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Term Paper

Public vs. Private: Analysis of the 2009 Privatization of the Federal Prison System in Mexico

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Abstract

The primary objective of the prison system should be to protect society from crime and prepare people for reintegration, in Mexico this is not happening. At the federal level, one possible explanation of this is the presence of private centers. This study examines the impact of the 2010 privatization on the overall quality of services and rehabilitation efforts in the federal prison centers in Mexico. Using the ENPOL for 2021 and a fixed effects model controlling for individual characteristics, I provide correlational evidence that private centers are rated worse on average than public ones, and are associated with worse physical and mental health outcomes. Although not causal, these results are significant for two main reasons: (1) the effects are significant and negative across almost all dependent variables, which suggest that although the estimates are biased, the direction of the effects are probably correct, and (2) results seem to be in line with the theoretical predictions, since the effects seem to be of higher magnitude in goods and services where quality is not easily contracted on, such as drinking water and food quantity.

Keywords: public economics, privatization, contractible quality, non-contractible quality

Contents

1 Introduction

The violence spiral that Mexico has been suffering for the last six years is far from ending and criminality rates continue increasing. As of 2020, INEGI estimates that out of 100 thousand people, around 30 thousand have been victims of a crime. These clearly comes at an economic cost, as a result of insecurity and household related crimes, the Mexican economy loses around 277.6 billion pesos annually, that is, 1.85% of GDP (ENVIPE (2021)). Moreover, in March of 2022, some three thousand people had been murdered and almost four thousand missing persons had been registered since the beginning of the year[1]. The magnitude of the problem is really huge and new solutions need to be explored.

As adequately said by Saskia Niño de Rivera[2], prisons are rarely thought of as a solution to the violence problem in Mexico, they are mostly thought of as the last link in the chain of security, when they should be a priority (Niño de Rivera (2022)). In a certain way, the primary objective of deprivation of liberty should be to protect society from crime and prepare people for reintegration, and this is currently not happening in Mexico. As of September 2021, approximately 222,600 people were incarcerated in Mexico in 288 penitentiary centers in the country, half of them reported overcrowding. Also, recidivism rates are increasing and about 43% of people in prison have not received a sentence yet (UNODC & ENPOL (2021)).

In 2009, President Felipe Calderon signed contracts to construct 10 private federal prisons in Mexico as a solution to the problems faced by the system. However, the extent to which private parties care to solve any of the problems described above is unknown and probably not enough. Actually, there exists anecdotal evidence that costs have increased, quality of life and rehabilitation efforts have decreased and that contracts lack transparency. Also, there are concrete arguments as to why private prisons are worse than the public ones. For example, it's a proven fact that the private prison facilities are farther apart from cities and access to them is more difficult than public ones, making familiar visits more difficult (México Evalua, 2015). Therefore, it is important to empirically quantify these effects to fully understand this issue and contribute to the public versus private procurement of goods debate.

[1]"Marzo, el mes más sangriento del año y el baile de las cifras de muerte", El País. https://elpais.com/mexico/2022-04-20/marzo-el-mes-mas-sangriento-del-ano-y-el-baile-de-las-cifras-de-muerte.html

[2]Founder of Reinserta which is an ONG focused on helping children that live in prisons with their mothers find spaces to develop their skills and talents.

This study examines the impact of this privatization on the overall quality of services and rehabilitation efforts in the federal prison centers in Mexico. It fills an important gap in the literature of private versus public procurement of goods and services, which has focused mostly on highly institutionalized contexts such as the United States and Scandinavia. It is still unclear whether this results obtained in developed countries generalize well to less institutionalized contexts, such as Mexico, where contracts are not always enforced and corruption is highly present.

