would be premature. This study is focused on studying competitive prison industry as a separate phenomenon from non-competitive prisoner labor, a separation justified both economically and legally. State-use prisoner labor prevents private industry profit from prison work programs. Plus, federal regulation has historically focused on restricting the trade of prison made goods (which mainly impacts prison industry), rather than regulating prisoner work conditions (which would impact all prisoner labor). Both of these assertions justify treating prison industry, as defined in this study, as separate from state-use prisoner labor.
CHAPTER II

LITERATURE REVIEW

When searching through the substantial writings on prisoner labor, it is rare to find academic work that makes the distinction between competitive prison industry and non-competitive, state-use prisoner labor. Finding literature that offers explanations for the existence of prison industry is an even greater task. For this reason, I have spent some time blending in reasons we incarcerate individuals. This blending allowed the sorting of the rather diverse writings on prisoner labor into three main categories: (1) correctional reports, (2) theory and private interests, and (3) a prisoner rights and law review. Reports by and for correctional agencies tend to focus on the rehabilitative or economic aspects of the industry programs. Theory and articles from private interests tend to speak of the issues of human rights, for prisoners and for outside workers, and the fairness of competition, for business and for workers. Federal laws are arguably the single greatest influence on industry programs. Since 1929's Hawes-Cooper Act, federal laws have focussed on the economic realities of prison labor programs; the distribution of funds generated by, and the fairness of the competition provided by the programs.

Presenting the topic in this manner will provide a more logical way of understanding the origins and history of prison industry
programs, and will provide groundwork for research choices. By explaining the current incarnation of prison industry first (through the research briefs), we can get some idea of the current conceptualization and purported functions of today's prison industry programs. The private interest and incarceration theory articles help us to understand not only the historical social context of prison industry, but also to begin to understand the reasons popular debate on the topic is full of emotionally charged rhetoric and limited substance. By finishing with a review of law, legal perspectives, and prisoner rights, we can put in perspective the history of prisoner work, the reasons for trade restrictions, and the status of the prisoner worker. This should make clear the argument that prison workers are a small part of a much larger economic reality, and that other indicators of economic reality can serve as predictors of the occurrence of competitive prison industry.

Correctional Reports

Reports by and for correctional agencies include the 1998 Correctional Industry Association's (CIA) directory, reports and briefs from the National Institute of Justice, and selected reports from state level correctional agencies (for example, PRIDE industries out of Florida). When examining these reports, one must realize that many of them were written with two purposes in mind; first to inform readers of the industry programs, and secondly to promote the industry programs. Putting the advertising aside, one
can use these reports to gain comprehensive statistics about a given state's prisoner labor programs, the proposed organizational models for the industry programs, and the relatively diverse uses of prisoner labor.

For anyone wishing to study the subjects of prisoner labor or prison industry, the Correctional Industry Association (CIA) directory (1998) is an excellent resource. Published annually, the directory provides not only demographic data on prisoner labor programs, it also provides valuable contact numbers for prison officials familiar with each state's programs and the laws that enable them. This type of reference is vital, for the laws regarding prison industry greatly determine the conditions under which programs function on a state-by-state basis. Included in the directory are lists of Prison Industry Enhancement (PIE) programs, which are programs which meet federal guidelines for interstate trade with the private sector. As of the directory's publication, thirty-eight states have received PIE certification (CIA Directory, 1998).

Reports and briefs published through the National Institute of Justice are published more sporadically than the CIA directory, so the information is often dated. The benefit of the National Institute of Justice reports is they provide information on the conceptualization and history of modern prison industry programs. These reports (Auerbach, Sexton, Farrow & Lawson, 1988) offer six theoretical models for private sector--correctional relations:

1. Customer model - The state owns and operates the prison factory. The private firm merely buys the end product.
2. Controlling customer model - State correctional agencies still own and operate the facility. In addition to being the main recipient of goods and services, the private firm also takes an active role in the prison industry program's management.

3. Employer model - The private firm owns and operates the business. Correctional officials provide inmate laborers, at the discretion and under the supervision of the private firm.

4. Investor model - The state operates a business that is capitalized, at least in part, by the private sector.

5. Manager model - The private sector is contracted by the state to manage the prison industry program.

6. Joint Venture - Ownership and management of the prison industry program is shared between the state and the private agency. (pp. 16-17)

It is worth noting that the term Joint Venture is sometimes used to denote a prison industry program in a more general sense. In fact, Sexton (1995) later uses the term as an umbrella to cover employer, customer, and mixed (termed Manpower) models.

Through the National Institute of Justice sources, we also can trace the development and spread of current prison industry programs. The Great Depression led to the federal outlaw of the interstate trade of prison made goods with the Sumners-Ashurst Act in 1940 (Misrahi, 1996), and that ban lasted nearly forty years until the Prison Industries Enhancement Act (a.k.a., the Percy Amendment) in 1979 (Sexton, Auerbach, Farrow, Lawson, et al., 1985). States which were amongst the first to re-enter private sector involvement were predominantly in the western United States, with two states (Mississippi and Florida) in the south (Sexton, et al., 1985). The
brief The Private Sector and Prison Industries also included charts that show, as of 1985, each state's position on the legal status of prison industry programs (Sexton, Farrow, & Auerbach, 1985), such as state legislation restricting the types of work that prisoners could perform. That same brief also mentions the status of prisoners employed in a prison industry setting, noting that prisoners were generally not considered employees "in the strict legal sense of the word," (p. 7) and therefore, not entitled to coverage under the Fair Labor Standards Act (FLSA).

Not only do national associations and federal institutes print materials reporting the trends in prison industry, but individual states often produce literature on their programs. The state of Florida publishes an annual report on its PRIDE enterprises. The annual report is quite detailed. It includes descriptions of companies and industries, fiscal information in both dollars and percentage, and follow up information evaluating the annual progress towards PRIDE's mission statement (PRIDE Enterprises, 1997). Examples of the detailed information are inmate pay (with deductions detailed) and job placement rates for released inmate workers. Other states, such as California, make information available on the companies working with the department of corrections, along with financial reports detailing, by industry, inmate contributions to family support, restitution, room and board, etc., (California D.O.C., 1998). There are also states that have websites for their various prison industry products, (e.g. Oregon's "Prison Blues" jeans

Theories of Punishment and Private Interests

When researching prison industry, one is overwhelmed with opinions on prisoner labor, which can be generally attributed to the exploitative social history of prisoner labor. Few articles deal with prison industry as a separate phenomenon from prisoner labor, despite specific legislation covering it. Academic pieces fail to offer any logical causative theory on prison industry in an explicit manner. Hence, this researcher was forced to look at causative theory for incarceration in general. When explaining motivations for incarceration, academics often cite wider social problems—be it racism, social hierarchies, or economic oppression—as a cause for the denial of freedom. Editorial pieces tend to either frame the issue in terms of the benefits of industry programs, or criticize prison industry programs in terms of fairness of competition. Because labor from prisoners is such a controversial topic, such articles sometimes fail to get beyond political rhetoric and half-truths, and subsequently miss valid ethical concerns.

