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# A Problematic Business Model: The Effect of Private Prisons on Arrests

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**Abstract**

Past work related to the private prison system has focused on direct comparisons between private and public facilities, including their respective quality, cost-effectiveness, and influence on recidivism. Using 2005 United States data compiled from a prison facility census, county census, and information on number of arrests by county, I examine the effect that the presence of private prisons has on the number of adult male arrests per county. Across four regression models, I initially find a significant effect of private prisons on arrests, but find that effect becomes insignificant once county and prison controls are accounted for. This suggests that the presence of a private prison in a particular county does not necessarily lead to a significant increase or decrease of arrests in that area.

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**I. Introduction**

In the United States, the sharp rise in incarceration rates of the 1980s coincided with increasing private sector involvement in the prison system. From 1970 to 2005, the United States' prison population increased by 700 percent (Public Safety Performance 2007), and as of 2016, more than 2.2 million people resided in state, federal, and local institutions (Bureau of Justice Statistics 2016). This progression stemmed from major public policy decisions during the "War on Drugs" era of the 1970s, in which the popular "tough on crime" rhetoric heavily influenced laws into the 1980s and beyond. Specific examples include mandatory minimum sentencing laws, truth in sentencing laws, and three strikes laws, all of which combined to lengthen sentences, limit judges' case-by-case discretion, detract from rehabilitation efforts, and increase severity of punishments (American Civil Liberties Union 2011).

Today, some of the largest private prison corporations are publicly traded on The New York Stock Exchange (Friedmann 2015), report profits in the millions[1], and account for 13.3% of U.S. federal prisoners and 7.3% of state prisoners (Bureau of Justice Statistics 2015). The profit model for these corporations is dependent on high rates of incarceration (American Civil Liberties Union 2011) and more severe sentencing policies, which Corrections Corporation of America[2] (CCA) concluded as a "Risk Related to Business and Industry" in a 2010 Annual Report. They claim that lenient sentencing, altered conviction and parole standards, and decriminalization each represent threats, and that they rely on consistency in these areas to maintain their business model

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[1] Two of the largest prison companies, Corrections Corporation of America and GEO Group, reported 2016 profits of $220 million (Core Civic 2016) and $162 million (The GEO Group 2016).
[2] Corrections Corporation of America is now known as Core Civic.

(CCA 2010). Supporters of the private prison industry promote increased employment and tax revenues generated by the presence of new facilities (Gran and Henry 2007), attainment of faster and cheaper bed capacity, lower operational costs, and improved quality of service (Bales et al. 2005). Several studies, discussed more comprehensively later in this paper, attempt to assess and draw conclusions regarding the viability of these claims. Pratt and Maahs (1999) and Pratt and Perrone (2003) explore the cost-effectiveness and the quality of private prisons in comparison to public institutions, while Bales et al. (2005) determine the difference in recidivism rates between public and private facilities in Florida. Additionally, many academics address the debate surrounding private prisons, assessing the philosophical and ethical implications of a for-profit prison system.

However, it appears that there are no studies to date regarding the direct effect of private prisons[3] on arrests. This study attempts to fill the gaps in the literature and expand upon the impact of private prisons by measuring the strength of influence their interests have on society. Based on 2005 Census data from the Bureau of Justice Statistics database using regression analysis, I will specifically test whether private prison presence in United States counties has a measurable effect on the number of arrests of adult males who reside in these locations. The focus on arrests of adult males is based on contract

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[3] In some cases, state and federal prisons may have operations that are managed by private prison companies, such as rehabilitation services, construction or financing through lease-purchasing, or medical care and food services (Pratt and Maahs 1999). In this thesis, however, references to private prisons refer to a facility that is entirely owned and managed by a single corporation, also known as "private prison management".

prisons'[4] primary incarceration population, which are short-sentence, low-security criminal alien adult males (Office of the Inspector General 2016). The effect will be measured by county, because this scope had the most available data for prisons, counties, and arrest rates. I hypothesize that the private prison corporations' interest and influence on criminal policy (Schneider 1999) at the local, state, and federal levels may lead to more adult male arrests in each county. A significant effect may indicate private prison's contribution to the high incarceration rates in the United States.

I find that my results do not support my hypothesis. Descriptive statistics and my results my first specification initially suggest that the presence of private prisons does have a positive effect on adult male arrest rate by county, but the introduction of prison and county characteristic controls cause this effect to lose significance.

The remainder of the paper is organized as follows. Section II expands upon the background of the private prison industry and the relevant existing literature. Section III describes the data. Sections IV and V discuss the empirical strategy and results, and section VI concludes and discusses further areas of research.

