

5-2022

Mississippi Crime and Corrections: The Effects of House Bill 585 on Crime and Incarceration Rates

Madisyn Flammia
The University of Southern Mississippi

Follow this and additional works at: https://aquila.usm.edu/honors_theses



Part of the [Other Economics Commons](#)

Recommended Citation

Flammia, Madisyn, "Mississippi Crime and Corrections: The Effects of House Bill 585 on Crime and Incarceration Rates" (2022). *Honors Theses*. 842.
https://aquila.usm.edu/honors_theses/842

This Honors College Thesis is brought to you for free and open access by the Honors College at The Aquila Digital Community. It has been accepted for inclusion in Honors Theses by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu, Jennie.Vance@usm.edu.

Mississippi Crime and Corrections: The Effects of House Bill 585 on Crime and
Incarceration Rates

by

Madisyn Flammia

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of Honors Requirements

May 2022

Approved by:

Mehdi Barati, Ph.D., Thesis Advisor,
School of Social Science and Global Studies

Bridget Hayden, Ph.D., Director,
School of Social Science and Global Studies

Sabine Heinhorst, Ph.D., Dean
Honors College

ABSTRACT

The state of Mississippi's historically high incarceration rate peaked in the year 2013, when it was the second highest nationwide. To combat this problem, House Bill 585 was passed into law in 2014. The law consisted of multiple reforms, which were part of an effort to toughen sentencing for violent offenders and reduce severity of punishment for non-violent criminals, with the aim of reducing incarceration and refocusing prison space for violent crimes. I employed difference in differences and synthetic control methodologies to examine the effects of House Bill 585 on crime and imprisonment rates. My results revealed that House Bill 585 caused an initial sharp decline in imprisonment rate, but the effect wore off as time progressed. The impact of House Bill 585 on violent crime was insignificant at all levels, and the law led to an increase in property crime rate, which also became less significant over time.

Keywords: Mississippi, crime, incarceration , House Bill 585

DEDICATION

This thesis is dedicated to my fellow teammates on the Southern Miss women's soccer team for being a constant source of support and love in my life. Also, to my parents, thank you for calming me down any time I was stressed; I love you guys.

ACKNOWLEDGMENTS

I would like to extend my most sincere thank you to the Honors College at The University of Southern Mississippi for allowing me the opportunity to engage in undergraduate research and acquire these useful skills while providing the necessary funding for my thesis.

I would also like to express my deepest appreciation for my advisor, Dr. Mehdi Barati, for being so helpful, knowledgeable, and understanding throughout this process. He has taught me more about econometrics than I could have imagined, and without him, this thesis would not have been possible.

TABLE OF CONTENTS

| | |
|------------------------------|------|
| LIST OF TABLES | viii |
| LIST OF ILLUSTRATIONS | ix |
| LIST OF ABBREVIATIONS | x |
| INTRODUCTION | 1 |
| POLICY BACKGROUND | 4 |
| LITERATURE REVIEW | 6 |
| METHODOLOGY AND DATA | 10 |
| RESULTS AND DISCUSSION | 13 |
| CONCLUSION | 17 |
| REFERENCES | 19 |
| APPENDIX A | 23 |

LIST OF TABLES

| | |
|--|----|
| Table 1: Summary Statistics | 23 |
| Table 2: DiD Regression with All States | 24 |
| Table 2 (Continued) | 25 |
| Table 3: DiD Regressions with Southern States Only | 25 |
| Table 3 (Continued) | 26 |

LIST OF ILLUSTRATIONS

| | |
|---|----|
| Figure 1: SCM Graph for Imprisonment Rate per 100,000 People | 14 |
| Figure 2: SCM Graph for Violent Crime Rate per 100,000 People..... | 15 |
| Figure 3: SCM Graph for Property Crime Rate per 100,000 People..... | 16 |

LIST OF ABBREVIATIONS

| | |
|----------|---------------------------|
| DiD | Difference in Differences |
| H.B. 585 | House Bill 585 |
| MS | Mississippi |
| SCM | Synthetic Control Method |
| US | United States |

INTRODUCTION

In the year 2013, the state of Mississippi had the second-highest incarceration rate in the nation, with the prison population having grown by approximately 17% in the preceding decade (Cate, 2021). These startling statistics prompted the government of Mississippi to take a step back and re-examine the correctional system and criminal laws that were currently in place. A Corrections and Criminal Justice Task Force was created with the goal of identifying areas of needed reform in Mississippi's prison systems, in hopes of saving taxpayers a significant amount of money in the years to come (Pew Charitable Trusts, 2014). House Bill 585 was thus created as a result and enacted into law in 2014, with the aim of reducing incarceration. Among the reforms created by H.B. 585 was the tiering of drug offenses, the increasing of the felony theft threshold from \$500 to \$1000, and the establishment of a true minimum of time served for those convicted of violent and nonviolent crimes before becoming eligible for parole or early release (Pew Charitable Trusts, 2014).