The writings of Rusche and Kirchheimer offer the idea that punishment is related to worker availability in the private sector. This idea is founded in the assumption that the standards of living within a prison must always be lower than those of the "lowest socially significant proletarian class" in the private sector (Rusche, 1978, pp. 3-4). This assumption is tied into the concept that pri-
soners can serve as an auxiliary, if not always desirable, labor force. Prisoners serve as workers when economic conditions result in a shortage of labor. When there are masses of unemployed workers, prisoners are punished and can, at times, be denied basic needs, as their living conditions must be worse than that of the outside member of the lower class. Rusche and Kirchheimer (1967) offer Germany from 1928 through 1932 as an example. Conversely, when workers are scarce, punishment is used to make the unwilling work, and prisoners are seen as an exploitable work force (Rusche, 1978). Rusche and Kirchheimer (1968) cite the Prussian, French, and English tendency "to use prisoners in their efforts during World War I as an example" (pp. 160-162). It is during this time of worker shortage that unemployment falls, crime rates drop, and incarceration declines (Rusche & Kirchheimer, 1968). The economic backdrop of America in the early-to-mid 1920's had all three of these indicators in line, and prison industry was booming (Rusche, 1978).

After the economy crashed in 1929, a long period of legal restrictions ensued. Today, prison industry programs are regaining prominence in this country. This resurgence, which began nearly twenty years ago, has seen the drop in unemployment that Rusche and Kirchheimer would have predicted. But in that twenty year period, crime rates have only recently begun to level off. In fact, prison overcrowding continues to be a problem and incarceration rates continue to climb (Tonry, 1995). This contradicts the overall liberal progressive climate Rusche predicted would be necessary to shift
penal philosophy from punitive torment to job orientation (Rusche, 1978). While the conclusion that low unemployment would lead to industry tapping prisoners for their labor would seem possible, the drop in incarceration rate that would signify this shift has not happened. This failure in premise led me to search for alternative explanations for the growth of prison industry programs.

Unable to find alternative explanations for competitive prison industry (outside the conventional explanations of state budgets or teaching prisoners skills, ideas which would be difficult to examine at a national level), the literature review focused on explanations of why we incarcerate. While Rusche and Kirchheimer's idea of what motivates prison industry would seem outdated (since incarceration no longer seems tied to unemployment), certainly the reasons we incarcerate should influence how we treat the incarcerated. Several works, inspired by Rusche and Kirchheimer, have tried to prove a connection between social conditions and incarceration, but most get results that are conflicting or contradictory (Chiricos & Delone, 1992). Still, the pool from which prison industry workers are selected would reflect any social or economic biases that may be present in our criminal justice system. Likewise, those biases may influence which prisoners are involved in prison industry, and which ones are not.

When exploring scholarly works on incarceration, the theme of oppression rings throughout. Incarceration, and the labor involved within, is about degradation and punishment for the offender. Con-
versely, incarceration means safety and prosperity for the free citizen. It is the assertion of many critical theorists that prisons have historically over-represented minorities and the poor, and that prisoner labor has often been used dubiously, as an exploitable, quasi-slave labor source.

Lichtenstein's *Twice the Work of Free Labor* (1996) talks of the use of convict labor in the reconstructionist south as a replacement for slave labor. The convicts, who were disproportionately black, were used by government and leased to private enterprise. At the time, convicts could be forced to do work that free labor wouldn't, and were often used in lieu of striking workers in such occupations as mining. Whippings and beatings were common, and work conditions were unsafe, but this was largely overlooked. Walker (1988) paints a similar picture of minority prisoner mistreatment under a lease system in Texas during the same time period, the late 1800's to early 1900s.

Other scholars examining the late 1800s and early 1900s saw incarceration patterns that over-represented the poor and uneducated. Walter Wilson (1971) cited several public officials claiming that lack of training and employment were key causes of incarceration, with property crimes being the most common offense. He also points out that "nationwide in 1930 an estimated 75,000 convicts manufactured goods with a market value of $100,000,000" (p. 35). At the time, practices such as concealing the origin of prison made goods by creating dummy companies or sewing false labels into prison made
clothing were gaining the attention of the Federal Trade Commission. McGinn (1993) collaborates the existence of such fraudulent deals, and notes the irony of reforming poor, uneducated thieves by teaching them a different style of stealing.

These issues of racial and economic bias within the correctional system have seen redress by modern scholars. Reiman (1990) asserts that the current criminal justice system punishes the crimes of the poor and often ignores the crimes of the wealthy. When it comes to sentencing, white-collar criminals are more likely to receive probation or a fine, whereas common criminals are more likely to receive a prison sentence. Tonry (1995) addresses racial bias by concluding that there is participatory difference in crime, with the best predictor of desistance from offending being employment and marriage, a concept that fits well with William Julius Wilson's marriageable males theory. Empirical testing of the theory, which states marriage rates are lower amongst African-Americans due to a shortage of employed single men, revealed a significant relationship between economic conditions and marriage rates among African-Americans, though employment does not explain all the differences between marriage rates for blacks and whites (Wood, 1995). Other scholars feel that a woman's economic prospects have as much to do with marriage outcomes, and suggest that we need to reverse our thinking (Lichter, McLaughlin, Kephart & Landry, 1992). In other words, perhaps there is a lack of adequately employed females, and therefore men are not getting married. Whichever the case, the key issue
seems to be the economic status gained with employment. If marriage affects the conditions of incarceration, it may only be through the employment rate.²

Given a social history linking it to exploitation and slavery, it is no wonder that editorials on prisoner work are emotionally charged and/or defensive. Proponents tend to write in terms of the benefits of society. Opponents tend to write of the unfair competition provided by inmate labor. More often than not, these opinions are addressed in dollar terms or by the roles that stated parties should have in the political economy. Too often, words like competition, benefit, and fairness are used in unclear, and sometimes misleading, ways.

For instance, the federal prison labor division UNICOR, which produces clothing and furniture for the federal government, holds a position of superpreference (Gale, 1997). This superpreference means that if a government agency wants an item that UNICOR can supply, a UNICOR bid must be accepted even if other bids are lower. Both Gale and Nicknish (1995) mention "superpreference as unfair competition to private contractors" (pp. 89-91). Nicknish (1995) goes as far as to estimate 1,429 jobs lost to FPI (Federal Prison-Industries).³ Steve Schwalb (1996), an assistant director for FPI, responded with the per dollar spending of FPI income and then criticizing Nicknish's displacement figures as being inflated "by more than 300 percent" (pp. 110-114).

Perhaps it was done without intent, but all three authors seem
to miss a few key points. First, if UNICOR produces items solely for the federal government, the production is state use. The issue is not competition, but rather one of entitlement to government contracts. Secondly, by focusing attention on superpreference's effects on the private sector, we miss what a policy of superpreference really affects—government appropriations. Gale (1997) reports "UNICOR made $450 million in 1996" (p. 65). Combine this with Schwalb's (1996) 1995 estimate of "one percent of FPI income spent on new facilities" (p. 110). Given these figures hold accurate, we can estimate that UNICOR appropriated $4.5 million of federal money earmarked for other purposes and used it to construct prison factories in 1996. Of course, twenty-six times this amount went to staff and prisoner pay (19% and 7%, respectively). In an era of trillion dollar federal budgets, UNICOR's current appropriations seem relatively small. But, if either the percent of income designated for construction or the UNICOR annual income increases, real dollar figures could inflate rapidly.

