Mass incarceration and the CCCA of 1984

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Abstract

The current explanations for mass incarceration focus on social control theories, which bring up important issues of the current criminal justice system but lack explanatory power. Instead the causes of mass incarceration are likely from an increasingly centralized judicial system. To investigate these connections, this paper evaluates the impact of the Comprehensive Crime Control Act of 1984 (CCCA) on the trend of the US prison rate using the synthetic control method. Currently the findings indicate that the passing of the CCCA did increase the prison rate as compared to a synthetic for the US.

1. Introduction

The major issue to be explained is why is there such a cleft between the US prison rate and crime rate, especially between similarly developed countries. One easy explanation for an increased prison rate is from an increase in crimes. However, at the same time the crime rate had been remaining steady in the US with the crime per capita around 3.8% in 1970 and 4.1% in 1993 (UNODC Historic Data). Other developed countries have similar trends or increasing crime per capita, Canada had 2.7% in 1970 and 4.9% in 1993, England had 2.6% in 1970 and 5.2% in 1985, and Italy with 1.1% in 1970 and 2.6% in 1993. However, the prison rate for the US is an outlier amongst developed countries. The US number of incarcerated people in state and federal prisons was over 900,000 in 1993. In England at the same time the incarcerated population was over 39,000, in Canada there over 36,000, and in Italy there were a little over 44,000. Even after accounting for population the US is an outlier. The prison rate in the US was 346 per 100,000 while England had a rate of 68, Canada had 127, and Italy had 78, all for the same year of 1993. The high prison rate is not diminished in recent years either as in 2017 the US had a prison rate of 433, while England, Canada, and Italy had 127, 111, and 93 respectively.

The costs and benefits of imprisonment involve a lot of controversy about how and where items are counted. On the cost side there are those which are easily identified, while other costs are hard to quantify, nonetheless cost-benefit analysis is attempted to help identify and inform policy. Broadly the benefits are summed up in crime prevention, while the costs are a mixture of direct and indirect government expenditures, lost inmate productivity, and other collateral harms (Gifford 2019). To give some concrete numbers for the less intangible items, the seen cost or total expenditure for justice systems in the US was $294 million in 2016 (Buehler 2021). An unseen but understandable cost is the opportunity cost is that this spending could have been put towards other social programs, such as education. An even more unseen cost is through school of crime effects, where the increase of prison populations leads to other costs, like depriving individuals of income in the present and future, changing family structures, and sapping male labor force participation. A specific example would be how increased prison populations led to the creation and increase of gangs in prison (Skarbeck 2012). Conversely, imprisonment offers benefits. The readily obvious is in separating and controlling dangerous people lowers the cost to society from continual crime. The potential of being put in prison then acts as a

deterrence mechanism for future crime. Another way prisons can be beneficial is through rehabilitation program aimed at transforming criminals into productive members of society.

The rate of incarceration does not match the crime rate, this raises questions, as the expectation would be that incarceration would increase only to match an increase in crime. This not being the case has led to many theories trying to explain the discrepancy. One camp of thought puts focuses on American exceptional culture, with focus on individualism and vengeance. A subset of this camp argues that imprisonment is a new form of slavery targeting and discriminating against Black Americans (Alexander 2012). Other explanations focus on the institutions or rules surrounding systemic incentives. One which theory elucidates how lack of competition between jurisdictions, or a centralization of jurisdictions can lead to more severe punishments (D'Amico & Martin 2022).

Another popular explanation rests on a set of policies and zeitgeist of the War on Drugs from the Nixon and Reagan administrations, which increased the harshness of drug related crimes. It follows that putting low-level drug-related criminals in prison will lead to turning low-level criminals into harden repeat offenders (Pfaff 2017, p. 22). Along with the War on Drugs, another theory is how the length of time in prison leads to people compiling in prison leading to large numbers, with people entering prison faster than the rate in which they leave (pp. 51-52). Lastly another suspect of the large imprisonment numbers is the private prison industrial complex, where the incentives for private prison labor and their interests groups lobby for tougher on crime platforms so to fill their prisons and pockets (pp. 79-80). Pfaff (2017) points out the issues with these last three explanations of the War on Drugs, length of prison sentences and the private prison industrial complex. Overall, the Drug War has not sent enough people to state prisons to be the main factor of mass incarceration in the US (p. 23). The concern of prison sentence lengths also misses the mark, with the rate of incarceration increasing even when length of time served has decreased (pp. 74-75). Lastly, private prisons and interests are very small compared to public prisons and their interests. The issues that private prisons are accused of are more prevalent and increasing in public prisons (p. 81).

The Comprehensive Crime Control Act of 1984 (CCCA) was the largest change of the federal criminal justice system at one time (diGenova and Belifore 1985). It gave more tools to prosecutors to deal with criminal convictions. The highlights of the act include stricter bail requirements, increased penalties in general, increased punishment for recidivism, seizing of assets and profits of drug related crimes, tampering with electronics, credit card and bank crimes, counterfeit manufacturing and trafficking of counterfeit laws, and an overhaul of the insanity defense. Though these highlights do not touch on all the topics the law included, it gets the point across that it was sweeping. Another big dimension of the act focused on the coordination between federal and state law enforcement. The CCCA of 1984 offers an opportunity to test how institutions shape prison rates. The law represents another major shift in policy reducing alternative jurisdictions that civilians could move too. In this way the CCCA offers a complementing institutional story of mass incarceration, with the judicial system centralizing.

In order to test the casual impact of the CCCA on the US prison rate, a quasi-experimental method of synthetic control is used. The method constructs a credible counterfactual of the US, matching on similar characteristics relevant to the study. The characteristics that are important here relate to the crime rate, judicial tradition, and more general aspects like income and population. Through this method, it is possible to compare the prison rate before and after 1984 to see the causal impact of the CCCA.

The rest of the paper is organized as follows. Section 2 will provide a literature review, encasing the competing theories about the causes of mass incarceration in the US. Section 3 will introduce the theoretical framework of this paper. Section 4 will introduce the data and describe it. Section 5 will summarize the empirical framework. Section 6 will contain the results and interpretations. Section 7 will conclude.

2. Literature Review

2.1 Alternative theories of mass incarceration

The common thought surrounding crime and punishment is a simple connection where increased crime rates lead to increased prison rates. However, Fegley (2015) shows that the relationship between crime and imprisonment is less straightforward, and in comparisons with other similar countries crime rates and incarceration rates are not dependent on one another. The factors that impact imprisonment specifically in the US are more political rather than a consequence of crime. Policies in the US that focus on "tough-on-crime" showing social punitive desires while Scandinavian criminology theory put to use in different countries focus on imprisonment as a value-creating and moral-shaping process.