This paper will address the portion of House Bill 585 that requires nonviolent offenders to serve a minimum of 25% of their sentences and violent offenders to serve a minimum of 50% before being eligible for early release and will examine how these minimums affect crime and incarceration rates. The existing literature related to House Bill 585 generally supports the notion that the law was effective only in the short-run and has had no significant long-term impacts. Previous findings have suggested that minimum time served laws generally lead to higher imprisonment rates (which H.B. 585 is attempting to prevent), but this may not be the case in Mississippi, where the time served minimum of H.B. 585 decreases the required length of sentence serving for non-

violent criminals (Latino, 2020). This portion of the bill is referred to in Cate (2021) as a “split policy verdict” law, because the implementation of these minimums leads to tougher sentences for violent criminals and reduced sentences for non-violent criminals. Similarly to Barati (2018) and Abadie & Gardeazabal (2003), I will be utilizing the synthetic control method, along with the difference-in-differences method, to discover how time-served minimums impact prison population growth and crime. Theoretically, if there was previously no true minimum in place, requiring that violent criminal offenders remain in jail for a specified amount of time, rather than being eligible for extremely early release, etc., should lead to greater prison populations but decreased crime rates in regards to violent crimes/criminals, as incapacitation leads to crime reduction by rendering criminals incapable of reoffending or harming the community outside of the prison (Piquero & Blumstein, 2007). On the other hand, instituting a 25% minimum for non-violent criminals, when the previous minimum was a year, should lead to greater non-violent crime rates but lower incarceration rates for non-violent criminals. Because the majority of prison space in Mississippi was occupied primarily by non-violent criminals prior to 2014 (Cate, 2021), House Bill 585 should lead to a decline in the total prison population. Additionally, implementation of minimum time served laws and increasing of crime severity can reduce recidivism (Johnson, 2019).

By studying House Bill 585, this paper will specifically highlight the case of Mississippi, a state in which there is sparse existing literature related to the prison system, as Mississippi consistently lacks on crime reform in comparison to other states nationwide (Latino, 2020). Cate (2021) negatively states that H.B. 585 has continued mass incarceration at cheaper rates, but this may not necessarily be a bad thing if violent crime

is reduced at a greater rate, therefore reducing social costs and taxpayer expenses.

Additionally, it should be noted that it will be difficult to distinguish between the effects of incapacitation and deterrence when examining crime reduction via minimum time served laws. Implementing a true time-served minimum for violent criminals when the previous minimum was not enforced should lead to decreased violent crime rates and a refocusing of prison space on violent offenders. However, Cate (2021) points to the fact that even if House Bill 585 was initially able to accomplish this refocusing of prison space on violent criminals, Mississippi is still continuing to fall behind in crime reform and argues that House Bill 585 does not/will not have a significant effect on incarceration or crime rates over a long period of time.

POLICY BACKGROUND

As a result of the alarming crime rates in the state of Mississippi, a Corrections and Criminal Justice Task Force consisting of law enforcement officers, Mississippi legislators, attorneys, and more was assembled to propose reforms and attempt to discern the causes of the ever-increasing prison population (Pew Charitable Trusts, 2014). The Task Force produced three main findings: nonviolent offenders accounted for a significant portion of the incarcerated, minimal prison alternatives were available for courts, and sentence lengths had been heightened in recent years. The Task Force then provided 19 policy recommendations aimed at placing an emphasis on incarceration of career and violent criminals, rather than first-time nonviolent offenders as well as decreasing recidivism rates, and providing better incarceration alternatives (Mississippi Corrections and Criminal Justice Task Force, 2013).

Thus, House Bill 585 was proposed and enacted into law in March of 2014 after a 105-13 vote in the Mississippi House of Representatives and a unanimous vote in the Senate (Pew Charitable Trusts, 2014). House Bill 585 was first and foremost a way to produce budget cuts in Mississippi's criminal justice system by reducing the sheer number of people incarcerated, but Cate (2021) argues that it rather enables "mass incarceration on the cheap." With inmates tending to cost American taxpayers between approximately \$30,000 and \$60,000 per year per person (Henrichsen & Delaney, 2012), House Bill 585 promised to save taxpayers as much as \$266 million dollars over the course of the seceding decade. Among the changes to the criminal justice system enacted by H.B. 585 included the aforementioned true time served minimums, as an attempt to

reserve prison space for violent and career criminals, and more (Pew Charitable Trusts, 2014).

Prior to 2014, Mississippi's laws regarding minimum time served requirements for violent and non-violent offenders varied distinctly from the 25%-50% requirements instituted as a result of House Bill 585. Before House Bill 585, violent criminals did not have a true time served minimum and were eligible for early supervised release, intensive supervised release, and unadjudicated probation, barring certain extenuating circumstances or crimes (Coxwell Law, 2014). Additionally, non-violent criminals were required to serve a minimum of one year before becoming eligible for parole, so an individual sentenced for a non-violent crime to a year in prison would have had to serve the entirety of his sentence (Coxwell Law, 2014). After House Bill 585, the 50% minimum was put into place for violent offenses, and violent criminals were ineligible for intensive supervised release and unadjudicated probation. The true time served minimum was reduced from one year for non-violent criminals to 25%, once again, in an attempt to "toughen up" on violent crime specifically. However, one of the most widely acknowledged drawbacks and flaws of House Bill 585 is that it does not apply to criminals convicted prior to 2014, leading to the possibility of individuals convicted of identical crimes in different years to differ greatly in terms of parole/release eligibility, spurring inevitable questions of fairness and equity.

LITERATURE REVIEW

In the existing literature regarding the economics of crime and the efficiency of incarceration rates and lengths, Becker (1968) provides a sufficient foundation for the examination of tradeoffs related to crime. He believed that crime could be reduced by increasing the costs of committing crimes or decreasing the potential benefits of crime. The two ways to increase costs, which are often considered more feasible than reducing benefits, are increasing the certainty/probability of crime apprehension or increasing the severity of punishment for criminal activity. There is significant disagreement amongst those in the world of criminal justice and economics in terms of the varying importance of certainty vs. severity. Antunes & Hunt (1973) and Mathur (1978) posit that certainty is much more successful in preventing crime than severity. Nagin (2013) and Loughran (2011) also support the notion that certainty has a significant effect on crime reduction. Killias (2009) finds it to be a nonlinear deterrent of crime, meaning that the probability of an offender being incarcerated for a crime does not proportionally affect crime rate. Opponents of this view argue that severity plays just as much, if not more, of a significant role in reducing crime as certainty (Friesen, 2012; Lee & McCrary, 2009; Landerso, 2015).