Other authors imply that prison industry is a wonderful solution in which everyone benefits. And in general, ideas like defraying incarceration costs and allowing prisoners to do productive work while earning a savings are noble enough. Certain policy advisors go so far as to say they would like to see the total removal of restrictions on the sale of prison made goods, along with the shift away from prisoners performing state-use and non-profit doing-good labor (Grayson, 1997). As authors like Lichtenstein (1996) have
stated, many of the laws regarding prison industry came about due to the beatings, cruelty, and other slave-like conditions present in early prison industry programs. Also, being non-competitive does not mean a program is inherently less valuable. In 1989, the State of New York began state-use composting and recycling programs. During a three year period, these prison labor programs saved the state $4.9 million in disposal costs, provided free compost for community beautification projects, and in 1994 employed 1,000 of New York's 65,000 prison inmates (Marion, 1994), all in a non-competitive work environment. A headlong rush to industrialize prisons could not only open the door to renewed exploitation, but force us to overlook the value of programs that have developed in a non-competitive environment.

Authors who write against prison industry programs are also subject to many of the same errors, with their main theme being fairness. There are many websites devoted to the topic, and they tend to speak from an everyman, us-against-them mentality. Hightower (1996) flashes many names and services rendered, specifically Oregonian prisoners manufacturing uniforms for McDonald's. He states that prisoners make as little as twenty cents an hour, and cites Steven Elbow as estimating sales of prison made goods at $9 billion by the year 2000. Elbow (1996) has his own website, citing "prison industry programs taking over jobs in a slaughterhouse and taking stocking shifts from workers at a Toys-R-Us" (pp. 1-10). Too often, sites like these contain information that is too vague to accredit.
In an effort to tell us the unfairness of competitive prison industry, these authors blend together ideas, innuendo, and outright mistakes in such a manner it does no service toward their legitimate reasons for concern.

Magazines often offer the same ideas with a little more substance to them. Parenti (1996) writes in the Nation that in the mid-1980's a Ventura, CA youth facility that provided workers to T.W.A. as ticket agents. The still employed TWA ticket agents then replaced unionized flight attendants who happened to be on strike. While citing a modern example of how prison industry programs could be abused, the article then points out an important fact, that prisoners themselves are forbidden to organize or join labor unions. That fact is but one of the interesting issues raised by the laws regarding prison industry in this country.

Prisoner Rights and Legal Perspectives

The resurgence of prison industry has led to prisoners taking on roles they have seldom held in the past: taxpayers, renters, and as incarcerated providers for their dependents. The courts have made numerous rulings at the state and federal levels about the status of prisoners who participate in prison industry programs, but more remains unsettled than settled. The federal legislature has predominantly regulated the conditions of prison industry programs that deal with interstate commerce. Intrastate commerce has been left for the individual states to regulate, which has led to different
industry conditions in every state, and nearly as many terms to describe those conditions. When examining federal law, it seems clear that Congress has common ideals for both prison industry programs and labor union relations, those of voluntariness and of fairness in practices and competition.

With new prison industry programs emerging, more and more prisoners are being reinserted into the private market, and potentially affecting private labor and private enterprise. With this new status comes questions both of the roles these prisoners play in the current economy and of the rights these prisoners have obtained through their industry employment. In regards to inmates, prison industry seems to have made vast improvements from the early days chronicled by Lichtenstein (1996). However, laws and court rulings, which tend to focus on economic questions rather than human rights, have left prisoners with fewer rights and lower status than the free worker.

Prison industry in America is nearly as old as penitentiaries themselves. The first penitentiary was built in 1790; and the first prison to be built intentionally with revenue generating labor in mind was the Newgate prison in 1797 (Shichor, 1995). But for over a century, states were free to set their own rules regarding their prison industries. Federal intervention began in 1929 with the Hawes-Cooper Act, which made goods produced by prisoners subject to the laws of the state of destination, once imported; with violation of Hawes-Cooper criminalized in 1935's Ashurst-Sumners (Sexton, et al., 1985). Passed in 1940, Sumners-Ashurst outlawed the interstate
transport of prison made goods to private interests (Misrahi, 1996), essentially making interstate prison industry, as defined for this study, illegal. The Walsh-Healey act prohibited the use of prisoner labor in government contracts in excess of $10,000; and subsequent acts outlawed prisoner labor in construction of highways and airports and also in the production of goods for the post office (Sexton, et al., 1985). Misrahi (1996) asserts that the true pressure to abolish prison industry came from a consolidated effort from both laborers and businessmen, rather than from human rights activists. This assertion is interesting, since federal law regarding prison industry has focused on prohibiting interstate commerce and limiting government involvement, with the discussion of prisoner rights left to academics.

It was not until the passage of the Percy Amendment in 1979 that legislation was written with some reference to prisoner status. The Amendment spelled out the conditions under which prisoner made goods could be exempt from previous prohibitive legislation. Qualifying programs would be called PIE (Prison Industry Enhancement) programs. Some of the conditions provided in the Amendment are as follows (Auerbach, et al., 1988):

- Inmates must be paid at an equal or greater wage than is demanded for similar work in that area.

- Officials must consult local labor unions during the planning of projects.

- Prison labor cannot displace existing workers, violate existing contracts, or enter into industries for which there is a surplus of available workers.
- Deductions of inmate pay are limited to 80% of the inmate's gross wage.
- Inmates must receive federal and state employment benefits, including workers compensation. (pp. 10-11)

"The only required deduction is a 5-20% gross wage deduction for Victim Compensation programs. In addition, prisoner participation must be obtained voluntarily" (CIA, 1998, p. 99). "PIE programs must pay at least minimum wage and the private sector must be involved" (Misrahi, 1996, p. 421).

While the Percy Amendment still focuses largely on economic aspects of prison industry (limiting unfair competition), it does address minimum standards of inmate treatment; in that wages are required, deductions are limited, and inmates must volunteer to do the work. In that these standards still address only interstate industry, despite revisions with the Justice Assistance Act of 1984 and the Crime Control Act of 1990 (Misrahi, 1996), it can be argued that the focus of PIE certification is to control interstate labor practices more than to set standards of inmate treatment.

Part of the reason misinformation exists about prison industry programs is because the public, interest groups, and even public officials remain largely unaware of the complex structures of prisoner labor, much less the complex legal and social structure that creates prisoner work programs. One of the goals of this paper is to generate better theory on the structural conditions and social relations involved with the genesis of prison industry programs. Federal involvement regulating prison industry programs has been
limited to restrictions on interstate commerce, which has left state

governments the lion's share of regulating prison industry. States
can currently have prison industry programs that function on an
intrastate basis only, or offer services and not goods, that can
legally exist without PIE certifications or standards (Auerbach, et
al., 1988). This freedom to regulate has resulted in many different
industry conditions, with many different interpretations of what
industry is right and proper in a given state. States are free to
determine what models of industry are followed, how wages and deduc-
tions are handled, and what rights prisoners ultimately have.

Inmate rights are often set by the courts. This often comes
about as a result of an inmate or interest group bringing action.
For instance, cases have claimed that prison industry should be
covered under the Fair Labor Standards Act (FLSA), and prisoner
workers should be treated as employees (Haslam, 1994). The FLSA's
circular definitions; employer as any person acting directly or in-
directly in the interest of an employer in relation to an employee,
and employee as any individual employed by an employer; do little to
clear up the debate. The best argument for FLSA coverage probably
lies in the objection claiming prisoner labor to be unfair compe-
tition (Haslam, 1994). Haslam disagrees with the notion of pri-
soner labor providing unfair competition, denying competition as a
motivation for industry programs and citing "the hidden cost of pro-
grams like FPI, including job training for relatively unmotivated
workers" (pp. 390-392). Haslam makes similar mistakes as Nicknish
(1995) and Gale (1997), by deeming Federal Prison Industries competitive. Rather, FPI is a state-use system that does not involve the issue of competition, but rather entitlement. Also, state imposed wage deductions can easily change the meaning of any pay scale, an issue I will discuss in the conclusions section. Regardless, Haslam (1994) agrees that the courts are leaning towards providing FLSA coverage for inmates.