Most of the current economic literature focusing on institutionalized contexts has concentrated in the fact that incomplete contracts are prevalent. Hart et. al (1997) argued that because of a lack of ownership rights, government employees have weak incentives to innovate and to improve costs and/or quality. However, private contractors tend to over-reduce cost at the expense of non-contractible quality. Moreover, economic literature suggests that the case for privatization is stronger when quality-reducing cost reductions can be controlled by contract, competition is effective (Vickers and Yarrow (1988)), innovation is important (Bergman et al. (2016)) and/or government suffers from patronage or inefficiency (Lopez-de-Silanes et al. (1997)). While the case is weaker when cost reductions are more likely to lead to non-contractible deterioration of quality (Knutsson & Tyrefors (2021)), innovation is relatively unimportant and competition is weak (Shleifer (1998)). Also, this decision could be political (Merilainen & Tukiainen (2019)) and could be influenced by corruption[3].

Thus, the decision from the government to provide a service inhouse or contract it out is not a trivial question. If done correctly, privatization could potentially lead to an increase in efficiency and quality. However, in certain contexts, the profit-maximization induced cost reduction leads to a decrease in quality, that could ultimately lead to an increase in human deaths (Knutsson & Tyrefors (2021)). In a prison context, taking the incorrect decision could potentially lead to an increase in violence internally, human rights violations and/or an increase in recidivism due to a lack of rehabilitation. According to theory, prison services are characterised by unverifiable outcomes and moral hazards, and a high level of contracting difficulty (Andersson et al. (2019)). Empirical evidence suggests, contrary to politicians beliefs, that for-profit management leads to an increase in recidivism rates in juvenile correction facilities (Bayer & Pozen (2005)) while no significant effect in Florida inmates (Bales et al. (2005)). Moreover, Armstrong and Mackenzie (2005) find no significant differences in reported environmental qualities across public and private centers. Even though the evidence is mixed, it seems that it slightly

[3]Around the time of the adjudication of contracts, Mexico's infrastructure industry was catalogued as the most corrupt in the world (México Evalua (2015))

favors public prisons.

Now, to understand the differences between the quality and availability of services provided by private and public prisons in Mexico, I use the ENPOL (National Survey of Population Deprived of Liberty) for 2021. This survey covers almost all aspects of life in prison, from the period of detainment to the actual life in a cell, and includes questions related to the standard of living and rehabilitation options offered. to provide evidence of the differences between the perception of quality across both groups, I use 6 questions where individuals are asked to rate different goods and services provided by each center, such as the drainage system, the drinking water and the toilets. Also, to understand the consequences of these differences, I use other 6 yes or no question, that are related to physical and mental health outcomes and capture the availability and quality of the food and some reinsertion activities, such as the education received.

Using a fixed effects model, and controlling for all observed significant individual characteristics, I present evidence that private centers are rated worse on average than public ones, and are associated with worse physical and mental health outcomes. Although not causal, these results are significant for two main reasons: (1) the effects are significant and negative across almost all dependent variables, which suggest that although the estimates are biased, the direction of the effects are probably correct, and (2) there is no distinction between effects in quality-contractible services and non-contractible ones, which could be influenced by the fact that contracts are not being enforced in Mexico.

The rest of the paper is organized as follows. The next section addresses the institutional and political context. Section 3 presents the data and empirical design, followed by Section 4, that presents the results and a discussion around them. Section 5 concludes.

2 Background

2.1 Institutional and Political Context

In 2010, President Felipe Calderón assigned contracts to build 10 CEFERESOS (Federal Reinsertion Centers) arguing that the private sector had more resources to provide better conditions for inmates and to contribute to the reintegration of these people into society. It also constituted a state response to the problem of overcrowding in federal centers. The contracts granted a consortium of companies the construction, maintenance and operation of a penitentiary center for at least 20 years. During this

period, the contracts stated that the private company should also assume the provision of food, maintenance, recreation, reinsertion activities, treatment against alcoholism and drug addiction, among others, while receiving the payment of a fee per inmate from the government. Public institutions would only be in charge of providing security services inside the prisons. The name of this modality is Service Provision Contract (CPS, by its acronym in Spanish)[4], where the State maintains ownership of the center and requires specified service (México Evalua (2015)). The concessions made for construction and operation of these CEFERESOS were awarded via direct adjudication, under unknown criteria and without any public tender (Díaz Sandoval & Espejel (2015)).