## II. Literature Review

The following historical background and literature review seeks to concisely describe the history and growth of private prisons, explore significant literature related to this topic, discuss philosophical and ethical arguments surrounding the use of private

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[4] The official definition of contract prisons, explained further later on in this paper, defines contract prisons as facilities run by private prison corporations whose services and beds are contracted out by state governments or the Federal Bureau of Prisons (Bureau of Justice Statistics 2016)

prisons, and finally to investigate the private industry's relation to politics and lobbying tactics. I discuss each in turn.

II. a) *Historical Background*

Government contracts with private prison companies for adult facilities first were introduced in the 1980s, an opportunity that new private companies took advantage of during an era of prison overcrowding. The first arrangement was through Hamilton County, Tennessee in 1984, when the Corrections Corporation of America (CCA) went under contract with the government to run the facility there. Another major deal involved four Texas institutions in 1988, where the Department of Corrections agreed to contracts with the Corrections Corporation of America (CCA) and Wackenhut Corrections Corporation[5] (WCC) (Harding 2001). Federal and State departments became willing to contract with private companies due to the potential that private agencies could construct and run prisons at a higher level of quality, efficiency, and, most importantly, at a cheaper cost than public agencies could (Perrone and Pratt 2003). This option was highly attractive for federal and state agencies at a time when alleviating the cost burden of long-term and high volume incarceration became a necessity (Pratt and Maahs 1999).

The pressure to lower costs and prison populations is still relevant in the modern era, exemplified through the May 2011 Supreme Court case *Brown v. Plata*, which ordered California to alleviate its overcrowded prisons (Brickner and Diaz 2011). This case demonstrates the continuous need for private companies to take part in the prison system, assuming that they can provide the cost savings they advertise. A more debatable reason as to why the government would contract with private prisons is the perception

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[5] Wackenhut Corrections Corporation is now known as The GEO Group after a name change in 2003.

that private prisons would provide higher quality facilities in the face of deteriorating public prisons, which is not entirely true in all cases. Pratt and Maahs (1999) argue that while some public facilities are in severe decline, others are clean, state-of-the-art institutions (Pratt and Maahs 1999).

Government contracts with third-party companies stem from the expectation that private facilities are superior to public institutions in terms of quality, efficiency, and cost. In the next section, I explore the existing literature, which examine the validity of these assumptions.

## II. b) *Existing Literature*

Several studies question the legitimacy of arguments in support of private prisons, and therefore challenge the purpose of government contracts with these corporations. Pratt and Perrone (2003) examine both the quality and cost-effectiveness of private facilities compared to public institutions. This work reviews past empirical studies that relate to this topic to determine whether private facilities operate with higher quality and/or at a cheaper cost than public facilities. Pratt and Perrone (2003) discuss the methodological issues with past studies, and attempt to come to conclusions regarding the question at hand. They find inconclusive data about effectiveness (measured by relative safety and order of the facility) and cost-effectiveness, finding that many of the past studies use inconsistent methods. They conclude that neither supporters nor those who oppose private prisons should use the data from these past studies to support their claims, because when aggregated, the data is inconclusive in both categories. Pratt and Maahs (1999) also find that there is no overall significant or long-term cost savings for private

over public prisons. These studies challenge arguments in support of private prisons regarding cost-effectiveness and quality. This may indicate the need for federal and state governments to further examine empirical research before engaging in additional private industry contracts.

Bales et Al. (2005) conduct a study regarding recidivism[6] rates of public versus private inmates in Florida state prisons. They seek to address the claim that private prisons reduce inmate recidivism, and do so by comparing and analyzing multiple treatment groups of private and public prison inmates. Using a wider range of recidivism covariates than prior studies, Bales et al. (2005) find that there are no significant recidivism rate differences between private and public inmates for adult males or females, or for juvenile offenders. This study refutes yet another argument made in support of the private prison system, and therefore supports the position that this industry does not necessarily deliver the entirety of what it promises.

II. c) *Philosophical and Ethical Arguments*

Those in opposition to private prisons find several philosophical and ethical drawbacks to this system including their for-profit business model, insufficient programming for prisoners, lack of transparency, and issues with training and safety measures.

A key philosophical standpoint views prison as the fundamental responsibility of a government that should not be shifted to a third-party. Harding (2001) states that one may view prison as a primarily state function because of the government's direct

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[6] Recidivism is defined as the tendency of a convicted criminal to reoffend.

responsibility to its citizens, both the incarcerated and the free. Therefore, leaving control of this responsibility in the hands of the private sector, which is likely not motivated by people's best interest, is a potential disservice to society.

Perhaps the most obvious ethical argument against private prisons is that they seek to earn profits, which they acquire from filling bed quotas with more prisoners for longer periods of time (Schneider 1999). Many of the contracts private prisons form with the government guarantee 80 to 100 percent of the facility's beds will be filled with prisoners, in an arrangement called a "bed guarantee" (Bowling 2013). The most interesting and concerning aspect of these contracts is that if the state does not fulfill the agreed upon quota, it must pay a fee to that private company whether the beds have prisoners in them or not (Bowling 2013). This arrangement means that the federal and state governments may have increased incentives to arrest more citizens and subsequently send them to the private facilities to avoid paying this fine.