The question of whether or not prison industry workers are true employees is tied to social history as well as the courts and the legislature. The abuses previously cited by Lichtenstein (1996), Walker (1988), and McGinn (1993) would suggest that inmate labor was used historically as a substitute for slave labor, and focus the debate on changes in that condition. The most obvious assertions are that industry participation is largely voluntary (PIE requires this) and that physical punishment for poor work performance is theoretically eliminated. Although the latter point can be questioned (Parenti, 1996) and can only be judged on a program by program basis, the former seems a near given in prison industry programs. Likening modern prison industry to slavery may be stretching the point thin, but given the not-uncommon conditions of wage-deductions for room and board and the custodial control of the worker, comparisons to share-cropping and indentured servitude have some merit. Add to this recent trends toward reviving the chain gang in certain states, and it should become clear that our ideas about how inmates should be treated should be given careful consideration.
As it stands, inmate wages can typically be subject to deductions for room and board, taxes, family support, and victim compensation/assistance (CIA, 1998). But, as Misrahi (1996) points out, "prisoners lack certain rights, like the right to unemployment compensation and the right to unionize or collectively bargain. Other inmate rights remain unclear, like protection from discrimination in industry employment practices" (pp. 427-429). Depending on which wage deductions are allowed, there are a number of legal statuses the courts could rule prisoners have attained. Deductions for FICA could mean that prisoners are entitled to disability as well as worker's compensation. Deductions for room and board could qualify prisoners as residents or tenants in state subsidized housing. Deductions for victim compensation could complicate civil suits brought on by the victims. In other words, wage deductions give prisoners footing from which to push for more rights and higher status.

These possible rights may seem improbable, in light of prisoners' limited right to representation. Incarcerated felons cannot vote, even if through industry programs they pay taxes. Prisoner workers have not been allowed to join or form labor unions, or to collectively bargain, due to the adversarial nature of such organizations (Misrahi, 1996). Presumably to compensate for potential abuses, Criminal Justice Associates, Inc., recommends that correctional officials consult with any group (i.e., unions, human rights groups, etc.) that might have a negative reaction to a prison in-
dustry program prior to its initiation (Sexton, et al., 1985). Private prisons, like those run by the Corrections Corporation of America (CCA), often make lawyers available to prisoners in order to resolve grievances in the most efficient way possible (Gold, 1996). Since prisoners cannot legitimately organize to discuss their complaints, such a resource could lessen the already adversarial relationship between prisoners and correctional officials.

It is fair to say the vast majority of the critical writing, and a good share of the legislation, on prison industry has focused on the relative fairness of competition provided by these programs. Historically, one might infer that, had prison industry been more reserved, the private sector might not have taken notice. As it was, when the economy fell into depression, prison industry programs were outlawed (Misrahi, 1996). In fact, the major pieces of legislation on prison industry were written in times of economic depression, with the Percy Amendment coming during the depression of the late 1970s--early 1980s.

Much like the legislation regarding prison industry, the legislation regarding labor unions is rooted in the concepts of volunteerism and fairness of competition. The Wagner act gave non-inmate workers the right to organize and collectively bargain (Cohen, 1948). With the right to organize came restrictions, in the form of the Taft-Hartley Act of 1947 and the Labor-Management Act of 1959 (McAdams, 1964). First, on the list is the requirement that union membership be voluntary. This requirement came about to pro-
hibit the closed-shop state, in which union membership was mandatory for employment (Cohen, 1948). The issue of volunteerism created several interpretations by the states. First, Cohen (1948) describes right-to-work states as "states in which workers cannot be forced or coerced to have any affiliation or relation with a labor organization" (pp. 13-18). Other states have rulings that allow labor unions to collect dues from non-union members for collective bargaining services if enough of the company's labor is already unionized. Certain practices are also deemed unfair and prohibited (McAdams, 1964):

secondary boycotts, the bringing of pressure on a second group of employers or laborers; roving picketing, protests that follow a product from factory to wholesaler to retailer; hot cargo contracts, labor agreements in which the employer agrees not to use unfair goods; and extortion picketing, in which a union official uses striking workers for personal gain. (pp. 50-55)

In addition to legislation, the United States Congress has held hearings as recently as 1983 (March 23; #98-161) and 1985 (February 27, March 26; #99-251) regarding the use of violence in labor protests.

The fact is that labor unions and prison industry programs seem to gain much the same attention from the legislature and the courts. In both cases, the concept of fairness of competition has been the driving force behind regulation. In both cases, what is deemed fair varies from state to state. In both cases, where force and coercion were implied or exercised, the point of voluntariness became the standard to judge the program or the union.

The location of states most heavily involved in prison in-
dustry, to the south and the west, led me to wonder if the strength of the labor market, here defined as the ability of the working class to make demands of their employers, had anything to do with whether or not prison industry programs were taking place. Prison industry programs are less prevalent in the east, where union membership is higher. This fits in well with the legal history of prison industry, in which labor unions and private interests were the driving force behind restricting of trade in prison made goods (Misrahi, 1996). The parallels between regulation of prison industry programs and labor unions, combined with the supposition that labor unions campaigned to eliminate prison industry programs, led me to include the labor union membership rate in the causal model.
CHAPTER III

METHODS

In order to evaluate the ideas research and literature have suggested, four state level rates: (1) incarceration, (2) employment, (3) unemployment, and (4) labor union membership, were compared to data collected measuring the existence and conditions of prison industry programs. Prison industry programs are those programs in which prisoners produce an item that is for sale on the open market (that is, not government consumed) or in which prisoners provide a type of service that is provided by a non-governmental labor source. To collect the data on prison industry, a phone survey of state correctional officials was conducted. State level data was selected over prison level data because state legislatures have historically controlled the existence of prison industry within their borders. In other words, prison industry, as defined in the study, can exist without federal approval (at least at the intra-state level). Current prison industry programs exist solely within state institutions (prisons) and employ those with state imposed prison sentences.

Rationales and Descriptions of the Variable Choices

Independent Variables

There were four rates chosen to measure either incarceration
or labor market strength. Descriptions reiterate justifications found in the literature review.

1. Incarceration--This rate states the number of incarcerated individuals per 100,000 of the adult population. It was chosen due to its overwhelming presence in the literature. Not only is it an intervening variable in Rusche and Kirchheimer's (1967) theory, and an integral part in Tonry's (1995) application of marriageable males, but it could easily serve as a measure of oppressive government attitudes suggested by Lichtenstein (1996), Wilson (1971), and Walker (1988). This variable is the best of those included because, unlike the others, incarceration necessarily precedes involvement in prison industry programs.

2. Unemployment--This rate measures the percentage of newly unemployed individuals. The chronically unemployed, and those who are no longer seeking work, are excluded from this rate. It was chosen as it may be a measure of labor market weakness. It also is integral to Rusche and Kirchheimer's theory (1967) (though, given the lack of a drop in the incarceration rate, Rusche and Kirchheimer alone is not a good rationale). As unemployment measures those with recent job losses, and much of the incarcerated population has little work experience (Sexton, et al., 1985), the variable may not have anything directly to do with prison industry.