The difference in crime rate and prison rate has led to the creation of many theories aimed at explaining the gap. One set of theories focuses on noninstitutional factors surrounding social control. D'Amico (2020) explores the different implications and histories of these theories and models. The general social control model invokes three implications. The first is that the crime rate does not sufficiently explain the patterns of imprisonment. Next, prison growth in the modern era and across developed nations is conspicuously correlated with free market ideologies and public policies. Lastly, in the US specifically mass incarceration was instigated and buttressed by race and class animosities. Overall, the dominant point of this model is that imprisonment trends are not explained well enough as a byproduct of the real crime rate. The social control model can trace it ideological roots back to Foucault and Bentham. Both Foucault and Bentham expounded on how the prison structures could be crafted to punish criminals and maintain surveillance and control over the imprisoned. Contemporary discussions of this model point to mass incarceration picking up after the civil rights era, the rise of "tough on crime" political campaigns and the war on drugs. Foucault, inspired by Rusche and Kirchheimer, viewed the growth of imprisonment alongside the unemployment trends. They argued that prisons helped alleviate social problems associated with surplus labor conditions amidst post-industrial business cycles. Specific social control stories on what causes mass incarceration are explain by Pfaff (2017) in their book *Locked In*, where the common explanation for mass incarceration in the US falls on the shoulders of three issues, the war on drugs, longer prison sentences, and the prison industrial complex. The war on drugs refers to the staunch toughness on crime notably from the Nixon and Reagan administrations, increasing the harshness of drug related crimes. It is popular to claim that most drug related offenders are nonviolent criminals and putting them in prison will only lead to making low level criminals into harden repeat offenders. Along with the War on Drugs, another popular claim is the length of time in prison leads to people compiling in prison leading to large numbers. Lastly, the prison industrial complex connects private prisons and their interest groups to more lobbying for tougher on crime platforms to fill their prisons and their pockets.

Other theories have been used to explain why the US imprisons so many people and one set of these theories focuses on the institutions surrounding prisons and legal systems that put people in prison. Pfaff (2017) illustrates this point. On a federal level it is easy to point to the unitary system of courts leading eventually up to the president. The state prison and local courts are really a set of systems with multiple layers that incorporate state and county level factors. The complexity this adds makes the analysis and the offered solutions harder to conceptualize and evaluate, even when reform is applied correctly it may be undermined by laws or processes at another level. The importance of looking at local levels is that the federal prison system only holds 12% of the nation's prisoners. A blind spot that is missing is the role of public prosecutors in mass incarceration. At one time, private and public

prosecutors were abundant, however with the rise of Jacksonian politics, public distrust and fear of corruption lead to stricter laws on private prosecutors. Now the majority of prosecutors are public, and the number of public prosecutors is growing. These prosecutors have a wide range of discretion and lack much overview. They solely decide what charges and whether to file charges and can even threat charges to bring about quicker convictions (plea bargains). More importantly these decisions happen behind closed doors and will not be reviewed by the federal courts.

2.2 Issues of current theories

Current theories of mass incarceration causes suffer from a variety of issues however. Social control models of imprisonment cannot explain why punitive imprisonment was also used before free market ideologies were extremely prominent, as well as there is lacking empirical evidence supporting a positive relationship between prison population rates and objective measures of capitalism or unemployment (D'Amico 2020). Similarly Pfaff (2017) points out issues of the specifics of how social control theories believe policies are implemented. The War on Drugs is not the main cause of mass incarceration. The relationship between drug crimes and incarceration is messy, state and local laws concerning drug crime were passed prior to the Nixon and Regan administrations. These local laws also widely vary from region to region even in a single state. Along with this, the story of the nonviolent drug criminal is mostly fabricated with the majority of criminals convicted of drug crimes falling near the median of the violent-nonviolent incarcerated criminal spectrum. Overall, the Drug War has not sent enough people to state prisons to be the main factor of mass incarceration in the US. The concern of prison sentence lengths also misses the mark, with the rate of incarceration increasing even when length of time served has decreased. Lastly, private prison and interests are very small compared to public prisons and their interests. The issues that private prisons are accused of are more prevalent and increasing in public prisons. Lobbying groups especially guard unions, famously push for tougher on crime platforms and other items that safeguard jobs. Public prisons are overly supported by legislators, prison guard lobbies, and even local voters and constituents. Though private prisons have grown in recent years, this growth shows private prisons as a symptom of mass incarceration rather than a cause of it.

Though different theories bring up relevant and important factors that impact incarceration, none of these theories presented so far elucidates the impact of different types if federalism on the prison rate. In the account by Pfaff (2017) comes close bringing up the difference between the single federal criminal justice system and the dispersed multiple state criminal justice systems. However this account does not directly address federalism beyond the increased complexity of analyzing state level prisons.

2.3 Federalism and polycentricity effects on incentives

While theories of acknowledged the importance of institutions broadly, there lacks direct analysis of how specific structures of government matter, such as federalism or polycentric systems impact prison rates. The different aspects of a federalist system can impact the incentives actors face leading to different outcomes.

A polycentric system has many centers of decision making that are formally independent of each other (Ostrom et al. 1961). The competition between the formally independent jurisdictions can discipline them to provide public goods more in line with constituent preferences (Tiebout 1956). Polycentric system and federalism are not one in the same, however federalism offers a robust political structure that can bring about the smooth functioning of a decentralized system (Boettke et al. 2017, Qian and Weingast 1997, and Weingast 1995). Ideally a federal system is able to solve the "paradox of government" by having the ownership of the control powers divided horizontally and vertically (Boettke et. al 2017). In public good provision for local areas, the "fiscal attention" of local authorities can be

shifted through increased federal financial support. In this case where in a decentralized system with multiple jurisdictions, and freedom of movement, tax-paying voters impose a hard budget constraint on local authorities. The authorities have to respond to their tax base otherwise, following the Tiebout model, the consumers will vote with their feet and leave the area for another jurisdiction (Tiebout 1956). However, with increased federal support through financial assistance, eases the budget constraint and shifts the attention of local authorities towards the interest of higher levels. This theory of "fiscal attention" or the violation of "fiscal equivalence" can be applied to change in local police force attitudes, becoming more federal minded and increasing tensions between local communities and police (Boettke et al. 2017, Skarbeck 2021).