The private prison model also has the potential to take away what some might argue is one of the key purposes of prison, which is to rehabilitate inmates. Rehabilitation programs such as drug counseling, mental health care, and job training are not primary priorities for private prisons (Brickner and Diaz 2011), because these programs detract from profits. Withholding these programs may negatively affect inmates, who are impeded from receiving any pre or post-release rehabilitation benefits potential programs would offer.

Lack of transparency is also an issue discussed regarding private prisons. Brickner and Diaz (2011) argue that it is difficult to analyze the operations of private prison facilities, because they are not held to the same standard of transparency as public

institutions. They cite past examples of private companies resisting Freedom of Information Act requests, and describe how this contributes to a culture of secrecy and lack of protection against corrupt processes. Additionally, Gran and Henry (2007) establish the issue that private prison administrators are held to a less strict standard than public officials, as they are not elected, appointed, or impeachable. This means that any wrongdoing is not directly available to be addressed by the public, and lowers the chances of any repercussions against administrators' misconduct. Additionally, the media has restricted direct access to the owners of these facilities as well as to their records, which further limits public knowledge of private prison practices.

A key procedural issue within private prisons involves staffing and training issues as a result of cost saving measures. It is common for private facilities to experience high turnover amongst its employees, most commonly due to lower salaries and benefits than those earned by employees in public facilities (Blakely and Bumphus 2004). The private sector pays new officers about $5,327 less than the public sector pays their new employees, and the difference in maximum salary is about $14,900 (Blakely and Bumphus 2004). High turnover, at a rate of 53% for private facilities and 16% for public, indicates unstable conditions that lead to lower quality supervision and increased safety concerns (Brickner and Diaz 2011). For example, the private sector experiences more than twice the number of assaults against inmates than the public sector, and just as many inmate-on-staff assaults (Blakely and Bumphus 2004). Similarly, Gran and Henry (2007) support these findings of high turnover rates among private facility staff, and also describe the tendency for these employees to have fewer credentials, less training, and a general lack of experience and specialization of prison knowledge as their public prison

counterparts. Additionally, both Brickner and Diaz (2011) and Gran and Henry (2007) describe prisoner escape scandals that occurred in private facilities, attributing these incidents to the substandard security efforts implemented in these institutions.  The 1998 escape of six prisoners from an Ohio correctional facility (Gran and Henry 2007) and the 2010 escapes of three prisoners in Arizona that led to the murder of an Oklahoma couple (Brickner and Diaz 2011) exemplify just two incidents that imply the danger poor training and security can pose to society.

The trends in the private sector are concerning, as they suggest a lower standard of quality, transparency, and safety than that of public facilities. Although there are safety concerns in public facilities as well, the fact that there are less stringent standards for training and expertise in private institutions indicates potentially lower quality service at the expense of both prisoners and the public. These findings are relevant to my analysis because they indicate the detrimental profit-seeking behavior of the private sector, which arguably leads to both cut corners and a skewed motivation to perpetually increase the incarcerated population.

## II. d) *Political Influence*

The growth and performance of private prisons appears to vary by presidential administration policy as well. To visually represent this, Figure 2 displays the stock price of two of the biggest private prison corporations over the past ten years. The stock of the GEO Group and CCA dipped to their lowest in January of 2008 and August of 2016. In 2008, Barack Obama had just been elected as president, which may have created unknowns for stockholders unsure of a president associated with the democratic party. The connection between presidential policy and industry are much clearer in 2016, during

which Barack Obama announced that the United States would be phasing out the use of private prisons due to questionable safety and security issues (Savage 2016). Conversely, October and November 2017 represent the beginning of a sharp increase of GEO and CCA stock, a response that corresponded directly to Donald Trump's victorious presidential campaign. This may be due to Trump's open support (The New York Times 2017) for private prisons, as well as his tough on crime attitude, which aligned well with the private industry agenda.

Tough on crime policies generally benefit elected officials' political agendas. This is due to the potentially increased support they may earn from the public for seeking harsher punishment on crime, without incurring any backlash from those actually receiving the punishment, the prisoners (Schneider 1999). For those elected who support prison reform, it is an uphill battle, as prisons are rarely a high priority for voters and prison reform proposals are often voted down (Harding 2001). This trend benefits private prison companies, which profit from society's perception of ever-increasing crime rates in the United States, and the resulting need for more prisons to combat this.

Brickner and Diaz (2011) describe in great detail past corruption scandals, which involve private prison lobbyists illegally influencing the actions of elected officials. In 2011, for example, it was revealed that a Juvenile Court Judge, Mike Ciavarella, had been involved in a longstanding scheme in which he was paid by private prison officials to sentence juveniles to harsher sentences. This scheme demonstrated that the temptation of profit was enough to corrupt the justice system and affect the lives of the juveniles sentenced by this judge. This case demonstrates the power that private companies have, and the danger of involving a party motivated by profits into the criminal justice system.