There are currently 18 fully functional federal prisons in Mexico, 8 of them are privately owned while 10 are publicly owned. Out of the 8 private centers, 7 are male's centers and 1 is female's (CEFERESO NO. 16 CPS FEMENIL MORELOS). In average, private prison centers have more capacity and are thus bigger in size. The average capacity for private prison centers is 2,541 inmates, while public ones' is 972. Out of all of this centers, 14 are of maximum security (CEFERESOS), including all of the private ones.

3 Data and Empirical Strategy

To understand the differences between the quality and availability of services provided by private and public prisons, I use the **ENPOL** (National Survey of Population Deprived of Liberty) for 2021. This survey covers almost all aspects of life in prison, from the period of detainment to the actual life in a cell, and includes questions related to the standard of living and rehabilitation options offered. One can also categorize each observation as coming from a federal private, federal public or a state prison. Since state centers are completely state-owned and there is only one female federal prison in the full sample, I reduced the analysis to the federal male level. Table 1 presents the number of observations for each group after filtering, as well as the total number of observations included in the sample. As seen in column 1, 37 percent of the individuals in the sample are currently at a public prison while 63 percent are at a private one. Appendix 1 shows a more detailed description of each of the centers, as well as the number of observations per center and the state where they are located.

The richness of these data allows me to control for a large number of individual and center characteristics that are likely correlated with the way prisoners rate the goods and

[4]Thus the names of the private prison centers, for example: CEFERESO 11 CPS Sonora.

Type of Center	N	Percentage	Total
Public	1943	37.1%	
Private	3297	62.9%	5240

Table 1: Number of Observations per Group - Private and Public

services at each center and whose absence might otherwise confound my estimates. Table 3 in the Appendix compares the differences in mean characteristics of public prisons to private prisons. Because of the lack of an experimental design, it is important to understand if the possible confounders are significantly different across groups, to further include them in our Specification. To do this I compute the following t-test for each characteristic i:

$$\begin{aligned} \mathrm{H}_0: &\quad \mu_i^{priv} = \mu_i^{pub} \\ \mathrm{H}_1: &\quad \mu_i^{priv} \neq \mu_i^{pub} \end{aligned}$$

In average, both groups statistically differ in several current and prior, personal and household characteristics. The most relevant ones being: schooling, literacy rates, age, marital status, prior income level and time sentenced[5] More explicitly, out of 49 characteristics, 26 are significantly different at a 95 percent level of confidence. In conclusion, there is no statistical evidence in favor of balance of groups. Even if there existed, the probable presence of unobserved confounders would not have let me conclude causality from a simple OLS regression. This is further discussed in the next section.

Now, to quantify overall quality, I use 6 questions from the survey where individuals are asked to rate, from 'Very Satisfied' to 'Very Dissatisfied', different goods and services. Figure 1 presents two services, available drinking water and drainage system. These two services are presented to compare goods that most of its aspects can be contracted, which is a drainage system; and one where cost reductions are more likely to lead to non-contractible deterioration of quality, which could be drinking water.

[5]Table 6 and 7 from the Appendix present the Balance Table for all personal, household health, prior income, work and crimes sentenced characteristics. These tables are also informative of the controls used in Specification 1 presented later.