Becker (1968) states that certainty and severity of punishments could either have an incapacitation effect or a deterrent effect, where the former prevents criminals from committing additional crimes by being physically incapable due to incarceration and the latter discourages individuals from engaging in criminal activity to avoid the repercussions and societal sanctions of these actions. The deterrent effect aims to “deter” individuals from committing offenses by setting penalties that are proportional to the

magnitude of the crime (Johnson, 2019). The economic framework upon which this notion is based are the theories of utility maximization and cost-benefit analysis, assuming that an individual will be willing to commit a crime if the benefits and/or utility received from this action outweigh the costs (Bushway & Reuter, 2008). Decker & Kohfield (1990) emphasizes the importance of both certainty and severity as components of the deterrent effect. Gibbs (1968) reports a significant, inverse relationship between sentence length and crime, thus offering support for the deterrent effect. Also, in support of this effect are Tittle & Rowe (1974) and Abrams (2012), which examines the effects of add-on gun laws on gun violence and finds that these laws deter gun violence by approximately 5%. May (2014) focuses on habitual crime and the three-strike rule in California, which is currently implemented in Mississippi as well, and finds that the law has a deterrent effect for criminals with two previous felonies but does not have an overall deterrent effect on the general population. Another means through which incarceration can prevent crime is the incapacitation effect, which occurs by physically separating criminals from society, thus rendering them incapable of committing further crimes (Greenberg, 1975; Bhati, 2007; Levitt, 1996; Barbarino & Mastrobuoni, 2014). Piquero & Blumstein (2007) finds that the incapacitation effect may reduce crime in a greater magnitude than the deterrent effect.

Despite plentiful evidence in support of increasing severity and certainty of punishments in order to reduce crime, longer incarceration may not actually be socially optimal or economically efficient. Donohue III (2007) discusses the possibility of optimal levels of incarceration but determines that further research is needed regarding the extent of the social costs of incarceration. Ganong (2012) argues that the costs of incarceration

outweigh the overall benefits of incapacitation, and Barati (2018) finds that milder punishments for lower-level crimes may be more economically efficient than punishments of greater severity. Furthermore, greater severity is often associated with greater recidivism and increased prison populations, along with increased demand for prison space (Drago, 2016; Cloninger, 1996). Due to the costs of incarceration often extending to social and implicit costs and surpassing state and local budgets, severity of punishment should be proportional to the costs of incarceration in order to maintain fiscal responsibility (Ross & Katzenelson, 1999; Henrichsen & Delaney, 2012).

Chen & Shapiro (2015) examines the effects of poor prison conditions and increased sentence lengths on crime and finds a significant association with increased recidivism. Poor prison conditions are often the result of budget cuts and attempts by state and local governments to save money, which often coincide with attempts to reduce the prison population. In 2019, the United States' incarceration rate dropped to its lowest point since 1995, following many years of increasing imprisonment levels (Gramlich, 2021). However, in 2020, the US still maintained the highest incarceration rate in comparison with all other countries worldwide, with an average of 665 individuals incarcerated per 100,000 people (Simpson, 2020). While some theories state that increasing the prison population decreases crime by taking criminals off the streets, this has not necessarily been the case for the United States. In recent years, states across the US have begun attempting to reduce their prison populations in hopes of saving money and cutting prison budgets (Siebrase, 2022). However, the results of Chen & Shapiro (2015) suggest that budget cuts leading to worsening prison conditions may actually be associated with increases in the prison population, instead. Cate (2021) discusses House

Bill 585 that was passed in Mississippi in 2014 and posits that this bill has not decreased incarceration by a significant amount. Furthermore, the fiscally responsible approach assumed by the Mississippi government in this case is leading to declining prison conditions, the transitioning to different types of criminal activity, and an increasing need for investment in public goods/works.

METHODOLOGY AND DATA

Due to the reforms of House Bill 585 applying only to the state of Mississippi, rather than all 50 states, I deemed the difference-in-differences method to be appropriate for use in this paper. The difference-in-differences method is typically used when specific groups are treated, but others are not (Schwerdt & Woessmann, 2020). Difference-in-differences is also commonly utilized when the issue at hand is of a political nature (Angrist & Krueger, 1999). The model estimates changes over time, in which no groups are treated in the first period, and one or more groups are treated in the next period and compared to a control group. Therefore, the effects of the treatment variable should then be observable. A sample regression equation is as follows:

$$\log(\text{Crime}_i) = \beta_0 + \beta_1 \text{Treatment}_i + \delta X_i + \varepsilon_i.$$

I chose to use a logarithmic model in order to better interpret the effects of dependent variables on crime rate and express these effects as a percentage. In this equation, *Crime* represents the outcome variables *violent crime*, *property crime*, and *imprisonment rate*. *Treatment* is a dummy variable that is equal to 1 if the observation is affected by House Bill 585 (alternatively expressed as observations for the state of Mississippi from 2014-2019). The variable *X* represents a number of demographic factors that could influence crime, such as population, gender, age, race, etc. I have also included state and year fixed effect variables in my regressions.

However, the difference-in-differences method is not exactly a perfect match for the issue in question because Mississippi is the only treated group out of all 50 states,

meaning there are 49 different control groups. Some of these states, such as New York, are not comparable to Mississippi due to extreme crime rate and demographic differences. To combat this problem of incomparability of crime in Mississippi versus more populous states, I have continued the difference-in-differences model with only states that are more demographically similar. I ran separate difference-in-differences regressions with the Southern states¹ as the control states. I also utilized another method, the synthetic control method (SCM), which has previously been deemed more suitable for determining the effects of a law such as House Bill 585 (Barati, 2018). This model was first conducted in Abadie & Gardeazabal (2003), and Abadie (2021) discusses its uses and applications. SCM is often employed with panel data sets and is used to examine the effects of an intervention, in this case, House Bill 585. A counterfactual synthetic control is then created using an optimization method and pre-treatment predictors to assign weights to appropriate control groups, in this case, states. By comparing the treated group to the synthetic control group, we can more clearly and accurately depict the effects of the intervention/treatment (Abadie, 2021).