The connection between private prison money and public policy was also revealed in Arizona under Governor Jan Brewer. In this case, individuals associated with private prisons made hefty donations to Brewer's campaign, and it was found that several members of her staff were in contact with private prison lobbyists (Brickner and Diaz 2011). A policy outcome most likely influenced by these connections was Governor Brewer's signing of a law that increased implementation of immigration law, and therefore would have increased incarceration of undocumented immigrants (Brickner and Diaz 2011). This would directly benefit private prisons in Arizona, as this is their most common inmate population. Additionally, a Petteruti and Ashton (2011) revealed another example of private prison campaign influence, exposing The GEO Group's $1.5 million in donations over the course of seven years, from 2003 to 2010. These donations likely were made to politicians who already supported the private industry or who were being convinced to do so, which is problematic in a system that should respond to the desires of government officials' constituents, not those of the officials themselves.

These examples demonstrate how the private prison industry fluctuates according to certain policies and the general political climate, which is why it is in their interest to attempt to influence those in power through legal or illegal lobbying and financial tactics. The scandals described above are just some of the incidents uncovered in the past, which suggests that there may be more corruption still undiscovered regarding the private prison industry. The political influence of private prisons is relevant to this analysis, because a correlation between private industry and arrests may signify corruption consistent with the incidents described above. A relationship between private prisons and arrests possibly suggest similar lobbying and bribery tactics to those they engaged in in the past.

Existing literature to date has explored comparisons between private and public institutional efficacy. However, a lack of research relating to private prisons' questionable profit motivations and methods as well as past corrupt behaviors indicates opportunity for further analysis. This study aims to approach this topic by examining the direct effect of private prisons on arrests based on their motivated to fill beds with prisoners for profit.

## III. Data

I use data from three merged sources that include information on prison facilities, county characteristics, and adult male arrest rates. There are 1207[7] facility observations across 506 counties. The first dataset documents prison facilities from counties across the United States, drawn from the Bureau of Justice Statistics (BJS) database. The second dataset, from the United States Census Bureau, contains demographic, macroeconomic, and public goods information about all counties in the United States. The final dataset provides the number of arrests by age, sex, and race in each county. Because this thesis solely focuses on adult male arrests, this is the only category extracted and merged with the prison and county data. Additionally, the year 2005 is examined because it reflects the most recent prison facility information available, and will therefore provide the most relevant results.

Excluded from the prison data are Military facilities, Immigration and Customs Enforcement (ICE) Institutions, Bureau of Indian Affairs facilities, US Marshals Service institutions, juvenile facilities, and private facilities not primarily for State or Federal

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[7] All facilities that did not have a primarily adult population were dropped from the dataset, which decreased the total number of observations by 471.

inmates (Bureau of Justice Statistics 2005). Some of these exclusions contribute to limitations of this data, because they decrease the number of private prisons available for analysis. For example, many private facilities seek to incarcerate Mexican immigrants with immigration offenses (Office of the Inspector General 2016), meaning that ICE facilities often contract with private companies. Excluding ICE facilities therefore, will eliminate a number of relevant private contracts from this analysis. Additionally, the exclusion of certain types of private facilities will similarly eliminate a portion of private prisons, which may affect the results of this analysis. Another drawback to this dataset is that the observations are dated, as the most recent prison census data collected was in 2005. Growth or decline of the private prison industry in the 12 years since this collection date may change results of this analysis.

The dependent variable in this analysis measures the number of adult male arrests per county. The main variable of interest is an indicator variable for private prisons, equal to 1 if the prison facility is private and 0 if the prison facility is state or federal. I also include a number of prison and county characteristics. Prison characteristic variables include whether inmates pay a fee for their imprisonment, the total number of inmates in each facility, and an indicator variable for prison work programs (equal to 1 if the prison facility has a work program and 0 if it does not). There are also multiple county characteristic variables that fall under macroeconomic, demographic, and public goods categories. See Table I for a full list of variables and their respective definitions, including both prison and county characteristics.

**III. a)** *Summary Statistics*

Appendix Table II presents descriptive statistics by type of prison facility. The mean and standard deviation of adult male arrests for exclusively private facilities was much higher than the total or public means. This indicates that on average, arrests of adult males are higher in counties with private prisons, which supports my original hypothesis. Further testing must be conducted to analyze the significance of this effect.