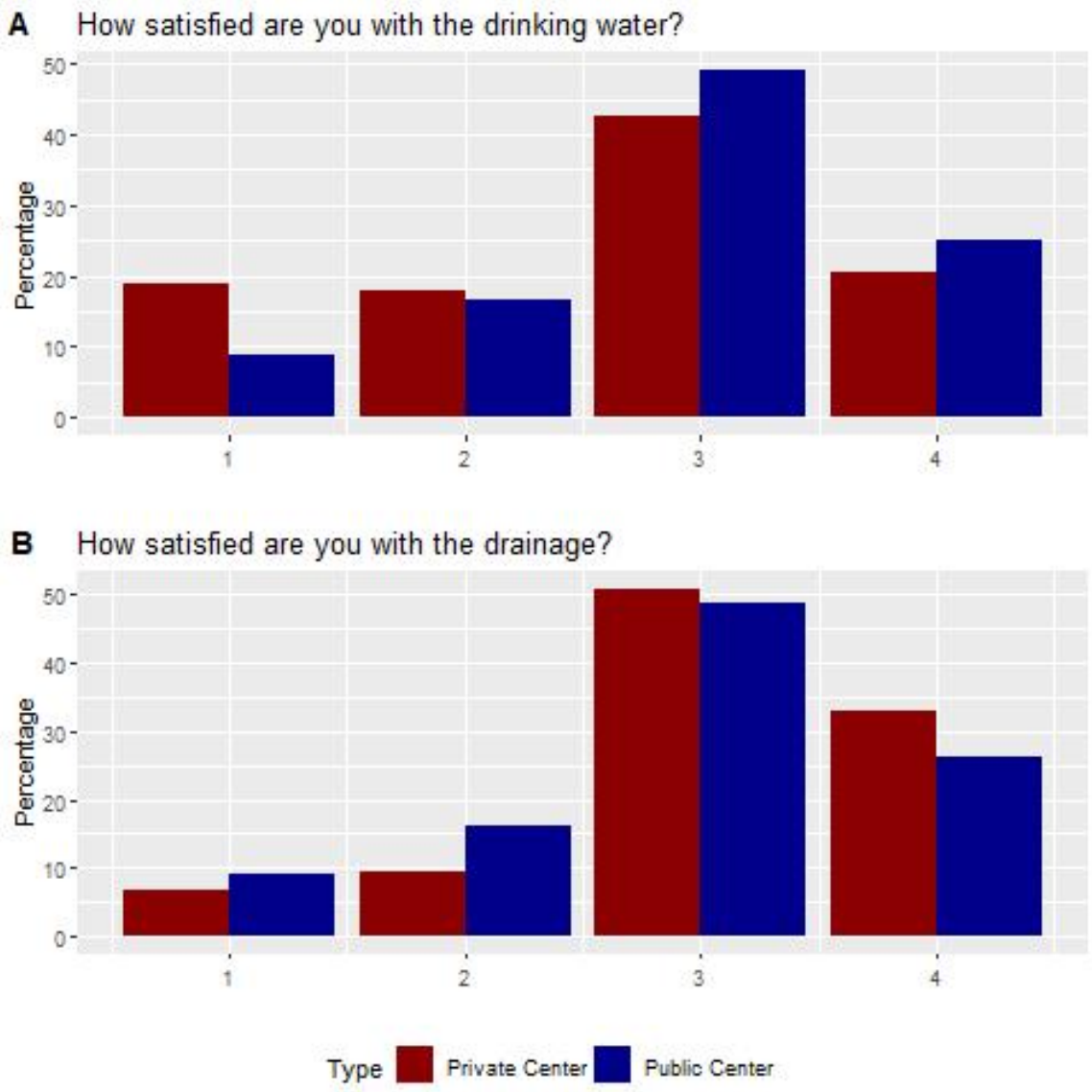

Figure 1: This figure presents the group ratings for the drinking water (top) and drainage system (bottom) services provided by each private (red) and public (blue) center. The bar-plots represent the percentage of people per group that answered that they were: Very Dissatisfied (1), Somewhat Dissatisfied (2), Somewhat Satisfied (3) or Very Satisfied (4).

The quality of water is subjective, and it is easier, when faced with an audit, to change the provision of water, than changing the whole drainage system. In other words, if contracts were constantly enforced, private parties could lower costs by reducing the quality of water, but could not reduce them by reducing the quality of the drainage system. Thus, Figure 1 presents the first evidence in favor of Shleifer's (1997) predictions,

since individuals rate worse the drinking water in private prisons than in public ones, and the opposite for the drainage system. Figure 2 in the Appendix B presents the ratings for the other 4 serviced which are related to contractible quality: lights, showers, goods and toilets. In average, all of these services, except drinking water, are significantly better rated in private centers than in public ones, as presented in Table 8 in Appendix A.

Lastly, to account for other possible relevant outcomes related to the status of the center, I analyze other questions related with the physical and mental health of inmates, as well as the availability and quality of food and reinsertion activities supplied by each center. Table 2 presents each question, as well as the percentage of people that answered yes per group. Supporting the theoretical predictions, individuals at public centers study more and feel less insecure than private ones. However, food, which is a great example of a good where firms can reduce costs at the expense of non-contractible quality, seems to be perceived as of better quality and of more quantity in private centers.