The data I utilized in this paper is panel data obtained via FBI public databases and includes figures related to imprisonment rates, violent crime rates, and property crime rates. Demographic data was retrieved from the US Census Bureau. The time period accounted for ranges from 2005 to 2019, which is comprised of nine years prior to the passing of House Bill 585 and six years after. Table 1 in Appendix A displays mean

¹ Georgia, Alabama, South Carolina, Louisiana, Arkansas, Tennessee, Kentucky, Virginia West Virginia, Maryland, and Oklahoma

and standard deviation values for the variables included in the difference-in-differences regressions.

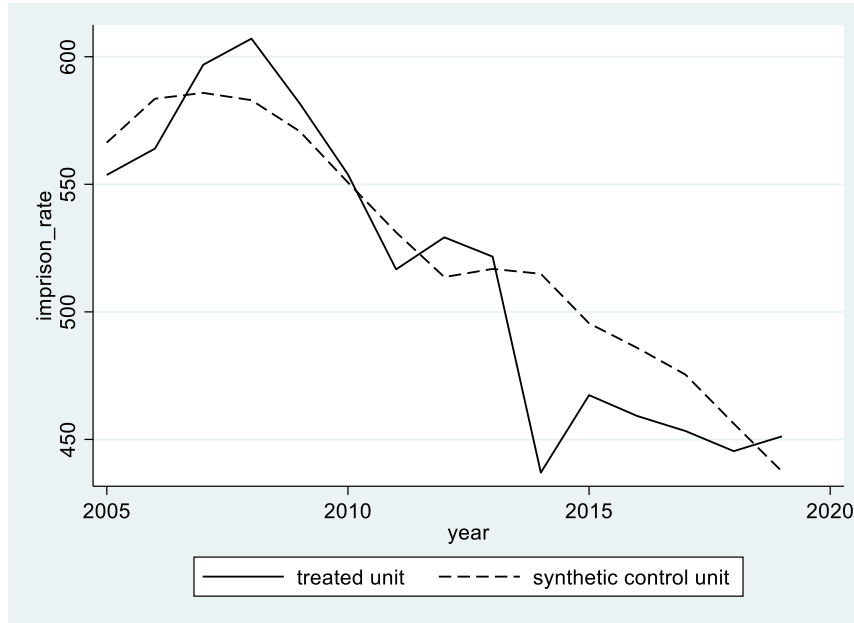
RESULTS AND DISCUSSION

In regards to the difference-in-differences regressions with all 50 U.S. states, the *treatment* variable representing House Bill 585 led to a 10.98% decrease in imprisonment rate, on average. This value was statistically significant at all levels. However, much of this effect could be encompassed by the sharp decline in 2014, the year the law was passed. The passing of H.B. 585 led to a 2.36% decrease in the violent crime rate, on average, but this value was not statistically significant. Property crime saw an average increase of 7.74% as a result of House Bill 585, which was statistically significant at all levels, as well. Table 2 in Appendix A presents these regression coefficients for the treatment variable and the other demographic variables. For the difference-in-differences regressions with Southern states only, the effects of House Bill 585 on the three outcome variables were similar to the regressions with all states, but with different magnitudes. H.B. 585 led to a decrease in imprisonment rate by 14.6% and violent crime rate by 8.2%, on average, with the former being statistically significant at all levels and the latter once again being statistically insignificant. The effect of H.B. 585 on property crime rate was a 5.66% increase that was statistically significant at a 5% level. These regression results, depicted in Table 3 of Appendix A, support our initial hypothesis that imprisonment rate will show an initial decline, and property crime rate will increase in Mississippi in the years after the passing of H.B. 585.

The pool for the synthetic control group consisted of every U.S. state except Mississippi. Predictor variables and lagged outcome variables produced a synthetic control with varying weights for appropriate states, with regards to each specific outcome variable. Mississippi is referred to in the graphs as the *treated unit*. Figure 1 depicts the

behavior of Mississippi and the synthetic control group pre-treatment and post-treatment for the outcome variable *Imprisonment Rate*, measured per 100,000 people.

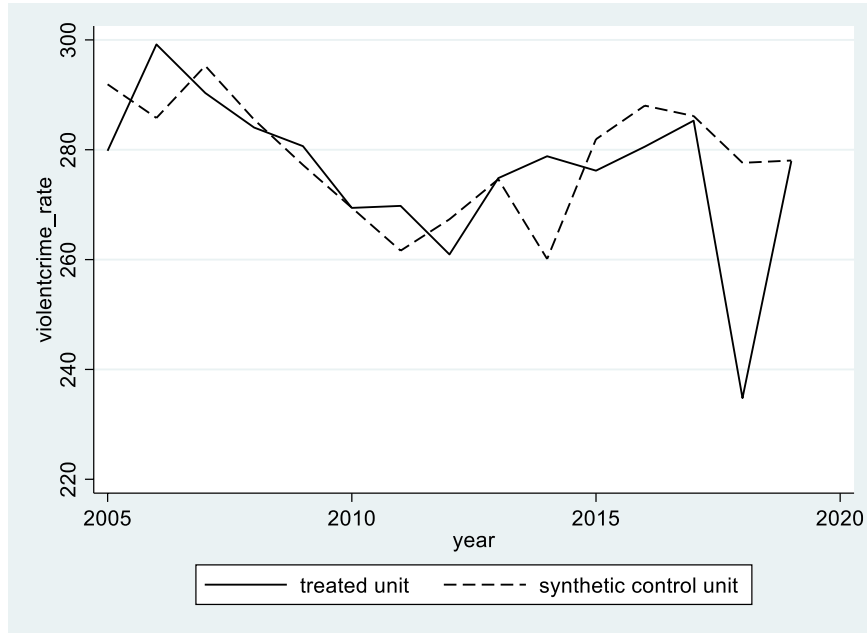
Figure 1: SCM Graph for Imprisonment Rate per 100,000 People