The averages and standard deviations are also higher for private than public facilities for inmate fee payment and for number of non-citizen inmates. This suggests that inmates pay fees more often in private prisons, and the number of non-citizen inmates is higher in private prisons. This is unsurprising, because inmate fees are utilized in private prisons to offset the cost of housing inmates (Eisen 2014) and non-citizens are generally private prisons' target population (Office of the Inspector General 2016). It is also found that private prisons have fewer inmates on average than public institutions, and that the presence of a work program is consistent across both private and public facilities. The finding regarding work programs is surprising, because it was a previous hypothesis of mine that private facilities were more likely to require compulsory inmate work due to ties to prison industry programs, such as the Federal Prisons Industries initiative, UNICOR[8]. However, this is untrue because UNICOR'S programs are implemented through the Federal Bureau of prisons, so both private and public institutions utilize work programs.

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[8] UNICOR, a federally owned program that implements prison labor in the United States, provides work to inmates within the Federal Bureau of Prisons.

When examining the means and standard deviations of the various County Characteristics, specific elements stand out. The total, private, and public means and standard deviations are fairly consistent for most variables. However, the average percentage of people who graduated high school or higher is slightly less for counties with private facilities than those with public institutions, but only by two percentage points. A larger sample size might indicate whether or not this is a significant difference. Another key finding reveals that the county population was much larger for private institutions than for public facilities, which may indicate that private companies look to operate in more populated areas. Additionally, it appears that there are more supplementary income recipients in counties with private prisons, yet fewer social security recipients in these counties than those with public facilities.

The remainder of the paper formally analyzes the aforementioned patterns.

## IV. Empirical Strategy

To analyze the impact of private prisons on adult male arrest rate, I estimate the following model:

$$A_{cf} = \alpha + \beta_1 P_{cf} + \beta_2 N_{cf} + \beta_3 Y_{cf} + \varepsilon_{cf} \qquad (1)$$

where c and f represent the observed county and prison facility, respectively, $A$ is the number of adult male arrests; $P$ is an indicator variable for the presence of a private facility; $N$ is a vector of prison controls including a dummy for whether inmates pay a per diem fee, total number of number of inmates in each facility, number of incarcerated noncitizens, and a dummy variable for the presence of a prison work program; $Y$ is a vector of demographic, public good, and economic county controls including percentage

of adults, education levels, the foreign population percentage, per capita income, percentage of homeowners, persons in poverty, the ratio of males per 100 females, social security recipients, Medicare beneficiaries, and supplementary income recipients, and unemployment rate; and $\varepsilon$ is an error term with the usual properties. Originally, two additional county variables were to be included into the regressions. The first was a variable that listed the number of hospitals in each county, and the second variable accounted for the percentage of the county population employed in manufacturing jobs. However, both of these variables included missing data, so they could not be included in the regression models. This may be an area of further research if more complete data can be collected from recent years.

I estimate four different specifications to determine if the effect found in the descriptive analysis persists after I control for prison and county characteristics. Specification 1 replicates the results presented in the descriptive analysis and simply controls for an indicator variable for type of prison facility. Specification 2 includes Specification 1 plus it controls for prison characteristics (*P*). Specification 3 includes Specification 2 plus county fixed effects, to account for the possibility that I may not include the full set of county controls. Finally, Specification 4 includes Specification 2 plus the county variables (Y).

**V. Results**

Appendix Table III presents the results from Specifications 1 through 4. There are several noteworthy patterns. First, there is a significant positive correlation between the presence of private prisons and adult male arrests (see Specification 1), which

supports the earlier findings mentioned in the descriptive statistics. However, this effect does not persist once prison characteristics (Specification 2) and county characteristics (Specifications 3 and 4) are included in the analysis. The finding in Specification 1 supports the hypothesis that private prisons play some significant role in the amount of arrests per county, most likely due to the fact that private companies profit from more prisoners to fill beds, as the aforementioned literature supports. However, the loss of this significance across the other specifications contradicts this hypothesis. The significant variables that cause this loss of significance across specifications are mostly rational, and are described below.

Prison characteristics in isolation find two significant variables, which may contribute to the loss of initial significance of private prisons on arrests found in Specification 1. The number of noncitizens and the presence of a work program are significant and positively correlated with arrests at the five and one percent levels respectively. The results indicate that for every one noncitizen incarcerated, about ten more arrests can be expected, and the presence of a prison work program predicts about 21,200 fewer arrests. This number seems incredibly high, especially since the average number of arrests per county is only about 10,400. However, this may be a valid result because a facility that has a work program may release prisoners who are able to find employment more easily upon release, which may lead to fewer arrests in that county. Interestingly, both these effects disappear in Specification 3 following the addition of county fixed effects, and inmate fee is instead significant. This indicates that if a prison requires inmates to pay a fees while they are incarcerated, it is expected that there will be about 2,500 additional adult male arrests in that county. This is a rational result due to the

fact that facilities earn profits from prisoners, so they may have a vested interest in a greater number of prisoners, as a result of more arrests. Specification 4 found no significance in any of the prison characteristics.