3. Employment--This variable measures the percent of the non-incarcerated population that is employed. It ties into Tonry's (1995) use of William Julius Wilson's marriageable males theory. It
also serves as a measure of labor market strength. As marriageable males has held up to empirical testing (Wood, 1995), and employment seems to be a predictor of who will not go to prison, there is reasonable expectation that employment may serve as a predictor of prison industry. Some caution is to be used, though, as employment and unemployment, though by no means jointly exhaustive, do covary.

4. Labor union membership--This rate measures the percentage of the American workforce that are members of a labor union. Short of real wage estimates, this was about the best measure of labor strength I could generate. Not only do labor unions and prison industry share theoretical links through voluntariness and fairness of competition, but Misrahi (1996) claims unions can be tied to the downfall of the early prison industry systems. Finally, before a current industry can be fully competitive with the rest of the private sector; that is, be approved for interstate trade; it must consult with the local labor unions. Thus, through the processes of our government, labor unions are claimed to affect prison industry.

The rates were collected from two sources. Incarceration rates for 1996 were taken from the Bureau of Justice Statistics (Gilliard & Beck, 1997). The other three rates were the 1996 figures taken from the Statistical Abstract of the United States (U.S. Department of Commerce, 1997). These rates were put into a correlation matrix (see Table 1), to test for interaction with the dependent variables.
Table 1
Variable (Pearson) Correlations for All Independent Variables and Dependent Variables Which Produced Significant Findings

<table>
<thead>
<tr>
<th>First Variable</th>
<th>Second Variable</th>
<th>Pearson Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of Prison Industry</td>
<td>Employment Rate</td>
<td>.315</td>
</tr>
<tr>
<td>Prison Industry Rate</td>
<td>Incarceration Rate</td>
<td>-.403</td>
</tr>
<tr>
<td>Job Training</td>
<td>Employment Rate</td>
<td>.389</td>
</tr>
<tr>
<td>Job Training</td>
<td>Incarceration Rate</td>
<td>-.371</td>
</tr>
<tr>
<td>Incarceration Rate</td>
<td>Unemployment Rate</td>
<td>.468</td>
</tr>
<tr>
<td>Employment Rate</td>
<td>Incarceration Rate</td>
<td>-.714</td>
</tr>
<tr>
<td>Employment Rate</td>
<td>Unemployment Rate</td>
<td>-.620</td>
</tr>
</tbody>
</table>

Dependent Variables

Several variables were chosen to measure the existence, nature, and extent of prison industry in each state.

1. The Existence of Prison Industry--This measures whether or not competitive prison industry; defined as any instance in which prisoners produce an item that is for sale on the open market (that is, not government consumed), or in which prisoners provide a type of service that is provided by a non-governmental labor source;
exists within a state.

2. Types of Labor--This measures the types of labor performed within a prison industry setting. Categories include: Manufacturing, White collar service, Blue collar service, and Recycling.

3. Prisoner Pay--This question is divided into several parts. First, officials were asked if prisoners are paid. Then they were asked for wage ranges and average wage. Finally, they were asked if there are any non-wage incentives for prisoners to work. (For example, early release, improved facilities, or special privileges.)

4. Job Training/Certification--This two part question involves asking if there are job training or certification programs available. If either answer is yes, respondents are asked to provide specifics (that is, a specific certificate prisoners could earn, or a specific job a prisoner would be qualified to do).

5. Job-Placement--This asks if there are any formal job placement programs available. A yes response garners a request to name a company or two that placed prisoners in post-release job positions. The second part of the question is asked under condition that the company names will not be released and the companies would not be contacted. The names are requested to verify the company's existence, to ensure that only programs that have actually placed prisoners in post-release positions are measured.

6. Demographic Data--This requests three measures of industry programs. This data, combined with data on the total correctional system, would provide an avenue to generate more ratio data, if
necessary. This data includes the number of prisoners in prison industry programs, the number of facilities in which prison industry programs take place, and the top three facilities in terms of participating prisoners.6

Data Collection

Respondents were selected using the ACA (American Correctional Association) 1996 Directory.7 A telephone survey was designed around the dependent variables. If an inappropriate state official was reached, an alternate number was dialed that was either selected from the ACA directory or provided by the incorrect state official or by directory assistance. Once the appropriate official was reached, and consent was given, the survey was conducted. Only one respondent was requested per state.8 On average, the survey lasted between ten and fifteen minutes. However, the average response time for a state without prison industry was five minutes, and the average for states with a program was fifteen to twenty-five minutes. Surveys were collected weekdays from March 19th, 1998 through April 3rd, 1998. Forty-four states provided responses to the survey.

Coding

Once the survey data were collected, they were coded to prepare them for analysis. When coding was finished, it became obvious that some of the dependent variables had an insufficient number of responses for analysis. Some of the problems are listed below.
1. Prisoner Pay--There was much hesitancy amongst respondents to report prisoner wages. This was more true for PIE programs than for intrastate programs. Early in the data collection, the insistent response of prevailing wage, without giving ratio data, made gathering enough wage data to produce meaningful analysis impossible. During data collection, it was discovered that a wage may not be the best measure of worker conditions, and can be outright counter-intuitive. This idea will be dealt with in the recommendations chapter. Those who did report data tended to report bi-modal pay scales, in which a majority of prison industry programs reported wages in the under $2 an hour range (intrastate only) or the $5-$7 an hour range (generally interstate). Because of the lack of usable data, analysis was not performed on the wage variable.

2. Job Placement--Before data collection, the plan was to only code responses that provided verifiable company names. The idea was to remove any programs that had informal or planned, but not truly active, job placement services. Problems arose due to two factors. First, only three states that responded Yes would answer the company part of the question; California, Florida, and Tennessee. Only two states, Florida and California, were prepared to make that information part of the public record. If there had not been as many informal responses as yes responses, I might have thrown out the question, altogether. Instead, I coded yes responses at face value, and informal and planning responses as no. If I had found significant results with this variable, as coded, I would have felt it
necessary to qualify the interpretation as tentative, needing further research.

3. Demographic Data--In a number of cases, the term facilities was misconstrued as industries, (e.g., an expected response of Smith State prison got the response, printing.) Also, when the top three facilities were given, it was not always in terms of participating prisoners, often due to respondents readily lacking that specific data. These responses the researcher takes total blame for, since respondents were usually near the twenty minute mark when this question was asked. After attempts to code the usable responses in terms of security level failed, due to poor resources, the facility aspects of the question were abandoned. On a positive note, the total (statewide) number of prisoners involved in prison industries question produced useable ratio data. These figures would be combined with CIA figures stating 1998 Correctional populations to create a prison industry rate (see Table 2), or the percentage of prisoners involved in competitive industry. Please keep in mind that several respondent states reported no prison industry (that is, competitive use), ranking them as zeroes for analysis of Existence of Prison Industry, and removing them from the analysis of other variables. Prisoner labor is for state use only in the following states: Alabama, Arkansas, Connecticut, Georgia, Maryland, Michigan, Montana, New Jersey, New Mexico, New York, Rhode Island, Texas, and West Virginia.
Table 2
Inmates Involved in Prison Industry Programs