As you can see, the synthetic control unit and treated unit (Mississippi) follow similar paths until the year 2014, when House Bill 585 was passed. We see a sharp drop from 2013 to 2014 in imprisonment rate in Mississippi, likely caused by the large increase in non-violent criminals eligible for parole as a result of the 25% true time served minimum. However, we see much less drastic results in the following years, with Mississippi's imprisonment rate eventually surpassing the treatment group in 2019, indicating that the effects of House Bill 585 wore off over time.

Figure 2 displays the trends for Mississippi and the synthetic control for the variable *Violent Crime Rate*, which is also measured per 100,000 people.

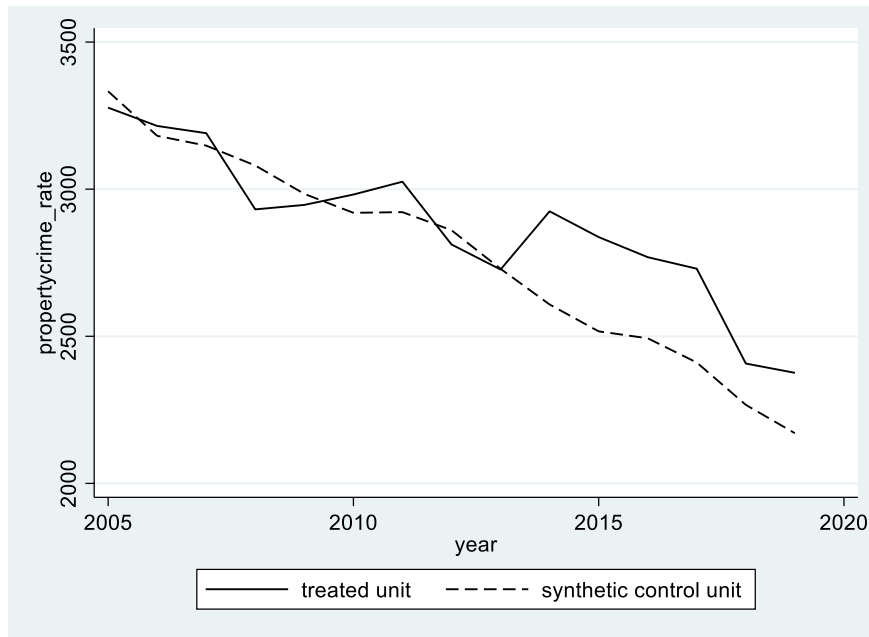
Figure 2: SCM Graph for Violent Crime Rate per 100,000 People



The effects of House Bill 585 on violent crime look to be insignificant, barring the year 2018, in which Mississippi experienced an abnormally low level of violent crime. The significant decline in 2018 appears to be unrelated to H.B. 585, and the most probable explanation for this anomaly is an error in data reported by Mississippi's police department, although this cannot be proven. Robertson (2019) cites the passing of a federal law that could have affected violent crime in Mississippi in 2018, but this would not explain the lack of such a significant decline for other states. The negative effect of House Bill 585 on violent crime rate is likely due in part to the decrease in 2018 and may have been even more insignificant in the absence of this data anomaly.

The SCM results for the final outcome variable, *property crime rate* per 100,000 people, are shown in Figure 3 on the following page.

Figure 3: SCM Graph for Property Crime Rate per 100,000 People



Prior to 2014, Mississippi and the synthetic control unit experienced very similar trends in property crime rate. Following the passing of H.B. 585, Mississippi's trend line jumps above the synthetic control group, and the treatment effect can be estimated by the difference between the two curves. As expected and supported by the DiD regressions, House Bill 585 led to an increase in property crime for the state of Mississippi in comparison to the control states.

CONCLUSION

House Bill 585 was created as a result of the recommended policy reforms of the 2014 Mississippi Corrections and Criminal Justice Task Force. It aimed to save Mississippi taxpayers as much as \$266 million in the decade following the passage of the bill by reducing the state's staggeringly high incarceration rate. Among the critical reforms included in the bill was the implementation of a true time served minimum of 25% of the sentence for non-violent crimes and 50% of the sentence for violent crimes. This minimum was part of an effort to refocus Mississippi's prison space on violent criminals by toughening up on violent crime and reducing punishments for non-violent crimes. The law was passed in March 2014 and was applicable to any criminal convicted of a crime in 2014 or later.

Although H.B. 585 attempted to take a step in the right direction, Cate (2021) argues that this step was too small, as Mississippi continues to fall behind on crime reform in comparison to the rest of the nation. Cate (2021) also stated that the law would not be effective in the long run in terms of reducing incarceration in the state. From the difference in differences regressions, we saw that imprisonment rate in Mississippi sharply decreased in the year the law was passed, but this effect wore off, and imprisonment eventually began to increase once more. The impact of House Bill 585 on violent crime was insignificant when comparing Mississippi both with the rest of the U.S. and with a selected few Southern states. Because H.B. 585 increased severity of crime for violent criminals, the desired deterrent effect would be a decrease in violent crimes, but in line with Cate (2021), this effect did not occur. For property crime rate, an increase

occurred as a result of the passing of House Bill 585, and the statistical significance of this increase varied when including 49 control states versus only Southern control states.