Variables	**Public**	**Private**
Are you currently studying in your center?	33.52	16.79
Have you ever felt insecure in your center?	66.70	69.59
Is the food of good quality?	23.14	42.24
Is the food sufficient in quantity?	24.24	27.87
Have you gotten sick from eating the food?	80.11	66.80
Have you thought of committing suicide?	11.33	13.70

Table 2: This table presents descriptive statistics for the outcomes of interest, as well as the actual questions asked in the survey (Column 1). Column 2 and 3 report the percentage of people that answered yes to the question per group, public and private, respectively.

3.1 Empirical Strategy

My main objective is to test whether being in a private center affects the overall perception of quality by the inmates, as well as some physical and mental health outcomes. As the economic literature presented on Section 1 predicts, private centers should, on average, provide worse services where quality is non-contractible, than their public counterparts. However, as already mentioned, it is unclear if these predictions generalize well to weakly institutionalized settings where not even contractible quality is

enforced. Thus, the main prediction of this paper is that, on average, private institutions are perceived by inmates to provide worse overall quality in their services than their public counterparts, and lead to worse physical and mental health outcomes, consequently. To estimate these effects, the ideal experiment would be to randomly assign each federal offender to a private or public prison and measure the short-term difference in perception and relevant outcomes across these two groups[6] Unfortunately, this experiment design does not exist, and it is unlikely that it will, so I instead compare individuals in a private prison, to individuals in a public prison, using the following regressions:

$$rate_i^e = \beta^e Priv_i + \gamma^e X_i + \mu_i + \epsilon_i \tag{1}$$

Where $Priv_{it}$ is a dummy variable which is 1 if the prison is private and 0 if it's public. The index e refers to each service rated by the inmates from 1 to 4. X is a collection of control variables, chosen based on the statistical significance of the mean-difference tests and their economic significance[7]. The estimator of interest is β, which quantifies the effect of being assigned to a private prison in the outcome of interest $rate^e$, in comparison to being assigned to a public prison. Furthermore, I estimate the next Linear Probability Model to quantify the probability that an individual i suffers outcome out^a, given that he is in a private prison in comparison to a public one.

$$out_i^a = \beta^a Priv_i + \gamma^a X_i + \mu_i + \epsilon_i \tag{2}$$

μ_i are state fixed effects to account for any state-specific unobservable that might affect any of these outcomes. It also controls for any differences across states and across time between these centers. The term ϵ_i denotes unobserved (to the econometrician) individual and center characteristics that determine physical and mental health, as well as the perception of quality of services.

In estimating Equations 1 and 2, I face one main challenge. Without random assignment of individuals across public and private centers, unobserved characteristics of the individuals and of the centers that affect both the assignment and the outcomes (e.g. intelligence, corruption at the court and unobserved personality traits) will bias the OLS

[6]Since there exists a law that states that criminals should be assigned to the closest center, the experiment would also have to be in a setting where the two prisons are close to each other, for example in Durango, where there is a private and a public prison. Also, timing is important, since life in prison could possibly change the personality, habits, and other unobserved factors that could bias the long term incidence of the treatment.

[7]Some characteristics, although not significant at the 5% level, were included in the estimation due to their huge economic importance (and to be sure).

regression. Thus each estimation has to be taken with caution, and no causality can be concluded from them.

4 Results and Discussion

This section provides evidence that private prison centers are rated worse on average and lead to worse physical outcomes than being in a public one. These findings are not causal but are in general consistent with the theory and across different dependent variables.

4.1 Ratings

Table 3 presents regression results from estimating Equation 1 with different dependent variables, in this case, ratings for each of the service described in the Section 3. All specifications include individual characteristics as controls, as well as state fixed effects. From the relationship in each column we see that private centers are associated with lower ratings in their provision of all of the included services. These differences are significant across all services.