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Inmates*</th>
<th>Percent of Total**</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Hampshire</td>
<td>500</td>
<td>23.41</td>
</tr>
<tr>
<td>Montana</td>
<td>350</td>
<td>16.91</td>
</tr>
<tr>
<td>North Dakota</td>
<td>110</td>
<td>14.29</td>
</tr>
<tr>
<td>South Dakota</td>
<td>217</td>
<td>10.06</td>
</tr>
<tr>
<td>Indiana</td>
<td>1500</td>
<td>9.27</td>
</tr>
<tr>
<td>Colorado</td>
<td>1200</td>
<td>9.18</td>
</tr>
<tr>
<td>Oregon</td>
<td>700</td>
<td>9.09</td>
</tr>
<tr>
<td>South Carolina</td>
<td>1800</td>
<td>8.55</td>
</tr>
<tr>
<td>North Carolina</td>
<td>2400</td>
<td>7.65</td>
</tr>
<tr>
<td>Idaho</td>
<td>300</td>
<td>7.26</td>
</tr>
<tr>
<td>Florida</td>
<td>4600</td>
<td>7.11</td>
</tr>
<tr>
<td>Ohio</td>
<td>3200</td>
<td>6.77</td>
</tr>
<tr>
<td>Kentucky</td>
<td>700</td>
<td>6.59</td>
</tr>
<tr>
<td>Maine</td>
<td>98</td>
<td>6.41</td>
</tr>
<tr>
<td>Tennessee</td>
<td>800</td>
<td>5.60</td>
</tr>
<tr>
<td>Virginia</td>
<td>1300</td>
<td>5.20</td>
</tr>
<tr>
<td>Utah</td>
<td>250</td>
<td>5.20</td>
</tr>
<tr>
<td>Nevada</td>
<td>375</td>
<td>4.86</td>
</tr>
<tr>
<td>Arizona</td>
<td>1059</td>
<td>4.55</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>700</td>
<td>4.37</td>
</tr>
<tr>
<td>Washington</td>
<td>440</td>
<td>3.76</td>
</tr>
<tr>
<td>Illinois</td>
<td>1449</td>
<td>3.58</td>
</tr>
<tr>
<td>Delaware</td>
<td>165</td>
<td>3.49</td>
</tr>
<tr>
<td>Kansas</td>
<td>258</td>
<td>3.31</td>
</tr>
<tr>
<td>Mississippi</td>
<td>328</td>
<td>2.41</td>
</tr>
<tr>
<td>Minnesota</td>
<td>100</td>
<td>1.91</td>
</tr>
<tr>
<td>Nebraska</td>
<td>50</td>
<td>1.75</td>
</tr>
<tr>
<td>Alaska</td>
<td>48</td>
<td>1.27</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>100</td>
<td>.67</td>
</tr>
<tr>
<td>Louisiana</td>
<td>20</td>
<td>.11</td>
</tr>
<tr>
<td>California</td>
<td>250</td>
<td>.08</td>
</tr>
</tbody>
</table>

*Number of Inmates - Survey data collected on the number of prisoners involved in prison industry programs.

**Percent of Total - Combines number of inmates with 1998 CIA Directory figures to create the Prison Industry Rate, or the percent of state prisoners involved in industry programs.
Correlations Charts

Given the preliminary nature of this study, and the fact that current incarceration theory left no clear way to predict relationships, correlation charts were generated comparing all variables against each other. These charts would be used to help regression choices. (Results for selected variables are summarized in Table 1).

Regression Procedures

Multiple regression was almost removed from the study. Originally, the average wage for industry workers was going to be used as a dependent variable. However, correctional officials often could not provide these figures; perhaps due in part to bimodal pay scales, in which PIE workers' gross wages are significantly higher than intrastate industry workers' gross wages. While coding the data, I considered using demographic data collected on prison industry to generate rates for various prison industry conditions. Generating a prison industry rate, the percentage of prisoners involved in competitive labor, made it possible to apply multiple regression.

The logistic regression technique was selected, after instrumentation was already designed, as the most efficient way to deal with the lack of true ratio data. The core text I worked with was Munro and Page's *Statistical Methods for Health Care Research* (1993). Through supplementary articles (Bendel & Carlin, 1990; Visser, 1994; Schwartz, 1994; Steel & Holt, 1996), I learned of the ecological fallacy, and the tendency for logistic regression to inflate results.
Of the critical literature I read, there seemed to be an overall acceptance of the use of the technique for generating a hypothesis. Since the literature written on prison industry would tend to suggest causal patterns that are convoluted or illogical, the focus of the study became to generate theory. If logistic regression yielded significant results, then the findings would warrant further investigation, mainly to verify that the findings were not due solely to the result inflation that normally occurs with that technique. If multiple regression reinforced these findings, then a hypothesis could be proposed and further studies could be guided in a more efficient way. Lack of consistent findings would compel us to seriously question the lack of provable relationships in the theory and writings on prison industry, and move studies in different directions.
CHAPTER IV

FINDINGS

The findings section is divided into three parts: (1) a univariate report on the survey data collected, (2) a report on the multiple regression portion, and (3) a report on the logistic regression portion.

Univariate Findings

Forty-four states completed the survey, with six states unable or unwilling to participate. Thirty-one of those states had prison industry programs in existence. The majority of those states, seventeen, had some mixture of intrastate and interstate (PIE) industry programs. The following describe prison industry programs, with the percent of the thirty-one states with prison industry programs given, and the raw number of respondents in parenthesis.

Types of Inmate Labor Programs

The types of inmate labor programs are as follows: In 29 states (93.55%), the prisons had manufacturing programs. In 18 states (58.06%) the prisons had inmates working blue collar service positions. In 19 states (61.29%) the prisons had inmates working white collar service positions. In 13 states (41.94%) the prisons had inmates recycling.
Opportunities for Prison Industry Workers

Opportunities for prison industry workers are as follows: In 23 states (74.19%) the prisons had job training programs. In 8 states (25.81%) the prisons had job certification programs. In 6 states, (19.35%) the prisons had job placement programs. These percentages indicated that prison industry programs have prisoners engaging in many types of labor. While job training is an integral part of most prison industry programs, formalized certification or job-placement seem to occur only in exceptional cases, with only a handful of states mandating certification.

All states surveyed paid inmates wages. Ten states (32.26%) offered early release or good time credit for industry workers. States with prison industry programs had an average of 818 industry workers (with a range of 20-4600), or 6.28% of the incarcerated population (with a range of .08%-23.41%) (See Table 2).

Multiple Regression

The initial regression weighed all four independent variables against the prison industry rate, the percent of prisoners involved in competitive industry (see Table 2). This model produced betas for unemployment and employment of -.828 and -.445, respectively. Matching signs for these rates are counter-intuitive, and these two rates are highly correlated (with a Pearson correlation of -.620, see Table 1). Given this, and a highly unstable model (a condition index of 94.556 at the fifth dimension), it was assumed that there was
heavy statistical interaction occurring. As this assumption fits well with common sense, and Tonry's application of marriageable males theory, both employment and unemployment were left out of the final model.

Regressing the prison industry rate against both the incarceration rate and the labor union membership rate (model found in Table 3) produced an R-square of .233 and an adjusted R-square of .179, which means this model explains eighteen percent of the variance of the prison industry rate.

Table 3
Multiple Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>Standard Error</th>
<th>Significance</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incarceration</td>
<td>-.017</td>
<td>.006</td>
<td>.009</td>
<td>.913</td>
<td>1.095</td>
</tr>
<tr>
<td>Labor</td>
<td>-.252</td>
<td>.157</td>
<td>.119</td>
<td>.913</td>
<td>1.095</td>
</tr>
<tr>
<td>Constant</td>
<td>15.095</td>
<td>3.292</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The final model, which excluded employment and unemployment as independent variables due to statistical interaction, leaves the Prison Industry Rate weighed against the incarceration rate and the labor union membership rate. The model has an adjusted R square of .179 (n = 31). Only the incarceration rate tested significant, at .009. The Beta for incarceration was -.017, with a standard error
of .006, and standardized Beta of -.485. This means the model has a relatively tight fit. A tolerance of .913 and a Variance Inflation Factor (VIF) of 1.095 means there is not a great deal of interaction between the incarceration rate and the labor union membership rate. Finally, a condition index of 8.332 at the third dimension indicates that this is a fairly stable model.