The competition between jurisdictions being very important to disciplining local authorities, a reduction in overall options would also soften the constraints placed on those authorities. By greater local adherence to higher level policies, the options to choose from for a citizen, are reduced greatly, nullifying the ability to vote with ones feet. A parallel point to the attention of local policymakers, is this one, which the entire system is losing competition. This could be modeled as a movement away from a more competitive federalism to more of a cartel federalism (D'amico and Martin 2022). Overall the movement in the US from a more competitive judicial system to a more centralized judicial system lacks the competition to solve the punishment knowledge problem similar to the economic calculation issue of centralized market systems. The line between federal and state jurisdictions becomes fuzzy with federal issues becoming materially the done by the state (Hinton 2016). State powers act in the per view of federal action.

2.4 The Comprehensive Crime Control Act of 1984

In the time between the 1960's and the 1980's crime was an often talked about issue. The concern surrounding crime led to federal policy change, first with the Organized Crime Control Act of 1970, then later on with the Comprehensive Crime Control Act of 1984, which included drug crimes but was, overall, a sweeping piece of crime-fighting legislation (Kantor and Pawlowski 2021). The CCCA was not the first-time federal legislation directly impacted state and local levels. Starting with the Law Enforcement Assistance Act presented by President Lyndon Johnson in 1964, directly involved federal forces into local and state arenas (Hinton 2016). The act can be seen as important tipping point where the lines dividing federal and state law became muddled and federal polices such as the War on Crime and the War on Drugs become materially state issues rather than federal.

Kantor and Pawlowski (2021) detail how the CCCA operates and explain how the act sought to increase local and federal coordination. Two sections which federal and local powers interconnect are in the forfeiture section and the drug enforcement amendments. Starting off, a main point of the forfeiture section was to seize property that was used in the manufacturing, growing, selling or other related processes of schedule I or II substances. Ideally this would hurt drug criminals in their purses reducing drug crime in the future. Where state and local come in, is that a high percentage of transferred of forfeited property would go to state and local law enforcement agencies that participated in the investigation leading to the seizure and forfeiture. The increase in maximum fine levels created incentives for devotion of investigation and prosecutorial resources to certain offenses that previously carried penalty levels so low that they discourage prosecution.

Diving more into the forfeiture clause, seizures are even allowed when federal agencies are not present during the investigation or seizure. CCCA facilitated state or local authorities access to seized money or the proceeds from seized property in two ways. The first way is noted above where if local law enforcement participated in a federal sting or raid, they were entitled to a portion of the seizure that matched their contribution to the overall effort. The second way is that local law enforcement could seize

property in stand-alone efforts and then allow the federal government to "adopt" the seized assets. The local agency effectively transferred the ownership of the seizure to the federal government, which then processed the seizure as if it were secured in a joint operation. It is common for the federal government to return the bulk of the proceeds, generally up to 80%, back to the originating local law enforcement agency. This adoption process can be used in any situation that is related to federal crimes. Many state laws are stricter on taking of criminal assets, the adoption process of the forfeiture act allows state and local loopholes for local agencies around state laws. The adoption process is also used often for local law and makes up around 20% of local police budgets.

2.5 Method

One way in which to study the impacts of a policy intervention is through quasi-experimental techniques of causal inference. These techniques can attribute casual explanations of phenomena by creating a credible counterfactual for items that previously were left to correlation studies. The specific method used in this paper is synthetic control. The synthetic control method is widely used to study case studies in economics and political science. Initially it was developed to study effects of terrorism in Spain's Basque Country (Abadie and Gardeazabal 2003). From there however it has been applied to a series of different studies, in a variety of disciplines (Abadie & Gardeazabal 2003, Abadie et al. 2010, Absger et al. 2019).

3. Theoretical framework

Crime and punishment provision is just one good offered in a bundle by a local jurisdiction. Centralization can happen specifically in one or more dimensions of a bundle. One way the Comprehensive Crime Control Act of 1984 could increase the prison rate in the US is through centralization of the judicial system. The CCCA greatly increased the federal jurisdiction, consequently shrinking the state jurisdiction for criminal punishment. The structure of the judiciary impacts how incentives are aligned towards punishment levels. In a polycentric system the set of options for an individual vary across different areas. Areas that offer appealing governance attract people, providing revenue to the government. The competition for these benefits leads to experimentation, enabling providers to discover better policy bundles, copy successful models, and respond to local and changing conditions. Legal jurisdictions are no different and directly impact punishment institutions. The transition of the US from a more competitive version of federalism to a more cartel federalism may change the budget constraint that local judicial systems face.

A more centralized judiciary concentrates the benefits of harsher punishments on politicians, bureaucrats and special interest groups through increased votes, funding to bureaus and resource allocation. This is all done while dispersing the costs to the citizens and criminal defendants. The more widely dispersed are the costs of mass incarceration, the more governments can indulge in it. Following this story of concentrated benefits and dispersed costs, growing the organizational apparatus of a more centralized criminal justice system increases the benefits and disperses the costs more. Criminal justice professionals, such as prison guard unions and public prosecutors, directly benefit from over incarceration and enjoy growing benefits. Incentives around growing the criminal justice system leads to increased capabilities of putting people away. More militarized local police investigating federal crimes, prosecutors with better technologies, increased prison construction, and larger prison work forces. The size of jurisdictions matter, centralization essentially enlarges one jurisdiction and shrinks the rest. A larger jurisdiction has a looser fiscal constraint on political actors and a larger overall network. The increased network size means there is a higher cost for reform or change, so once there is over punishment, correcting it becomes harder.

Specifically looking at public prosecutors shows that the CCCA exacerbated an already growing issue. Public prosecutors have full control over how they convict with little oversight (Pfaff 2017, pp. 134-135). The lack of oversight and flexibility that the prosecutor has allows them to offer plea bargains, where lighter sentencing is offered compared to harsher penalties. Tougher laws in general make the credible threat of harsher punishments in plea bargaining more intense (p. 135). Lastly, public prosecutors are not financially incentivized to decrease convictions as the benefits from convicting a criminal are concentrated, while the costs of imprisoning the same felon are dispersed at the state level where they are held (p. 142). All in all, public prosecutors will use new tools and laws to increase their convictions, the increase of federal crimes means more people will be convicted of those federal crimes, some of which were state issues before. Through public prosecutors the CCCA has reduced jurisdictional differences through the court system and allows for political gain by public prosecutors being tough on crime on other people's dime

The case for local law enforcement shows how CCCA created new ways for law enforcement to avoid restrictions on their activities. As mentioned, the CCCA has a forfeiture chapter allowing local law enforcement to directly benefit from going after more criminals. The forfeiture chapter increased coordination between federal and local law enforcement, by allowing the seizure of assets that were used in the association of drug and other federal crimes. Prior to this many states restricted seizure of criminal assets or restricted their benefiting police budgets. However again since the CCCA was at the federal level it allowed local police forces to go around this rule (Kantor et al. 2017). The forfeiture and adoption mechanism of the CCCA aligns incentives of local police towards federal crime which directly benefits them over focusing on local punishment sentiments.