The synthetic control graphs told a story very similar to that of the DiD regressions. The significant decrease in imprisonment rate was largely attributed to the first year in which H.B. 585 was passed. The decrease in violent crime, albeit insignificant, was influenced by the abnormal and unexplained large drop in Mississippi violent crime in the year 2018. Property crime increased initially in Mississippi in the year the law was passed and continued to trend above the synthetic control group for the next five years. In conclusion, House Bill 585 was impactful only in the short-term in initially decreasing incarceration. However, this decline did not persist for the following years, and violent crime did not significantly decrease in the manner which the Corrections and Criminal Justice Task Force anticipated. These results support the assertions made in Cate (2021) that House Bill 585 was not effective in the long run, and Mississippi must continue to make further reforms to improve its incarceration and crime rates.

REFERENCES

- Abadie, A. (2021). Using Synthetic Controls: Feasibility, Data Requirements, and Methodological Aspects. *Journal of Economic Literature*: 59(2), 391-425.
- Abadie, A., & Gardeazabal, J. (2003). The Economic Costs of Conflict: A Case Study of the Basque Country. *American Economic Review*: 93(1), 113-132.
- Abrams, D. S. (2012). Estimating the Deterrent Effect of Incarceration Using Sentencing Enhancements. *American Economic Journal: Applied Economics*: 4(4), 32-56.
- Angrist, J. D., & Krueger, A. B. (1999). Empirical Strategies in Labor Economics. In O. C. Ashenfelter, & D. Card, *Handbook of Labor Economics* (pp. 1277-1366). Elsevier.
- Antunes, G., & Hunt, A. L. (1973). The Impact of Certainty and Severity of Punishment on Levels of Crime in American States: An Extended Analysis. *The Journal of Criminal Law and Criminology*: 64(4), 486-493.
- Barati, M. (2018). Punishment Severity and Crime: The Case of Arkansas. *Review of Law and Economics*: 15(1), 1-23.
- Barbarino, A., & Mastrobuoni, G. (2014). The Incapacitation Effect of Incarceration: Evidence from Several Italian Collective Pardons. *American Economic Journal: Economic Policy*: 6(1), 1-37.
- Becker, G. S. (1974). Crime and Punishment: An Economic Approach. In G. S. Becker, & W. M. Landes, *Essays in the Economics of Crime and Punishment* (pp. 1-54). National Bureau of Economic Research.
- Bhati, A. S. (2007). Estimating the Number of Crimes Averted by Incapacitation: An Information Theoretic Approach. *Journal of Quantitative Criminology*: 23, 355-375.
- Blumstein, A., & Beck, A. J. (1999). Population Growth in U. S. Prisons, 1980-1996. *Crime and Justice*: 26, 17-61.
- Bushway, S., & Reuter, P. (2008). Economists' Contribution to the Study of Crime and the Criminal Justice System. *Crime and Justice*: 37(1), 389-451.
- Cate, S. D. (2021). The Mississippi Model: Dangers of Prison Reform in the Context of Fiscal Austerity. *Punishment & Society*: 0(0), 1-27.
- Cloninger, D. O. (1996). Sentence Length, Severity, and the Demand for Prison Space. *Social Science Quarterly*: 77(2), 265-268.
- Coxwell Law. (2014). *Practitioner Guide to HB 585*. Jackson.

- Decker, S., & Kohfeld, C. (1990). Certainty, Severity, and the Probability of Crime: A Logistic Analysis. *Policy Studies Journal; Urbana III: 19(1)*, 2-21.
- Donohue, J. J. (2007). Economic Models of Crime and Punishment. *Social Research: 74(2)*, 379-412.
- Drago, F., Galbiati, R., & Vertova, P. (2011). Prison Conditions and Recidivism. *American Law and Economics Review: 13(1)*, 103-130.
- Fisher, M. L. (2014). *Frequently asked questions about House Bill 585*. State of Mississippi Department of Corrections.
- Fox, S. B. (1998). *Policies on Good Time and the Effects on Sentencing Practices: History and Survey Results*. Correctional Standards and Oversight Committee of Montana.
- Friesen, L. (2012). Certainty of Punishment versus Severity of Punishment: An Experimental Investigation. *Southern Economic Journal: 79(2)*, 399-421.
- Gonang, P. N. (2012). Criminal Rehabilitation, Incapacitation, and Aging. *American Law and Economics Review: 14(2)*, 391-424.
- Gramlich, J. (2021, August 16). *America's incarceration rate falls to lowest level since 1995*. Retrieved from Pew Research Center: <https://www.pewresearch.org/fact-tank/2021/08/16/americas-incarceration-rate-lowest-since-1995/>
- Greenberg, D. F. (1975). The Incapacitative Effect of Imprisonment: Some Estimates. *Law & Society Review: 9(4)*, 541-580.
- Henrichson, C., & Delaney, R. (2012). The Price of Prisons: What Incarceration Costs Taxpayers. *Federal Sentencing Reporter: 25(1)*, 68-80.
- Johnson, B. (2019). *Do Criminal Laws Deter Crime? Deterrence Theory in Criminal Justice Policy: A Primer*. Minnesota House Research Department.
- Landerso, R. (2015). Does Incarceration Length Affect Labor Market Outcomes? *The Journal of Law & Economics: 58(1)*, 205-234.
- Latino, R. (2020, July 19). *Scare tactics led to veto: Mississippi prison reform still needed*. Retrieved from Clarion Ledger: <https://www.clarionledger.com/story/opinion/2020/07/19/prison-reform-mississippi-state-must-take-action-commentary/5442578002/>
- Mathur, V. K. (1978). Economics of Crime: An Investigation of the Deterrent Hypothesis for Urban Areas. *The Review of Economics and Statistics: 60(3)*, 459-466.
- Mississippi Department of Corrections. (2013). *Sentence Computation Reference Handbook*.