Notice that being in a private prison is associated with a 1.342 lower rating of the drinking water service as compared to the public one. This effect is the biggest one, which is interesting since is the service where it is more difficult to contract quality. However, it is also really interesting that after controlling for individual and center characteristics, the effects turn out to be negative and significant across all services. This provides evidence that contracts are probably not being enforced, and private prisons are reducing costs at the expense of contractible and non-contractible quality.

4.2 Other Outcomes

To provide further evidence in favor of public procurement of prison services, Table 4 presents regression results from estimating Equation 2 across the different dependent variables explained in Table 2. Again, all specifications control for individual characteristics and include state fixed effects. Each coefficient needs to be interpreted carefully since they depend on the question asked. For example, the probability associated with being in a private prison of inmates answering that they have received enough quantity of food is 23.9 percent lower than in public centers. The same interpretation for Column 4 and 6, but for quality of food and for studying. Now, the probability of ever feeling insecure associated with being in a private prison is 35.5 percent lower than in public

	Dependent variable:					
	Goods	Drainage	Toilets	Showers	Drinking Water	Lights
	(1)	(2)	(3)	(4)	(5)	(6)
private	-0.517^{***}	-0.680^{***}	-0.647^{***}	-0.743^{***}	-1.342^{***}	-0.346^{**}
	(0.163)	(0.165)	(0.114)	(0.152)	(0.126)	(0.147)
Controls	YES	YES	YES	YES	YES	YES
State Fixed Effects	YES	YES	YES	YES	YES	YES
Observations	2,408	2,859	2,871	2,870	2,799	2,839
R^2	0.088	0.087	0.088	0.074	0.168	0.092
Adjusted R^2	0.072	0.074	0.074	0.061	0.156	0.078

Table 3: The Effects of Private Procurement on Quality Perception - This table reports the effects of being in a private prison in comparison to being in a public one on the perception of quality of the services provided by each center. Columns 1-6 present the results of the OLS regression for the dependent variables described in Figures 1 and 2. Controls include age, race, schooling, children, income prior to arrest, literacy (read and write), health dummies (diabetes, hiv, cancer and COVID), marital status, sentence, time in prison, type of crime (organized crime, violent, drug related, rape, or gun related) and if the individual is a re-offender. Robust standard errors are displayed in brackets. Significantly different than zero at $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$ significance level.

prisons. Meaning there's correlational evidence suggesting individuals in public prisons feel less safe than their private counterparts. The other two effects are not significant, but Column 1 and 5 suggest individuals in private prisons are more prone to think of committing suicide while less prone to get sick from the food provided by the center.

Without over-interpreting these correlational results, one could argue that security is more contractible than the amount of food served and the availability of reinsertion activities offered, such as education. Violent outcomes, such as homicides, injuries and brawls inside the centers are registered and almost impossible to hide them. Thus, private parties have incentives to invest in better security installations to prevent any type of altercation from happening. In fact, there is anecdotal evidence suggesting that private prison centers have, on average, more security doors, are bigger in size and allow inmates

from coming out of their cell less times (México Evalua (2015)).[8]. All this reasons also can explain why individuals in private centers feel more safe than their public counterparts, without it being a desirable thing. In this particular sense, these results support the theoretical prediction that when dealt with cost-reductions, private companies will reduce non-contractible quality.

	Dependent Variable					
	Suicide Thoughts	Insecure	Food Quantity	Food Quality	Food Sickness	Study
	(1)	(2)	(3)	(4)	(5)	(6)
private	0.057	-0.355^{***}	-0.239^{***}	-0.076	-0.060	-0.374^{***}
	(0.052)	(0.065)	(0.090)	(0.086)	(0.079)	(0.079)
Controls	YES	YES	YES	YES	YES	YES
State FE	YES	YES	YES	YES	YES	YES
Observations	2,871	2,855	2,865	2,859	2,867	2,869
R^2	0.052	0.091	0.063	0.162	0.108	0.134
Adjusted R^2	0.039	0.078	0.050	0.150	0.095	0.121

Table 4: Other Outcomes - This table reports the probability of have suffered any of these possible outcomes given that you are in a private center, in comparison with being in a public one. Columns 1-6 present the results of the OLS regression for the dependent variables described in Table 2. Controls include age, race, schooling, children, income prior to arrest, literacy (read and write), health dummies (diabetes, hiv, cancer and COVID), marital status, sentence, time in prison, type of crime (organized crime, violent, drug related, rape, or gun related) and if the individual is a re-offender. Robust standard errors are displayed in brackets. Significantly different than zero at *p<0.1; **p<0.05; ***p<0.01 significance level.