4. Data and Descriptive Statistics

Below are the are the summary statistics in table 1, the list of the donor countries in table 2, and the list of data sources and descriptions in table 3. The data for this project is extremely limited caused by the timing of the treatment. Viable historical data for imprisonment and other variables of interest are sparse at best in the 1970's and before, both restricting the potential donors and what variables can be included. Because of this problem, the outcome variable, total prison population is interpolated pegged on population. Each estimated value is calculated on a line connecting two closest points on a x-y plane, in this case using the population of a country as the x-axis and the prison population when available on the y-axis, however when available actual prison population data is used. Below is the equation used to interpolate the data, with variables with subscripts representing specific data points used, while the variables that lack subscripts are the corresponding places to place the generated estimate. While interpolation is a cause for concern when it comes to the robustness of these results, using population eases the concerns slightly. Population is indicative of prison populations as it would be the pool for potential prisoners. By this logic, the interpolated prison data based on population is still useful when interpretating the results. Also, by doing this, the prison populations are not just linear estimates between two points and trend with population as it fluctuates. The largest interpolations are made for Australia and Ireland who both lack an observation for 1970 so it uses the data point in 1965 and 1975. All other countries and observations only interpolate over 5 years.

One other issue of the prison population data specifically between the US and other countries is that the US has a greater population compared to the donor pool countries. For this reasons the prison population is converted into a prison rate per 100,000 to in order to make comparisons between countries.

$$Interpolated\ Prison\ pop\ = Prison\ pop_1 + \frac{[(Pop - Pop_1) * (Prison\ pop_2 - Prison\ pop_1)]}{Pop_2 - Pop_1}$$

To capture the impact of the CCCA the treatment is set for 1984. The years of study start in 1963 and continue up to the treatment in 1984 and then passed till 1995. The timing is limited to 10 years after the treatment as explanatory power decreases after 10 years and the risk of model dependence increases. The control variables used include measures of inequality, population, and total crime per capita. The Gini coefficient is a measure of income inequality, which is a common concern when discussing incarceration. The crime data also faces some issues with historic data, so using a total crime variable incorporates more than just the homicide rate. It is composed of intentional homicides, assaults, rapes, robberies, thefts and frauds. Obviously more crimes exist, however these categories have data from 1970 till 1993, while the other crime categories were added later in the dataset. Lastly, the interpolated prison data is the richer set of data that is annual and available alongside population for all countries.

The list of donor pool countries again is heavily restricted by data, and then restricting the donor pool to those countries that are feasible comparisons for the US restrict the pool further. The countries which make up the donor pool are Australia, Canada, France, Ireland, Italy, Norway, Spain, and the United Kingdom. The US itself is an OECD country, which all other countries in the donor are (OECD 2023). Also, the US inherited its common law system from England, so countries that also inherited their common law system from England or England itself provide other important characteristics. Historical legal origins matter in the formation of the contemporary legal processes in a country (La Porta et al. 2008, pp. 286). Information is passed between societies through voluntary and involuntary exchanges, law and legal systems are also shared this way (McNeill and McNeill 2003). Legal origin impacts a variety of institutional areas, such as procedural formalism, judicial independence, regulation of entry, government ownership of the media, labor laws, conscription, company and securities laws, bankruptcy law, and government ownership of banks. Characterizing legal origins broadly defines most systems as either civil or common law, with some historically motivated characteristic differences (La Porta et al., 2008 pp. 288). Countries can share aspects of both or have complicated histories that include both. Keeping this in mind, the analysis of which broad category a country falls into depends on their legal system and how it operates in the time period of study. The countries that are common law are Australia, Canda, Ireland, Norway, and England, while France, Italy, and Spain are civil law countries. France, Italy, and Spain are distinctively civil law countries, however, they share other important characteristics to the US which is important for creating an accurate comparison synthetic.

Table 1. Summary statistics

Variable	Obs	Mean	Std. dev.	Min	Max
Prison population	642	34757	35594	396	233373
Prison rate per 100k	549	118.1802	132.3714	16.29782	748.5518
Population	549	57800000	74500000	2824400	332000000
Total crimes	129	1945105	3491624	26013	12800000
Total crimes per capita	129	0.024	0.017	0.001	0.062
Real GDP	540	2138160	3582581	29565	20600000
GDP per capita	536	0.034	0.014	0.009	0.096
Gini coefficient	425	30.169	3.026	21.600	37.900

Table 2. Donor pool and shared US characteristics

Country Name	Characteristics
Australia	OECD, common law
Canada	OECD, common law
France	OECD, civil law
Ireland	OECD, common law
Italy	OECD, civil law
Norway	OECD, common law
Spain	OECD, civil law
United Kingdom	OECD, common law

Table 3. Variable, description and its source

Variable	Description	Source
Prison rate per 100k	Prison rate per 100,000	World Prison Brief and the Prison Policy Initiative
Population	Nominal populations	World Bank
Total crime per capita	Total homicides, assaults, rapes, robberies, thefts, and fraud over the population	United Nations Office on Drugs and Crimes, with ICPSR
Gini coefficient	Measure of inequality in a country	Standardized World Income Inequality Database
GDP per capita	Real GDP per capita	Penn world tables

5. Empirical Framework

The synthetic control method uses a donor pool of countries to create a counterfactual then compares behavior of an outcome variable compared to this counterfactual to show a causal effect. The method requires enough data before the treatment occurs to create a realistic counterfactual. The comparison holds the real country or group as the treated group and the Frankenstein creation as the control group, as in the standard scientific method. Before the treatment both the control group and treated group behave similarly and only after the implementation of the treatment do the two groups separate pointing to the cause of the difference being the treatment. Due to the large differences between the US and all donor pool countries, the counterfactual is demeaned y the actual data. This method was pioneered by Ferman and Pinto (2021), to keep the synthetic and control comparable and may improve efficiency of the estimator.

There are two major identifying assumptions that must be satisfied for the effect to be causal. The first is the stable unit treatment value assumption (SUTVA). There can be no spillover effect nor similar treatments in the donor pool countries (Absher, Grier, & Grier 2020). Our research focusing on the US law minimizes the chance that there would be spillover effects to any donor countries directly. Along with this, in 1984 there was no other sweeping crime law in the donor pool countries. Though SUTVA cannot be tested directly for these reasons described above SUTVA is satisfied. The second identifying assumption is that there are no other simultaneous treatments causing the results (Absher, Grier, & Grier 2020). In this case, the CCCA sticks out as being a major law at a federal level not competing with any other law. Other crime laws passed in the 1970's or in the 1990's pale in comparison to the breadth and depth of the CCCA in 1984 (Kantor and Pawlowski 2021). For these reasons the second identifying assumption is satisfied.