- Nagin, D. S. (2013). Deterrence in the Twenty-First Century. *Crime and Justice: 42(1)*, 199-263.
- Peer Mississippi. (2019). *A Review of Mississippi's Criminal Justice Reform Efforts*. Mississippi Legislature.
- Petersilia, J., & Greenwood, P. W. (1978). Mandatory Prison Sentences: Their Projected Effects on Crime and Prison Populations. *Journal of Criminal Law and Criminology: 69(4)*, 604-615.
- Piquero, A. R., & Blumstein, A. (2007). Does Incapacitation Reduce Crime? *Journal of Quantitative Criminology: 23(4)*, 267-285.
- Raphael, S., & Tahamont, S. (2017). The Effect of Mandatory Minimum Punishments on the Efficiency of Criminal Justice Resource. *Goldman School of Public Policy Working Paper*.
- Robertson, J. (2019, October 1). *Mississippi's Crime Rate is Down*. Retrieved from Empower Mississippi: <https://empowerms.org/mississippi-crime-rate-is-down/>
- Ross, T. W., & Katzenelson, S. (1997). Crime and Punishment in North Carolina: Severity and Costs under Structured Sentencing. *Federal Sentencing Reporter: 11(4)*, 207-214.
- Schwerdt, G., & Woessmann, L. (2020). Empirical methods in the economics of education. In S. Bradley, & C. Green, *The Economics of Education* (pp. 3-20). Academic Press.
- Siebrase, J. (2022, February 7). *How 4 States Cut Their Criminal Justice Budgets Without Sacrificing Safety*. Retrieved from National Conference of State Legislatures: <https://www.ncsl.org/research/civil-and-criminal-justice/how-4-states-cut-their-criminal-justice-budgets-without-sacrificing-safety-magazine2022.aspx>
- Simpson, V. (2020, September 14). *Incarceration Rates by Country*. Retrieved from World Atlas: <https://www.worldatlas.com/articles/largest-prison-population-rates-in-the-world.html#:~:text=Incarceration%20Rates%20By%20Country%20%20%20%20Rank,%20%20541%20%2016%20more%20rows%20>
- Song, L., & Lieb, R. (1993). *Recidivism: The Effect of Incarceration and Length of Time Served*. Washington State Institute for Public Policy.
- Stephens, R. (2021, February 16). *Annual Prison Costs a Huge Part of State and Federal Budgets*. Retrieved from Interrogating Justice: <https://interrogatingjustice.org/prisons/annual-prison-costs-budgets/#:~:text=All%20old%2C%20American%20taxpayers%20pay%20appro>

ximately%20%2480%20billion,they%20often%20cite%20an%20average%20cost
%20per%20prisoner.

The Pew Charitable Trusts. (2014). *Mississippi's 2014 Corrections and Criminal Justice Reform* . Mississippi Department of Corrections.

Tittle, C., & Rowe, A. (1974). Certainty of Arrest and Crime Rates: A Further Test of the Deterrence Hypothesis. *Social Forces: 52(4)*, 455-462.

Wermink, H., Apel, R., Nieuwbeerta, P., & Blokland, A. A. (2013). The Incapacitation Effect of First-Time Imprisonment:A Matched Samples Comparison. *Journal of Quantitative Criminology: 29*, 579-600.

APPENDIX A

Table 1: Summary Statistics

| Variable | N | Mean | Standard Deviation |
|---|-----|---------|-----------------------|
| Yearly Crime/Imprisonment Rates Defined per 100,000 People: | | | |
| Imprisonment | 750 | 388.45 | 138.45 |
| Violent Crime | 750 | 374.35 | 152.60 |
| Murder | 750 | 4.51 | 2.30 |
| Robbery | 750 | 88.69 | 50.04 |
| Rape | 750 | 37.54 | 15.73 |
| Aggravated Assault | 750 | 243.61 | 113.41 |
| Property Crime | 750 | 2743.37 | 729.05 |
| Theft | 750 | 1925.23 | 447.53 |
| Burglary | 750 | 577.90 | 238.20 |
| Vehicle Theft | 750 | 240.24 | 132.13 |
| Population Characteristics: | | | |
| State Population | 750 | 6251954 | 6929862 |
| Population per Square Mile | 750 | 196.81 | 260.17 |
| Male Population | 750 | 3075934 | 3421201 |
| Female Population | 750 | 3176020 | 3509238 |
| Race, Age, and Sex Data (As a Percentage of the Population): | | | |
| White | 750 | 80.23 | 12.26 |
| Black | 750 | 10.78 | 9.54 |
| Hispanic | 750 | 10.93 | 10.01 |
| Other Race | 750 | 8.99 | 10.28 |
| Female | 750 | 50.62 | 0.76 |
| Male | 750 | 49.38 | 0.76 |
| Younger than 15 | 750 | 19.39 | 1.79 |
| Age 15-24 | 750 | 13.89 | 0.90 |
| Age 25-34 | 750 | 13.24 | 1.00 |
| Age 35-44 | 750 | 12.91 | 1.00 |
| Age 45-54 | 750 | 13.87 | 1.27 |
| Age 55-64 | 750 | 12.38 | 1.29 |
| Older than 65 | 750 | 14.31 | 2.24 |
| Unemployment Rate: | 750 | 2.83 | 1.06 |