Specification 3 is the equivalent of Specification 2, with the additional inclusion of all county fixed effects. This regression has the highest adjusted R squared value of the four models, at 95.8%. This means that all of the independent variables included account for 95% of the variance in arrests, indicating that county variables play a large role in the arrest rates per county. In terms of significant variables, the relationship between private prisons and adult male arrests maintains no significance.

With the inclusion of my specific county characteristics in this Specification 4, it appears that all of the significance of the prison characteristics become non-significant. However, there are some county characteristics that are significantly correlated with arrests at the one and five percent levels. One surprising result indicates that with every additional percentage point of adults in a certain county, it is expected that there will be about 525 fewer arrests of adult males in that county. This result seems counterintuitive, where I might predict that a higher number of adults residing in the county would mean more arrests of adults in that area. However, more adults may mean more two-parent households within that county, which often is an indicator of stability, and would signal a fewer number of arrests. Other surprising results included the finding that counties with higher foreign population correlated with fewer arrests. However, the foreign population variable does not indicate whether the person is simply born into a different country, or if they are still a noncitizen, which makes these results somewhat unclear. It also appears that for each additional percentage of a county population that is educated at a high

school graduate level and above, there are about 200 fewer arrests in that county, which is a reasonable result. Another predicted result is that every additional homeowner corresponds to about 250 fewer arrests per county. This is a rational result because more homeowners indicate financial stability, which is generally true in more affluent areas with less crime and fewer arrests. The adjusted R-squared for this model is much higher than the previous Specifications 1 and 2, at 82.9%. This indicates that the independent variables explain the variation in arrests per county quite well.

**VI. Conclusion**

The involvement of the private sector within the United States prison system is a highly controversial topic. Supporters of this design argue the advantages of private prisons over public institutions, citing improved quality, efficiency, and cost-effectiveness. However, much of the literature on this topic challenges the validity of these claims, and questions the incentives of private prison corporations. The foundation of this study revolves around the problematic and self-serving motives of private prisons, which profit by filling beds with prisoners. I hypothesize that private prisons may seek to earn greater profits by influencing policy towards increased arrests. This would benefit the private prison industry, while simultaneously contributing to high incarceration rates and adding little to no value to society. Specifically, this study seeks to analyze the effect of private prisons on arrests per county.

My analysis of the data regarding prisons, counties, and arrest rates has shown that in the simplest case of Specification I, the presence of private prisons does have an effect on the arrest rates of adult males by county. This finding supports my hypothesis stated in the introduction of this paper. However, after accounting for controls for both

prison characteristics and county characteristics, it appears that the correlation between private prisons and arrests is no longer significant in any of the other three cases. This may have changed in the years since the release of this data, which could be an area of further research once additional data has been released on years subsequent to 2005. This is especially true considering the fact that private institutions made up a small percentage of my overall data, so more recent data might reflect an increase of facilities and therefore show a larger effect on arrests. The private prison industry, especially since the recent transition of presidential administrations, may be seeing more growth in the future. Private corporations have much to gain from the continued expansion of prisoners, which some might refer to as the prisoner "market" (Schneider 1999). This attitude towards prisons is deeply disturbing, and makes it worthwhile to perform further research on the effects of this industry on arrest rates.

## VII. Tables

*Table I: Variable Definitions*

| Variable Name | Variable Description |
|---|---|
| Adult Male Arrests | Total number arrests of adult males in each county |
| County | County in which facility resides |
| State | State (abbreviated) in which each facility resides |
| **Prison Characteristics** | |
| Private Prison | =1 if facility is private, 0 otherwise |
| Inmate Fee | =1 if inmates pay a per diem fee, 0 otherwise |
| Number of Inmates | Total inmate population within facility |
| Male Facility | =1 if facility houses only males, 0 otherwise |
| Number of non-citizen inmates | Number of noncitizens present in facility |
| Facility Work Program | =1 if facility has a work program, 0 otherwise |
| **County Characteristics** | |
| Percentage of Adults | Percentage of adults aged 15 to 64 |
| Education | Percentage in each county who are high school graduates or higher |
| Foreign Population | Percentage of county population |
| Homeowners | Percentage of housing units occupied by owner |
| Per Capita Income | Personal income per capita (dollar) |
| Medicare Recipients | Persons enrolled in Medicare (Rate per 100,000) |
| Persons in Poverty | Percentage of persons in poverty |
| Population | County population |
| Males to Females | Number of males per 100 females |
| Social Security Recipients | Social Security program beneficiaries (Rate per 100,000) |
| Supplementary Income Recipients | Supplemental Income program recipients (Rate per 100,000) |
| Unemployment Rate | Unemployment rate |