The synthetic control method is widely used to study case studies in economics and different disciplines. Initially it was developed to study effects of terrorism in Spain's Basque Country (Abadie and Gardeazabal 2003). It continues to be a useful, multidisciplinary tool for studying interventions, such

as regime changes, reforms, and policy implementation (Abadie et al. 2015 and Absher, Grier, & Grier 2020). The development of synthetic control excels in establishing causal connections between an intervention of some kind and the outcomes that it causes.

6. Results and Discussion

The CCCA was created out of discussions and debates around federal criminal law for years and received bipartisan support in Congress (diGenova & Belifore 1985). As mentioned above the data is sparse, still a clear effect can be seen. The impact of the act is captured in the synthetic control showed in figure 1. The pre-treatment period is the years from 1960 to 1983, with the treatment happening in 1984 with the passing of the Comprehensive Crime Control Act. After 1984, the constructed synthetic US is compared to the actual US prison rate from 1985 till 1995. The post-treatment period is limited to 10 years following the event since the method is unreliable in long run explanations. Figure 1 shows a large gap starting in 1984 and growing after the Comprehensive Crime Control act was implemented in the US. Clearly, the passing of the CCCA increased the trend of the US prison rate compared to other countries in the donor pool. In terms of the pre-treatment period, the fit of the synthetic matches the actual trend of the US prison rate, even with the small donor pool and limited data. Table 4 shows the predictor balance, the donor pool weighting, and root mean squared prediction error. The created synthetic US pulled from Ireland, France, Italy, and Canada. The heaviest weight being from Ireland being around 64% of the counterfactual. There is a clear effect of passing the Comprehensive Crime Control Act of 1984 on the trend of the US prison rate as compared to the synthetic. The synthetic remains around a similar rate into the post treatment period and even increases slightly, however nowhere to the same degree as the synthetic US.

Figure 2 shows the individual behavior of the donor pool countries compared to the US. Visually, the donor pool trends are tightly condensed around the pretreatment period of the actual US while after the treatment there is some variation, but none are as extreme as the treated. Overall the trends of the donor pool offer a fair comparison for the US. The trend for the US prison rate is an obvious outlier compared to the donor pool group.

Figure 3 holds the standardized p-values per year in the posttreatment period. Inference provided by the p-values comes from comparing the estimated main effect with the distribution of placebo effects. The placebo tests create separate p-values for each post-treatment time period that represent how the significance of the estimated effect changes over time. These values show the proportion of the control units that have an estimated effect at least as large as that of the treated unit (Galiani and Quistorf 2017). Another way to put it, they represent the chances that the effect being seen is due to random chance. The effect of the CCCA is significant for all years in the post-treatment period.

Taken together figures 1, 2, and 3 all point to a significant increase in the trend of the US prison rate from passing the CCCA. The Comprehensive Crime Control Act clearly had an impact on the criminal justice system in the US, which is unsurprising given the breadth and depth that it covered. State prisons still hold the majority of the incarcerated peoples so it is important to note the effect seen is majorly on the state level, where jurisdictions should differ.