Table 2: DiD Regression with All States

| Variable | Imprisonment | Violent Crime | Property Crime |
|--------------------|------------------------|-------------------------|--------------------------|
| House Bill 585 | -0.1098*** (0.0347) | -0.0236 (0.0430) | 0.0774*** (0.0283) |
| Population Density | -0.0026** (0.0011) | -0.0057*** (0.0015) | -0.0030*** (0.0010) |
| Male Median Age | 3.9702** (1.6527) | 4.4764 (3.8747) | 3.2993 (2.3712) |
| Female Median Age | -3.1510* (1.7904) | -2.2964 (2.5545) | -3.8890 (2.4882) |
| Younger than 15 | 0.5107 (1.0532) | -0.5893 (1.2794) | -1.3681 (1.3379) |
| Age 15-24 | -0.1266 (0.7104) | 0.7477 (0.9737) | -0.9184 (0.8036) |
| Age 25-34 | -0.6830 (0.7258) | 0.4328 (1.1665) | -0.7945 (0.9199) |
| Age 35-44 | -0.7300* (0.4066) | 0.2324 (0.4482) | 0.0994 (0.4409) |
| Age 45-54 | -0.7309* (0.3854) | -0.3305 (0.4451) | 0.3992 (0.4073) |
| Age 55-64 | -1.1630** (0.4347) | -0.4057 (0.6554) | -0.6792 (0.4744) |
| White | 0.6644 (1.1200) | 0.2908 (1.5333) | -1.9628 (1.1775) |
| Black | 0.0842 (0.0930) | 0.2933* (0.1580) | -0.1019 (0.1005) |
| Hispanic | -0.0150 (0.1906) | 0.3244 (0.2431) | 0.4971** (0.2272) |
| Other Race | 0.1827 (0.2145) | -0.6505* (0.3869) | -0.6113*** (0.2284) |
| Female Officer | 0.0676 (0.0700) | 0.1646* (0.0982) | 0.0740 (0.0701) |
| Male Officer | 0.7366* (0.3741) | -0.1430 (0.7302) | 0.0547 (0.4198) |
| Female Population | 71.1792 (73.0528) | -157.6368 (108.5549) | -224.3316** (89.2784) |
| Male Population | 78.0221 (73.1077) | -144.9624 (108.1435) | -210.3244** (85.7775) |
| Unemployment | 0.0387 (0.0475) | -0.0505 (0.0667) | 0.0008 (0.0490) |
| Female Civilian | 0.1302 (0.1528) | 0.0786 (0.2014) | 0.2174 (0.1566) |

Table 2 (Continued)

| | | | |
|---------------|-------------------------|------------------------|------------------------|
| Male Civilian | 0.1326* (0.0686) | -0.0237 (0.1248) | -0.0172 (0.0724) |
| Constant | -580.1327 (573.7966) | 1181.982 (848.3617) | 1727.504 (689.3833) |

*denotes significance at p=.10 ** denotes significance at p=.05 *** denotes significance at p=.01
Standard Error values

Table 3: DiD Regressions with Southern States Only

| Variable | Imprisonment | Violent Crime | Property Crime |
|--------------------|------------------------|---------------------|-----------------------|
| House Bill 585 | -0.1460*** (0.0332) | -0.0821 (0.0906) | 0.05663** (0.0256) |
| Population Density | -0.00002 (0.0049) | -0.0113 (0.0089) | -0.0006 (0.0024) |
| Male Median Age | 6.4771 (4.8670) | 2.2890 (8.3116) | -0.5661 (2.6083) |
| Female Median Age | -3.1007 (4.9732) | -3.8789 (4.6845) | 4.0844 (3.1217) |
| Younger than 15 | -3.3638 (3.7883) | -3.4207 (5.0838) | 4.9547 (2.8364) |
| Age 15-24 | 1.4816 (1.5238) | -0.5631 (2.1664) | 1.9828 (1.3222) |
| Age 25-34 | 1.6709 (1.3965) | -0.3995 (1.9039) | 1.7879 (1.0003) |
| Age 35-44 | 3.2379* (1.7966) | 1.0365 (2.2518) | 1.7575* (0.9294) |
| Age 45-54 | 0.8842 (2.5481) | -0.5146 (2.1676) | 1.1877 (1.3229) |
| Age 55-64 | -4.2256* (2.2450) | -0.3309 (2.1768) | 2.4703** (0.9973) |
| White | -5.7640 (3.7873) | -4.1647 (4.1878) | 3.5855 (2.1254) |
| Black | 0.3218 (1.0874) | -0.3947 (1.5597) | -0.3830 (0.6073) |
| Hispanic | 0.3002 (0.6133) | 0.2220 (0.7629) | -0.0906 (0.3436) |
| Other Race | 0.3173 (0.8440) | 0.7719 (0.9159) | 0.1928 (0.3089) |

Table 3 (Continued)

| | | | |
|-------------------|-------------------------|-------------------------|------------------------|
| Female Officer | 0.1940* (0.0966) | 0.1436 (0.0905) | -0.0110 (0.0601) |
| Male Officer | 1.2754 (0.8025) | 0.6610 (0.9938) | -0.7777* (0.4076) |
| Female Population | -621.8004 (923.7993) | -454.6249 (964.5863) | -9.2251 (364.0819) |
| Male Population | -566.2549 (882.0833) | -423.8971 (931.9115) | -13.2045 (348.2886) |
| Unemployment | -0.0809 (0.0551) | -0.0347 (0.1273) | 0.0267 (0.0313) |
| Female Civilian | 0.3537** (0.1219) | 0.1109 (0.2193) | -0.1437 (0.1113) |
| Male Civilian | 0.2250 (0.1360) | 0.1687 (0.1239) | -0.0425 (0.0649) |
| Constant | 3662.055 (7042.163) | 3476.958 (7423.95) | 32.3511 (2774.638) |

*denotes significance at p=.10 ** denotes significance at p=.05 *** denotes significance at p=.01
Standard Error values