[8]The anecdotal evidence is actually presented to emphasize the fact that visits are more difficult because of the quantity of security doors and checkpoints, the size of the place and because inmates are put in solitary very often.

4.3 Discussion

Although, in my opinion, these results seem very interesting, a lot of caution needs to be taken out when concluding from them. There are several possible sources of bias, which are going to be discussed in this section, that might be biasing the magnitude of my estimates and even the direction of some of them.

First of all, since it is a survey, it is probably biased by some social acceptance bias, mostly in questions where inmates are ashamed of answering honestly, such as drug consumption. Actually, a high proportion of individuals in both groups didn't even answered this questions, probably because they didn't want to lie[9]. This leads to the other possible source of bias: although several personal characteristics are included in the regressions, there is no way of knowing if these variables are actually controlling for the actual observable confounder, since many respondents either do not answer or could be lying. For example, when controlling for type of crime, again the sample reduces like a thousand observations, meaning a lot of individuals did not want to answer for what crime they were convicted. Either because they were ashamed, or because they claim they are innocent (which they could be).

The third possible source of bias, is selection bias, since we do not have a empirical strategy that allows us to control for unobserved characteristics between groups, is possible that these unobserved confounders are biasing the magnitude of our estimates and even the direction of some of them. So, although the results seem to be consistent across all dependent variables in favor of public prisons, one cannot conclude firmly that they are better. However, it is a first great step and a call for a better experiment to be done or better data to be recollected.

5 Conclusion

The primary objective of the prison system should be to protect society from crime and prepare people for reintegration, in a country with the level of criminality rates and violence like Mexico, the correct operation of this system is of utmost importance to not allow it to contribute to the insecurity already present. Although several politicians and economists argue that privatization is a great option to reduce costs and increase efficiency, empirical and theoretical evidence suggests that it depends on the context.

For the particular case of prisons in Mexico, it seems from the correlational results obtained in this paper and presented in Section 4, that public prisons are on average rated

[9] if they didn't consume a certain drug, they could have perfectly and almost proudly answered 'no'

better than private prisons in almost all services, and lead to better physical outcomes than private ones. The effects seem to be of higher magnitude in goods and services where quality is not easily contracted on, such as drinking water and food quantity. Most of these results are in line with the theoretical predictions presented by Shleifer in 1997 and with the anecdotal evidence provided by México Evalua in 2015.

Future steps include using the 2017 survey to increase the sample and make an analysis by sector, or even by state, where it is more probable that assignment to each center was quasi-random, and also being able to delete all NA values without worrying about statistical power. Also, to answer another question related with prisons, I will use the Judicial Statistics around the date of the privatization to quantify the possible effects on petty crimes sentences, and other relevant outcomes.

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7 Appendix

7.1 Appendix A: Tables

Centers	State	Private	N	Percentage
CEFERESO 1 ALTIPLANO	State of Mexico	0	250	4.8
CEFERESO 11 CPS SONORA	Sonora	1	627	12.0
CEFERESO 12 CPS GUANAJUATO	Guanajuato	1	661	12.6
CEFERESO 13 CPS OAXACA	Oaxaca	1	559	10.7
CEFERESO 14 CPS DURANGO	Durango	1	733	14.0
CEFERESO 15 CPS CHIAPAS	Chiapas	1	77	1.5
CEFERESO 16 CPS MORELOS	Morelos	1	2	0.0
CEFERESO 17 CPS MICHOACAN	Michoacan	1	53	1.0
CEFERESO 4 NOROESTE	Nayarit	0	746	14.2
CEFERESO 5 ORIENTE	Veracruz	0	613	11.7
CEFERESO 7 NOR-NOROESTE	Durango	0	47	0.9
CEFERESO NO 8 NOR-PONIENTE	Sinaloa	0	287	5.5
CEPEFE 18 CPS COAHUILA	Coahuila	1	585	11.2

Table 5: List of Included Centers. Column 3 is a dummy variable which indicates if the center is privately owned (1) or publicly owned (0). Column 3 and 4 report the number of observations per center and the percentage they represent from the total, respectively.