Figure 1

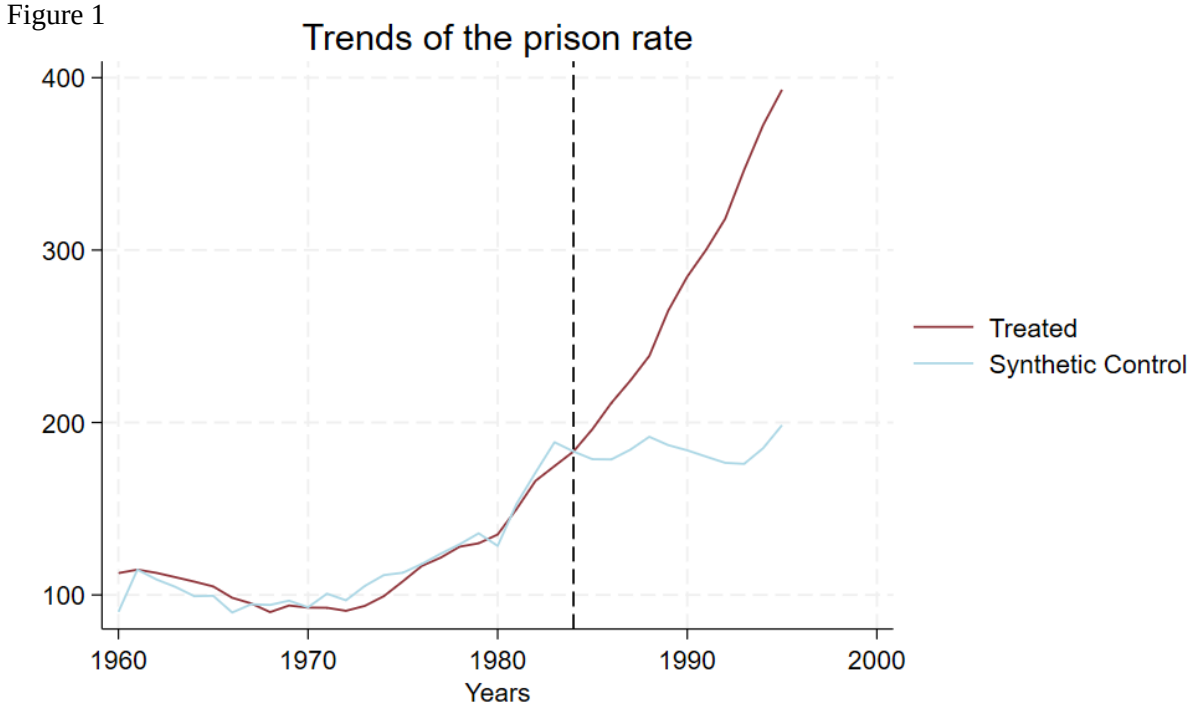

Figure 2

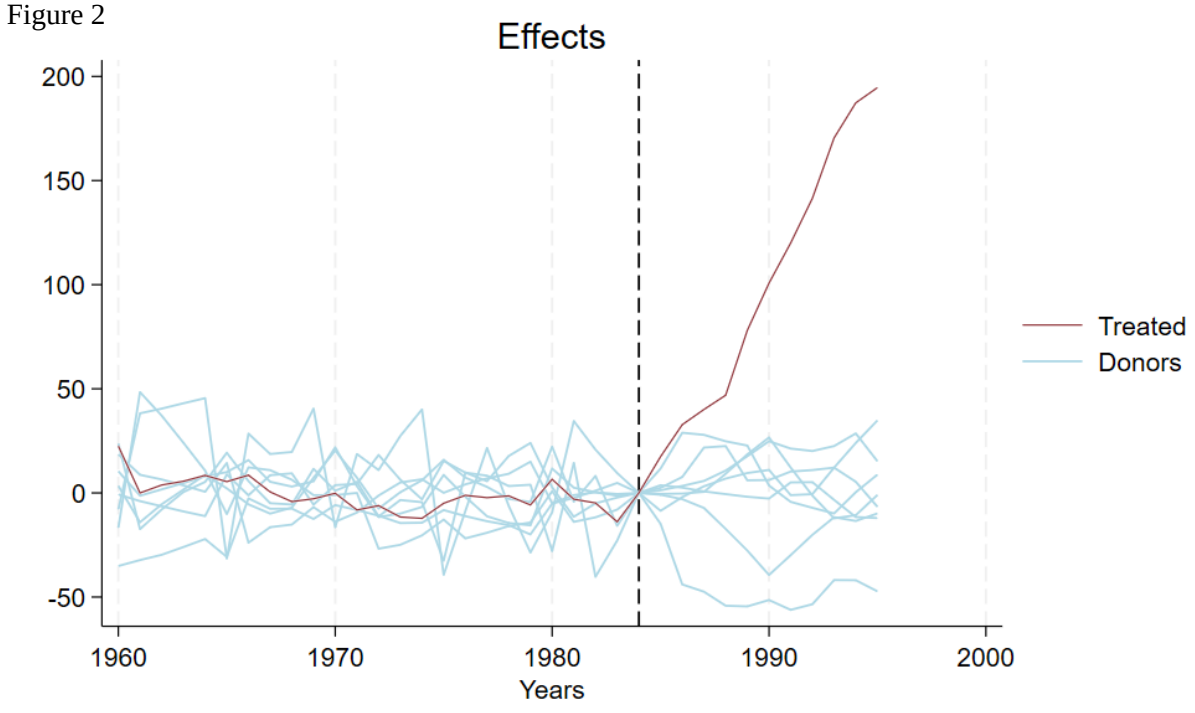

Figure 3

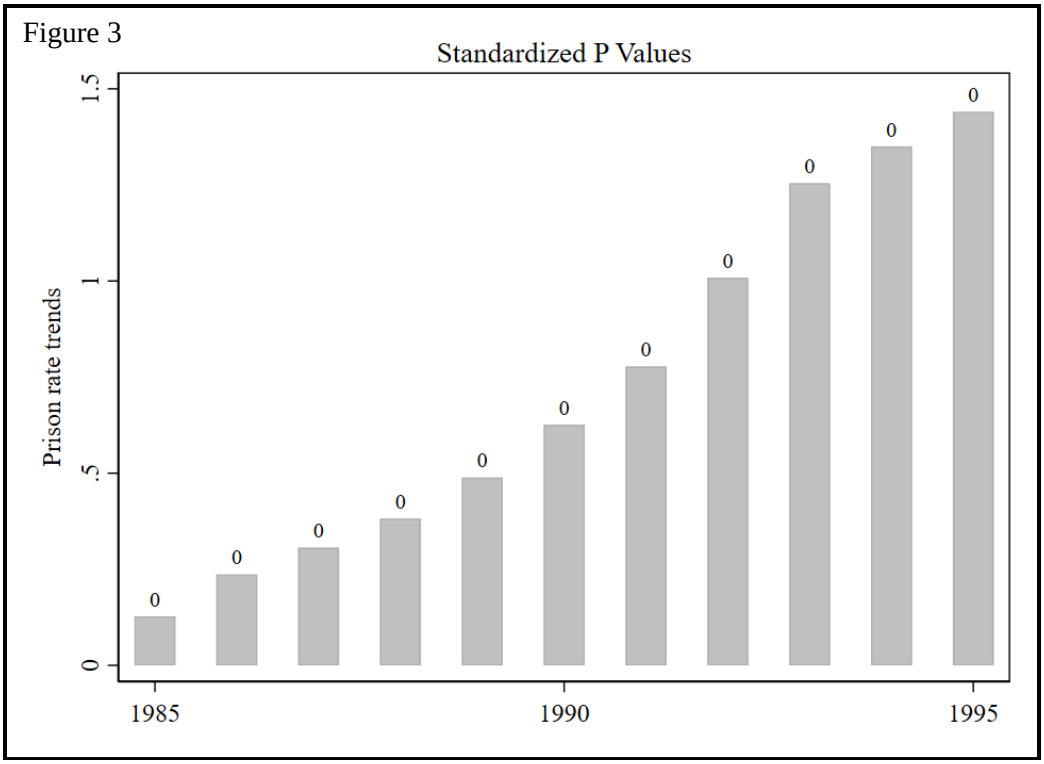

Table 4. Predictor balance, the donor pool weightings, and the root mean squared prediction error

	Treated	Synthetic
Population	2.16E+08	2.14E+07
GDP per capita	0.026361	0.018642
Total Crime per capita	0.047505	0.014106
Prison Rate 1960	0.625802	0.625581
Prison Rate 1970	0.505729	0.505721
Prison Rate 1982	0.907003	0.934122

Country Number	Unit Weight
AUSTRALIA	0
CANADA	0.062
FRANCE	0.164
IRELAND	0.639
ITALY	0.135
NORWAY	0
SPAIN	0
UK	0

RMSPE
0.041897

7. Conclusion

The discussion on the discrepancy between the US prison rate and crime rate, especially when compared to similarly developed countries, has shed light on various theories and factors contributing to this phenomenon. Through examining trends in crime rates and incarceration numbers, as well as exploring the costs and benefits of imprisonment, several explanations have been proposed. These include cultural factors emphasizing individualism and punitive measures, institutions, and policies such as the War on Drugs. However, amidst these explanations, it is important to note that certain theories, such as the impact of the War on Drugs or the length of prison sentences, do not fully account for the drastic increase in incarceration rates. One pivotal way the Comprehensive Crime Control Act of 1984 could increase the prison rate in the US is through the centralization of the judicial system. The CCCA greatly expanded federal jurisdiction, thereby diminishing the state's jurisdiction for criminal punishment.

Specifically looking at public prosecutors, it becomes evident that the CCCA exacerbated an already growing issue within the criminal justice system. The increased powers and tools provided to prosecutors under the CCCA amplified their role in driving higher incarceration rates. Furthermore, the case for local law enforcement illustrates how the CCCA created new avenues for law enforcement agencies to bypass restrictions on their activities, particularly through provisions such as the forfeiture clause. This clause allowed law enforcement to seize assets linked to criminal activities, providing additional incentives and resources for aggressive enforcement efforts.