Logistic Regression

The logistic regressions yielded some significant results (See Table 4). The first dependent variable to do so was the existence of prison industry. All independent variables were entered into the equation. As no signs were counter-intuitive, variables with significance levels higher than .20, the unemployment rate and the incarceration rate, were eliminated from the equation. This left the employment rate and the labor union membership rate. In this model, the labor union membership rate tested insignificant (.1375), but the employment rate tested significant at the .047 level (in a model with 44 cases), and had a logic coefficient of 1.2049. This means that prison industry is 1.2 times as likely to exist per percent increase in employment.

The other logistic regression to yield significant results was job training. Here too, no signs were counter-intuitive, and the incarceration rate and unemployment rate were eliminated from the model. This left a model with employment, significant at .0818, and the labor union membership rate, insignificant at .1989.
Table 4

Logistic Regression Results

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Beta</th>
<th>Significance</th>
<th>Logic Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of Prison Industry</td>
<td>Employment</td>
<td>.1864</td>
<td>.0470</td>
<td>1.2049</td>
</tr>
<tr>
<td></td>
<td>Labor</td>
<td>-.0920</td>
<td>.1375</td>
<td>.9121</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-9.7640</td>
<td>.0960</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n=44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Training</td>
<td>Employment</td>
<td>.2627</td>
<td>.0447</td>
<td>1.3004</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-15.8272</td>
<td>.0574</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n=31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Certification</td>
<td>Employment</td>
<td>.0200</td>
<td>.9138</td>
<td>1.0202</td>
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<td></td>
<td>Incarceration</td>
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<td>.8781</td>
<td>1.0008</td>
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<td></td>
<td>Unemployment</td>
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<td>.9838</td>
</tr>
<tr>
<td></td>
<td>Labor</td>
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<td>1.0654</td>
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Table 4 lists the significant logistic equations, using the dependent variables Existence of Prison Industry and Job Training. It also lists results for usable survey data that produced no significant
results (Job Training, PIE Certification, and Job Placement).

Given the labor union membership rate's proximity to the .20 cutoff, I decided to eliminate it from the model. This left the employment rate, significant at the .0447 level, with a logic coefficient of 1.3004. This means that job training is 1.3 times as likely to exist per percent increase in the employment rate.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This study seemed to modify the causation of prison industry programs as theorized by Rusche and Kirchheimer (1967). Though their premise that unemployment effects incarceration failed to receive support from this study, Rusche and Kirchheimer's conclusion that incarceration directly influences prison industry was supported. However, Tonry's application of marriageable males seems a better theory for explaining the link, as employment rates were highly correlated with incarceration rates (-0.365), and the possible link between employment and incarceration warrants further study, perhaps in a path analysis of the variables: employment, incarceration, labor union membership, and the prison industry rate.

While the incarceration rate and the employment rate both yielded significant results, other indicators of labor strength and incarceration policy could be used in the analysis, and might serve as better indicators. Figures like real wages, overtime hours worked, job benefits, and the underemployment rate could provide better measures of labor market strength. Also, length of sentence, probation rates, and parole rates could provide insights into incarceration policy.

In addition, this study made certain assumptions, like the inherent difference between competitive prison industry and state
use prisoner labor, that warrant further testing. While data collected seemed to indicate a relationship between the prison industry rate and the incarceration rate, the survey data needs to be confirmed. Also, these results should be compared to the results using the same independent variables, with state use prisoner labor rates and prisoner work rates (total industry and state use workers) as the dependent variables.

In order to conduct better analysis, prison industry programs need to be studied at much smaller levels, and terminology needs to be more universal. Case data could be collected on individuals in the programs, dealing with demographic data, length of sentence, security level, and employment experience prior to incarceration. This would allow those conducting analysis to draw better conclusions regarding how certain prisoners become involved with industry programs, while others do not. With cooperation from parole agencies, recidivism data could be collected and combined with the demographic data to determine if prisoners participating in industry programs have a lower recidivism rate than non-participating prisoners. A smaller level of analysis would also help evaluate claims that prison industry programs are initiated in order to balance budgets or provide the unskilled inmate valuable work training.\(^{10}\)

A move toward a more universal terminology for the types of prison industry programs, along with prisoner labor programs, would facilitate more meaningful studies. This study used the term prison industry to denote the competitive use of prisoner workers. The
acceptance of the use of this term varied from state to state. Many alternative terms were suggested, with private enterprise and joint venture being the most popular. The same could be said of this study's use of prison labor, with state-use industries being the most popular suggestion to replace it. While the choice of terms to designate what type of work prisoners perform is unimportant, the fact that clear distinctions need to be made is very important. A given program is either competitive with the private sector or it is not. A given program either involves the private sector or it does not. A given program is either state-use or it is not. That a prison work program can develop with several combinations of these three conditions makes a good case for more universal terms. For example, there are vast differences among the following; a private prison that produces state-use furniture, a state run customer model furniture enterprise that sells to the private sector, a PIE program that sells furniture exclusively to the state (thereby being exempt from Walsh-Healey and possibly qualifying for superpreference), and a jail work release program which allows those jailed to work at a local private furniture company. Given this, it becomes clearer that current popular uses of these terms in part aids the political confusion surrounding debates on the use of prisoner workers. Therefore, agreeing on universal distinctive terms could not only aid the rational study of prison work programs, but also enable the rational debate of prison work programs.

Finally, this project made very clear two realities a re-
searcher studying prison industry must face. First was the necessity to keep time order accuracy in light of constantly changing legislation and program focus. Second was the extreme caution one must take in accepting wage data at face value.

Time order is extremely important to developing a causal model for any relationship. What makes this a particularly difficult task is that the conditions of prison industry are subject to both federal and state legislatures and courts. This is further complicated by the rate of implementation, which can vary from state to state and from prison to prison. Numerous times in the survey process I was told that a condition I was asking about had recently been repealed by the legislature, or had been enabled and was due to take effect in less than a month. Such turbulent conditions make the case for more regional and local analysis even stronger, as state courts and state legislatures could be monitored more closely.

Ratio data available on prison industry, such as inmate wages, seem a tempting way to measure the actual conditions of prison industry. But, taken out of context, inmate wages can grossly misrepresent the economic reality of the program in question. For instance, say the state of Freedonia has two customer model prison industry programs, one intrastate and the other a PIE program. Inmates working the intrastate program receive $2 an hour, with $.50 in deductions for room and board. Inmates working the PIE program receive $5.50 an hour, with $4 in deductions for taxes, victim's compensation, and room and board. Since in the customer model, the
state controls the unit price of goods sold to the private sector, the economic realities of the two different wages may be identical.