*Table II: Summary Statistics*

| Variable | Mean and Standard Deviation | | |
|---|---|---|---|
| | Total | Private | Public |
| Adult Male Arrests | 10452.85 (30814.46) | 17995.05 (55120.59) | 9715.60 (27217.04) |
| **Prison Characteristics** | | | |
| Inmate Fee | 0.114 (.320) | .712 (.455) | .056 (.229) |
| Number of Inmates | 1087.92 (966.63) | 854.32 (845.61) | 1112.24 (975.50) |
| Male Facility | 0.849 (.359) | .649 (.479) | .869 (.337) |
| Number of non-citizen inmates | 90.23 (262.52) | 271.69 (690.20) | 71.34 (152.01) |
| Work Program | 0.986 (.118) | .939 (.241) | .991 (.095) |
| **County Characteristics** | | | |
| Percentage of Adults | 67.35 (2.89) | 66.74 (3.33) | 67.41 (2.84) |
| Education | 77.24 (8.56) | 75.97 (10.35) | 77.37 (8.35) |
| Foreign Population | 4.63 (5.65) | 5.78 (7.32) | 4.51 (5.44) |
| Homeowners | 71.95 (7.81) | 69.98 (8.76) | 72.15 (7.68) |
| Per Capita Income | 28143.05 (7457.56) | 27923.12 (8170.52) | 28165.99 (7382.93) |
| Medicare Recipients | 15782.77 (4338.14) | 15320.72 (3941.38) | 15830.87 (4376.23) |
| Persons in Poverty | 14.25 (5.10) | 15.89 (5.82) | 14.08 (5.00) |
| Population | 240514.6 (755645.5) | 389577.8 (1361399) | 223322.4 (658169.3) |
| Males to Females | 103.11 (13.55) | 103.47 (16.95) | 103.07 (13.16) |
| Social Security Recipients | 18526.03 (4622.16) | 17773.5 (4446.20) | 18604.37 (4635.04) |
| Supplementary Income Recipients | 2676.32 (1696.09) | 2936.68 (2009.66) | 2649.68 (1659.46) |
| Unemployment Rate | 5.21 (1.71) | 5.06 (1.78) | 5.23 (1.70) |
| *N=1207* | *Notes: Standard Deviations presented in parenthesis* | | |

*Table III: Regression of Private Prison Presence, Prison Variables, and County Controls on Adult Male Arrests*

| Variable | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|
| Private Prison | 8239.44*** (3099.89) | 4067.22 (3936.89) | 746.42 (1342.76) | 153.011 (1677.61) |
| **Prison Characteristics** | | | | |
| Inmate Fee | - | 4062.95 (3450.84) | 2533.02** (1139.53) | -1353.76 (1464.13) |
| Total Inmates | - | 1.59 (1.07) | .4041 (.3596) | .0563 (.4616) |
| Number of Noncitizens | - | 10.47** (4.77) | -.7304 (1.654) | 2.60 (2.04) |
| Work Program | - | -21238.11*** (7537.00) | -705.59 (2401.03) | 587.09 (3181.45) |
| **County Characteristics** | | | | |
| Percentage of Adults | - | - | - | -525.19** (205.66) |
| Education | - | - | - | -155.30* (86.54) |
| Foreign Population | - | - | - | -566.31*** (118.37) |
| Homeowners | - | - | - | -250.81*** (71.36) |
| Per Capita Income | - | - | - | -.102 (.0802) |
| Medicare Recipients | - | - | - | -.5742** (.225) |
| Persons in Poverty | - | - | - | -130.15 (178.01) |
| Population | - | - | - | .0383*** (.0006) |
| Male to Female Ratio | - | - | - | -37.24 (40.39) |
| Social Security Recipients | - | - | - | .1514 (.2480) |
| Supplementary Income Recipients | - | - | - | .0227 (.4658) |
| Unemployment Rate | - | - | - | -182.78 (270.59) |
| Constant | 9715.60*** (927.18) | 27981.93*** (7588.1) | 12658.85*** (3757.39) | 84260.12*** (18818.27) |
| County Fixed Effects | No | No | Yes | No |
| Observations | 1207 | 1207 | 1207 | 1207 |
| Adjusted R-Squared | 0.005 | 0.021 | 0.958 | 0.8297 |