By adopting a quasi-experimental approach such as synthetic control methodology, this paper assesses the causal impact of the CCCA on the trend of the US prison rate, taking into account these nuanced dynamics within law enforcement and prosecutorial practices. This method allows for a comparison of pre- and post-1984 prison rate trends while controlling for relevant variables like crime rates and socio-economic factors. Such analysis provides valuable insights into how institutional changes, like the CCCA, have shaped the landscape of incarceration in the United States, highlighting the transition to a more centralized and punitive approach in criminal justice policy.

In conclusion, the passage of the Comprehensive Crime Control Act of 1984 exerted a discernible and enduring effect on the trend of the US prison rate compared to the synthetic control group. While the synthetic control group exhibits a modest increase post-treatment, it pales in comparison to the pronounced upward trend witnessed in the actual US prison rate, emphasizing the pivotal role of institutional changes such as the CCCA in shaping patterns of mass incarceration, particularly through their impact on public prosecutors, local law enforcement practices, and the centralization of the judicial system.

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9. Appendix

To check to make sure that the crime rate is not driving the results, the crime per capita is set as the dependent variable. The results of this are in figure 4 with the standardized p-values in figure 5. From figure 4 the pre-treatment fit is very poor, there lacks a clean treatment effect in 1984, and the post treatment period does not provide much information. Along with this in figure 5 none of the post treatment years are significant.

In terms of robustness checks, figure 6 is an in-time placebo test and figure 7 is a completely lagged model. Figure 6 shows with changing the treatment date to 1975 the large effect remains in 1984. Figure 7 is a completely lagged model which is a robustness test against cherry-picking covariates for fit over empirically reasonable covariates. The fit of the lagged model, is very similar to the fit for the actual model, showing the results in figure 1 are robust. Tables 5 provides information from the V-matrix, showing the weights of the covariates in the synthetic.

Figure 4

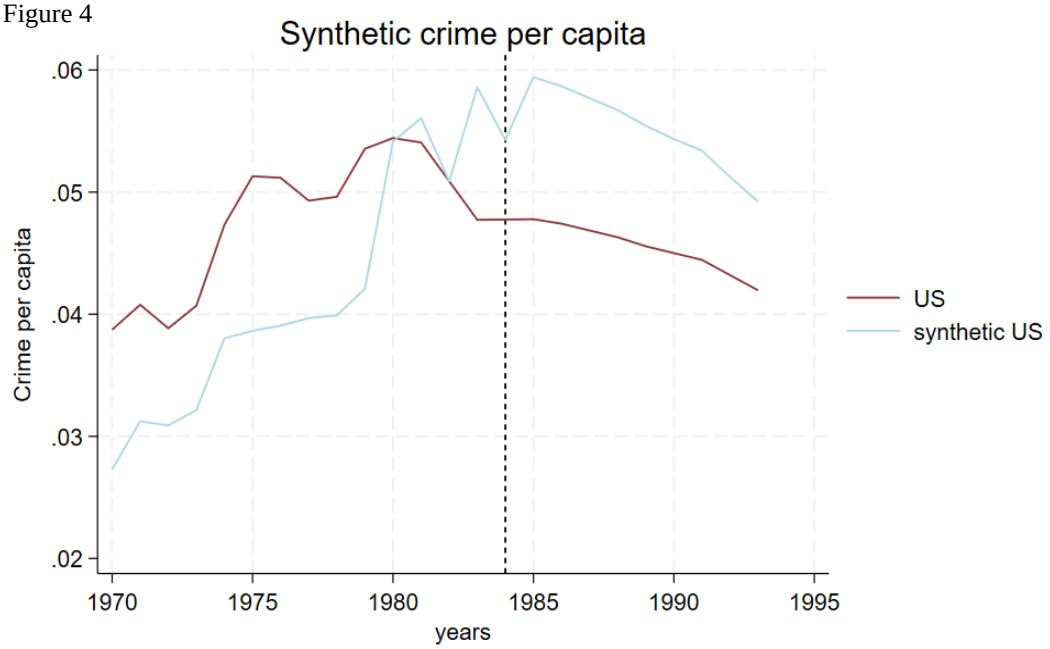


Figure 5

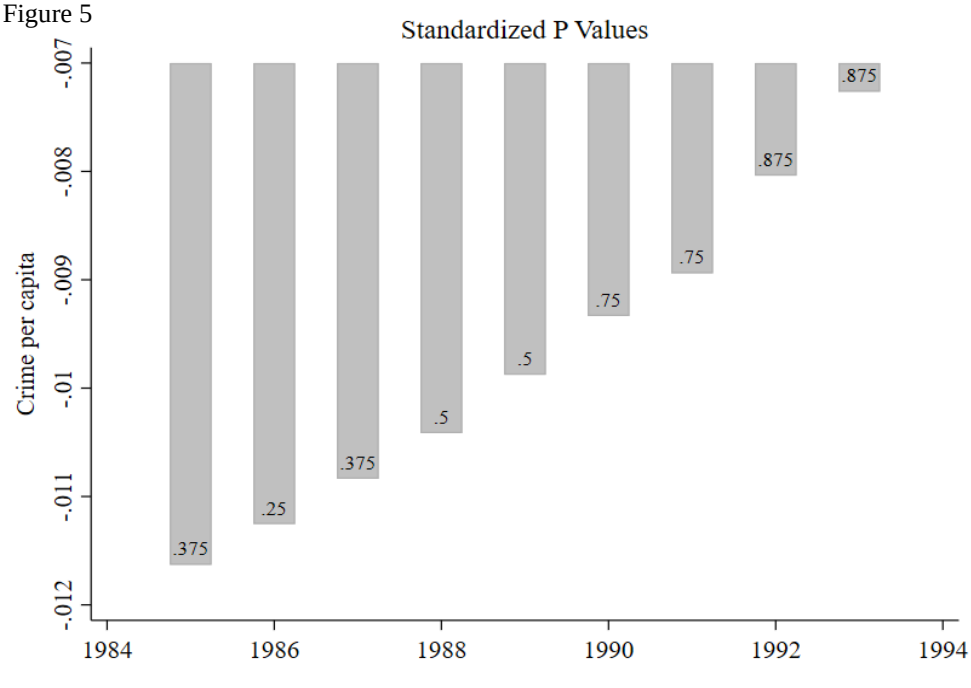


Table 5. Matrix of covariate weights

	Population	GDP per capita	Total crime per capita	Lagged outcome (1961)	Lagged outcome (1971)	Lagged outcome (1983)
Population	3.08E-07					
GDP per capita	0	0.000208				
Total crime per capita	0	0	0.000313			
Lagged outcome (1961)	0	0	0	0.966275		
Lagged outcome (1971)	0	0	0	0	0.028823	
Lagged outcome (1982)	0	0	0	0	0	0.004381