Then, assume that Freedonia decides that PIE programs really don’t fit well into their state economy, so the legislature decides to replace it with an intrastate employer model program, to which the former PIE customer agrees. Wages and deductions for the two programs are now identical. For the inmate, her or his economic reality has not changed. Depending on whether or not the state could manage a profit under the PIE program, the state’s economic reality may not have changed, either. But for the private business, this shift from a PIE customer to an intrastate employer meant the difference from getting their goods at a wholesale price to getting their goods at a sub-manufactured price. However, this hypothetical does not take into account other issues, such as whether the company or the state pays inmate medical bills, or covers worker’s compensation for injuries. But it does demonstrate just how complex the money exchanges in prison industry programs can become, and how it is possible that such data, taken out of context, may not accurately represent the economic realities of the competition that a given program provides.

In summary, prison industry programs are growing at a phenomenal rate, with most states acquiring a program in the last twenty years. A given program’s manifestation can change quickly. With expansion into new labor and sales markets, industry programs often have to meet new and different standards. Academic theory on
prison industry must also change to suit the times. Immediate study is needed so we can understand why these programs exist, because only with this understanding can we both prevent the exploitative abuses the industry system has had in the past, and at the same time ensure that worthwhile programs are not needlessly eliminated by the often hysterical trends of a global economy.
ENDNOTES

1Real wages and measures of worker benefits were also considered, but not only seemed fairly complex, but lacked much of the historical, theoretical, and legal justification that labor union membership already possessed.

2To include marriage as a predictor of incarceration would prove cumbersome at this juncture, as it would further complicate the interaction effects that would seem to already be present, like those between employment and unemployment. As stated, a direct relationship between employment and marriage has been found, and for the purposes of this project, it is sufficient.

3All the readings I have done indicate that Federal Prison Industries (FPI) and UNICOR refer to essentially the same program. An author’s choice of acronyms is often arbitrary. For the purposes of this paper, the two are used interchangeably.

4Admittedly, I did ask one respondent about one of the several replacement accusations Elbow had made. The respondent knew nothing about such a program, but suggested Elbow might be talking about a jail work release program, which is a county, not state, affair. The fact that such divisions and differences can be completely overlooked by those writing editorial pieces makes an excellent case for more qualified research to be done on inmate labor at all levels.

5The 1996 data is being used for several reasons. Most
importantly, since this survey was conducted largely in the first quarter of 1998, it could be assumed that the most readily available respondent data might be garnered from 1997 figures. Secondly, as recent employment and incarceration data have seen relatively few sharp increases or decreases, the time lapse should have little effect on the results.

6The facilities question was an ill-fated attempt to quickly determine demographic data such as gender and security level of the prison industry workers, without asking three to four individual questions. The coding section describes several reasons this attempt went awry.

7In the process of data collection, I was informed of a much faster way to acquire much of the information I was looking for, the Correctional Industries Association Annual Directory. In addition to charts detailing much of the demographic data any study of prisoner labor would require, it also includes invaluable contact numbers. The CIA directory was not used to collect prison industry data for this study, but was used as a source of information for the literature review, and used to generate the Prison Industry Rate (see Table 2).

8A few states asked that I speak to individuals in charge of different programs. Others requested a fax of the questionnaire, so they could gather answers and confirm me as legitimate. These requests, although not formally listed in the methodology, were accommodated.
Many states had informal job placement mechanisms in place. A few states, while training inmates for certifiable positions, cannot by law grant convicts that certification. Hence, the inmates must wait until they are released to be officially certified.

For instance, a program that is state-use, or competitive and non-profitable, might not be reaching a goal of budget balancing. Also, a program that only selects inmates with prior work experience (that is, inmates with prior work skills), might not be reaching a goal of training unskilled workers.
Appendix A

Letter of Permission From the Human Subjects Institutional Review Board to Conduct Research
Date: 5 March 1998

To: Zoann Snyder-Joy, Principal Investigator
    Eric Dill, Student Investigator

From: Richard Wright, Chair

Re: HSIRB Project Number 98-01-11

This letter will serve as confirmation that your research project entitled “Factors Influencing Prison Industry” has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: 5 March 1998
Appendix B

Survey Instrument
Hello, my name is Erik Dill. I am inviting you to participate in a research project entitled "Factors Influencing Prison Industry." It is my thesis project at Western Michigan University, department of Sociology, and Dr. Zoann Snyder-Joy is my faculty advisor. The survey will take approximately 3-15 minutes of your time and designed to measure your state's involvement in prison industries, with the project goal being a nationwide analysis of prison industry programs. You may choose not to answer any question or not to participate. Answering a question indicates your consent to use the answer you supply. If you have any questions, you may contact myself at ###-###-####, my faculty advisor Dr. Zoann Snyder-Joy at ###-###-####, the Human Subjects Institutional Review Board at (616) 387-8293, or the Vice President for Research at (616) 387-8298.

Just to confirm my information, I am speaking to (see above). Is there a correctional official other than yourself that I should be speaking to regarding the nature and extent of prison industry in your state? (If yes, fill in alternate official space above.)

Thank you. If you are willing, I would like to conduct the survey now. (If not, seek an alternate contact time, including time zone. Remember to confirm phone number.)
1) Are there currently prison industry programs in your state?

[For survey purposes, prison industry is any instance in which prisoners produce an item that is for sale on the open market (that is, not government consumed) OR in which prisoners provide a type of service that is provided by a non-governmental labor source.]

If no, forward to the final page. (Survey complete).

If yes: As there is prison industry in your state, I will be asking you questions as to the nature and extent of your prison industry programs.

First, I would like to ask what types of labor are being performed by prisoners in your prison industry programs. Does your state have prisoners performing any of the following in a prison industry setting?

____ Manufacturing - Taking raw materials and making a finished product (wood to furniture).

____ White collar service - Any type of clerical or information service (data entry).

____ Blue collar service - Any form of manual labor that produces no product (stocking shelves).

____ Recycling - The conversion of post-consumer/post-governmental waste into raw materials or other products (compost).

The next questions cover if and how prisoners are compensated for their participation in these programs.

____ Are the prisoners paid?

If yes,
How much are the prisoners paid?
If varies
What is a wage range for prisoners involved in your programs?
And
What is the average wage for a prisoner involved in your programs?
Are there any non-wage incentives for prisoners to work in your state?
(Examples might include: Early release; improved facilities; or special privileges.)
If vague Could you please tell me more about (their words from above)?

That is, what are the practical benefits of (their words from above) for the prisoner?
Are prisoners given the opportunity to earn job specific training or certification from their prison labor experience?
If vague Could you please name a specific job title each prisoner is qualified for, or a specific certification or degree each prisoner could earn?
Are there any post release job placement programs associated with your industry program?
If yes Could you please list the names and locations of specific companies (or agencies) involved specifically with the placement of participants in your state's programs?

<table>
<thead>
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<th>Name</th>
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</table>
Finally, I would like some demographic data on your state's prison industry:

How many prisoners participate in your prison industry programs?

At how many facilities are prison industry programs currently running?

Please list the (facilities/top three facilities) in terms of participating prisoners:

<table>
<thead>
<tr>
<th>Facility</th>
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Thank you for your participation. The information you have given me will be used in a nationwide comparative analysis of prison industry.

If you wish to contact me with any questions or concerns, my home phone number is ###-###-####. I can be reached by email at X91DILL@wmich.edu. My faculty advisor is Dr. Zoann Snyder-Joy. She office phone number is ###-###-####. Either of us can be contacted by writing to the following address:

Department of Sociology  
Western Michigan University  
Kalamazoo, MI  49008-5189

You may also contact the following with any questions or concerns.

Human Subjects Institutional Review Board at (616) 387-8293.

The Vice President for research at (616) 387-8298.

Thank you again. Goodbye.
BIBLIOGRAPHY