Standard Errors in parentheses.
***$p<0.01$, **$p<0.05$, *$p<0.1$

**VIII. Figures**
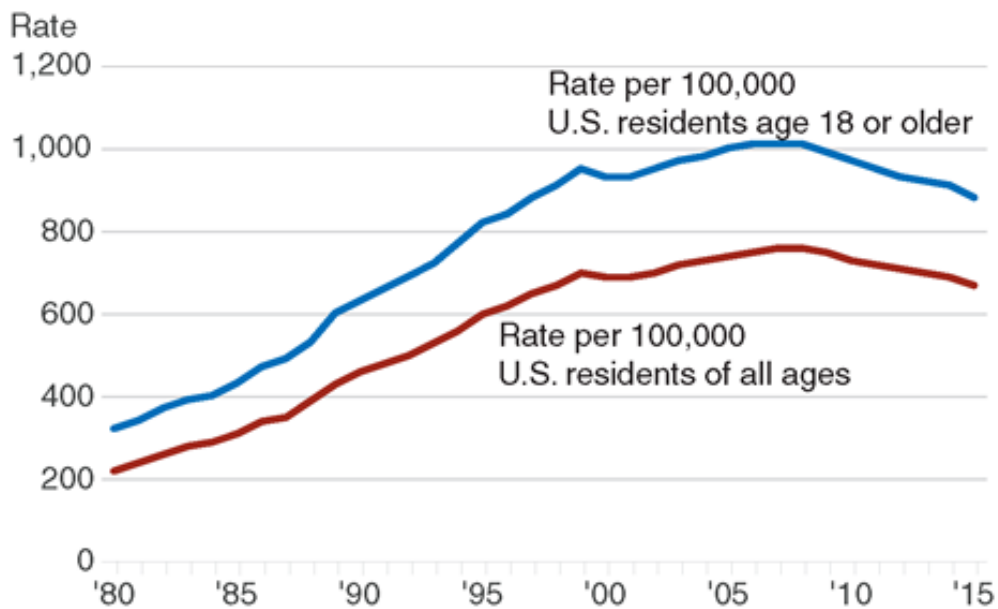
*Figure 1. United States incarceration rate from 1980-2005*

## Incarceration rate, 1980–2015



Source: Bureau of Justice Statistics, Annual Survey of Jails, Census of Jail Inmates, and National Prisoner Statistics, 1980–2015; and U.S. Census Bureau, postcensal estimated resident population for January 1 of the following year, 1981–2016.

*Figure 2. CCA (CXW) and GEO stock prices 2007-2017*
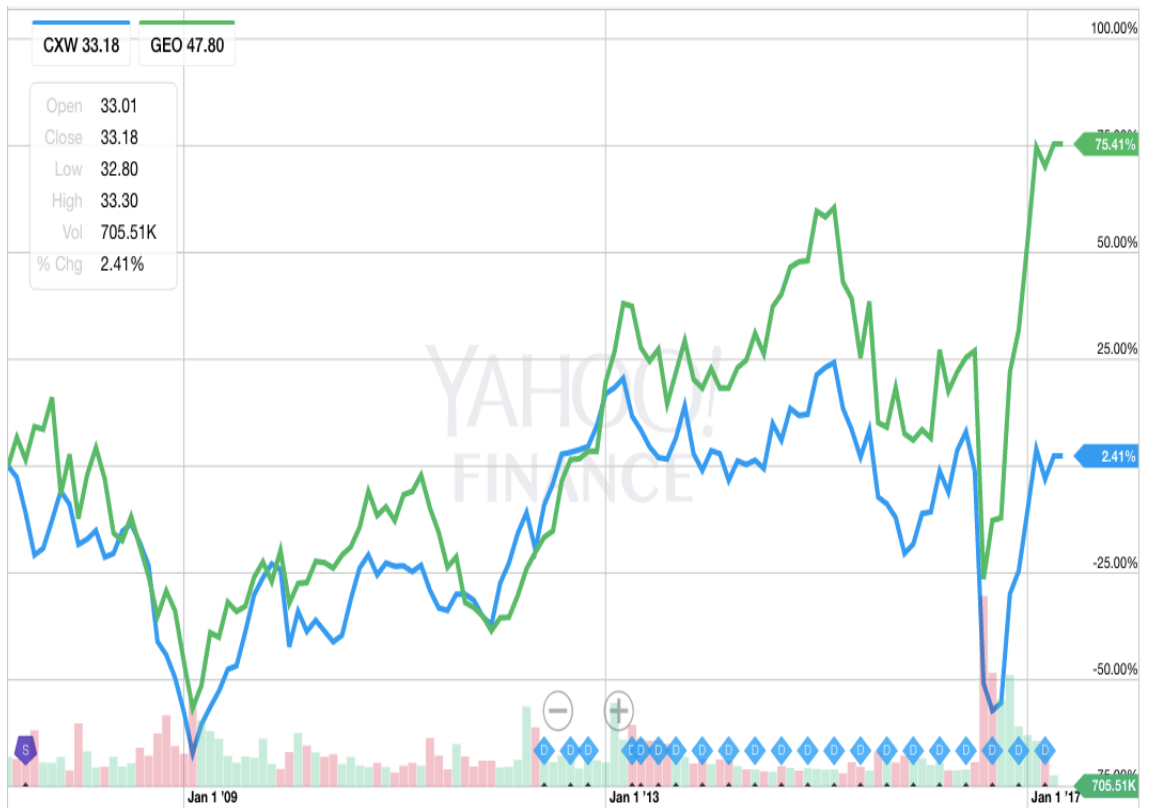
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