Figure 6

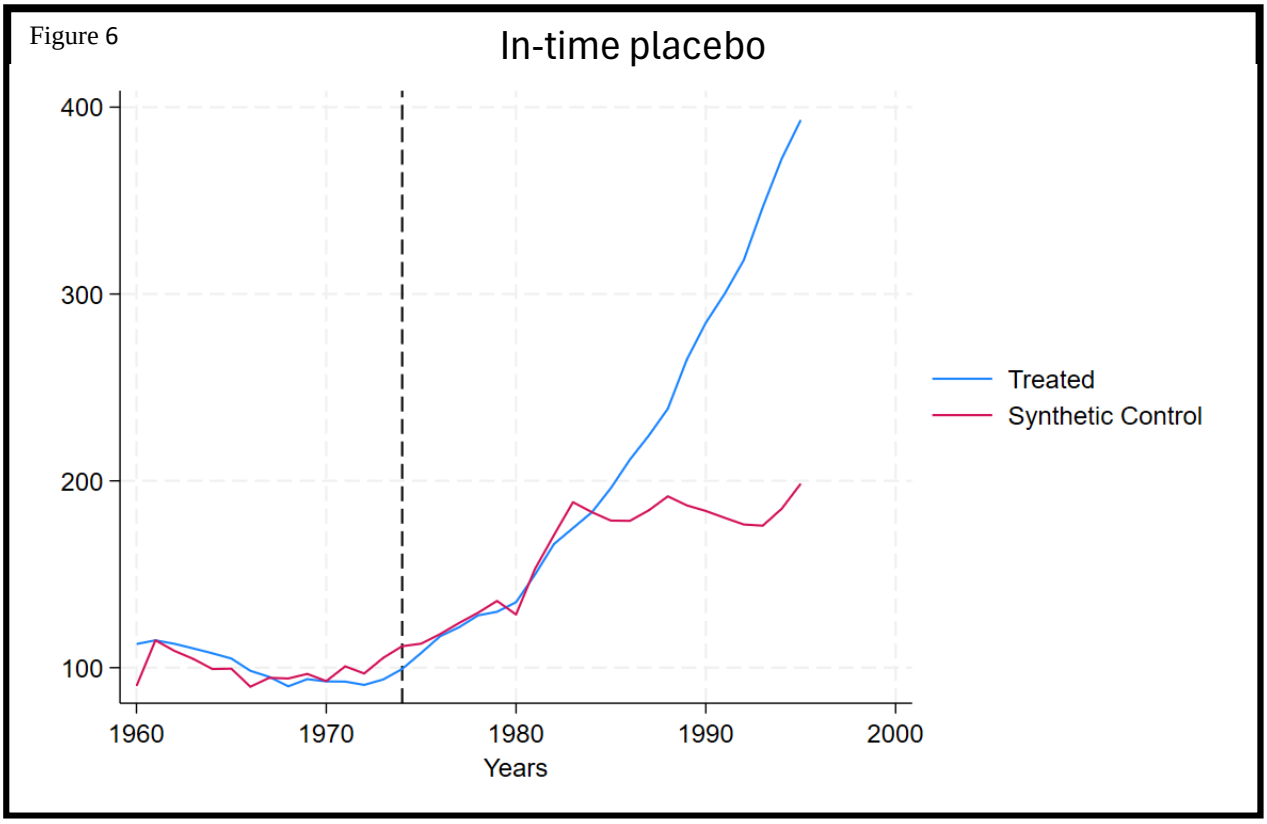
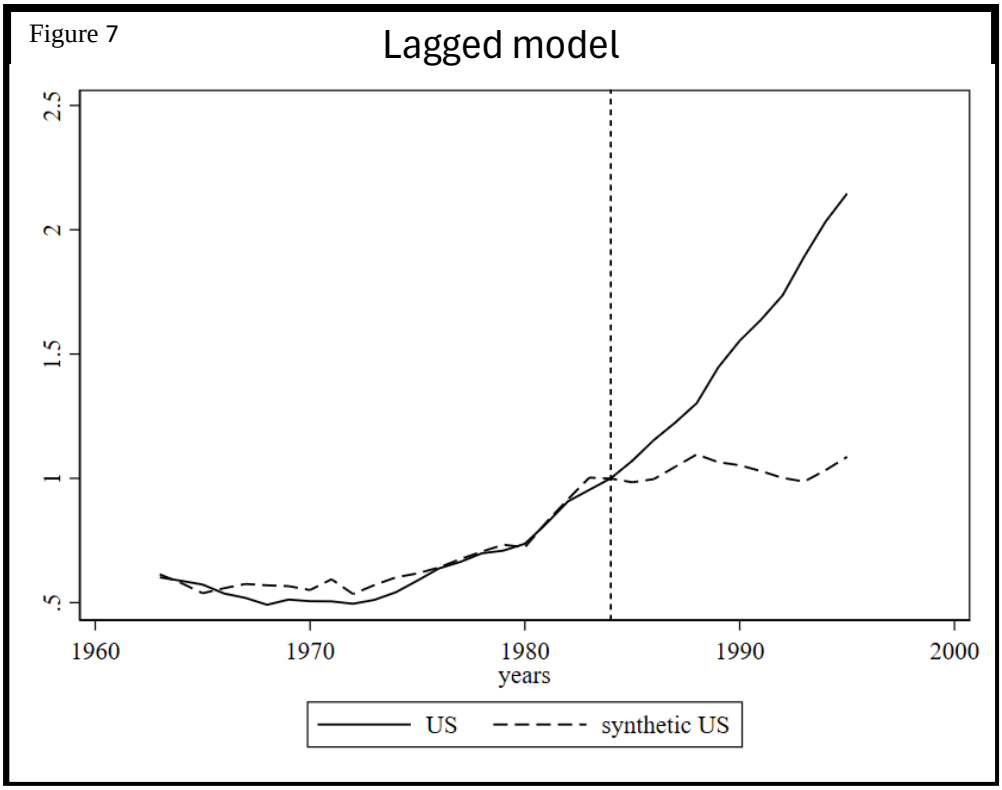


Figure 7


Lagged model
2.5
2
1.5
1
.5
1960
1970
1980
1990
2000
years
US
synthetic US