Variable	Public	Private	P-value
Personal Characteristics			
Bisexual	0.007	0.006	0.6841
Homosexual	0.004	0.005	0.3990
Heterosexual	0.990	0.988	0.6746
Other sexual or.	0.000	0.001	0.1573
Cisgender	0.997	0.995	0.1865
Transexual	0.002	0.003	0.4871
Dialect	0.039	0.036	0.5566
Afro-descendant	0.026	0.017	0.0589
Indigenous	0.128	0.131	0.8021
Other race	0.846	0.851	0.5849
Age***	39.399	36.788	0.0000
Literacy (read)***	0.987	0.974	0.0007
Literacy (write)***	0.986	0.971	0.0003
Schooling***	4.288	3.830	0.0000
Household Characteristics			
Child Dummy*	0.664	0.688	0.0786
# of Children***	1.361	1.483	0.0034
Age 1st Child***	11.918	10.879	0.0000
Age 2nd Child	9.917	9.650	0.1312
Age 3rd Child	8.562	8.511	0.8385
Divorced*	0.042	0.032	0.0711
Free union***	0.172	0.255	0.0000
Married***	0.297	0.235	0.0000
Separated	0.262	0.282	0.1192
Single***	0.212	0.179	0.0037
Widower	0.014	0.017	0.4670

Table 6: This table reports the balance table of the personal and household characteristics of inmates. Column 2 and 3 report the mean for each group, public and private, respectively. Column 4 reports the p-value from a mean difference t-test. These statistics were computed for all available observations, without modifying NA values. *p<0.1; **p<0.05; ***p<0.01

Variable	Public	Private	P-value
Health and Drug Consumption			
Cancer	0.005	0.003	0.1940
Covid***	0.080	0.045	0.0000
Diabetes	0.058	0.053	0.4252
Hepatitis**	0.029	0.042	0.0135
HIV***	0.002	0.008	0.0025
Hypertension***	0.144	0.087	0.0000
Neumonia	0.025	0.025	0.8813
Tuberculosis	0.009	0.013	0.1987
Drugs***	0.019	0.052	0.0000
HardDrugs***	0.0160	0.048	0.0000
Prior Income Characteristics			
Prior Debt	0.329	0.321	0.5326
Prior Housing condition	1.293	1.274	0.5067
Prior Income**	3.626	3.485	0.0113
Re-offender***	0.155	0.207	0.0000
Prior Food Scarcity	0.917	0.921	0.6470
Work dummy	0.995	0.992	0.1358
Crimes and Sentencing Status			
Time sentenced (years)***	18.435	22.974	0.0000
Time incarcerated (years)***	4.804	4.418	0.0000
Drug related***	0.356	0.247	0.0000
Gun related***	0.461	0.359	0.0000
Homicide***	0.102	0.150	0.0001
Rape***	0.002	0.013	0.0000
Kidnapping***	0.150	0.243	0.0000
Organized Crime***	0.188	0.138	0.0004

Table 7: This table reports the balance table of the health, drug consumption, prior income and sentencing status characteristics of inmates. Column 2 and 3 report the mean for each group, public and private, respectively. Column 4 reports the p-value from a mean difference t-test. All these statistics, except hard drugs and drugs (NAs to 0), were computed for all available observations, without modifying NA values. *p<0.1; **p<0.05; ***p<0.01

Table 8: Ratings Specifications

	Dependent variable:					
	Goods	Drainage	Toilets	Showers	Drinking Water	Lights
	(1)	(2)	(3)	(4)	(5)	(6)
private	0.035	0.176***	0.139***	0.016	−0.257***	0.183***
	(0.028)	(0.025)	(0.024)	(0.025)	(0.027)	(0.025)
Observations	4,355	5,209	5,236	5,232	5,104	5,179
R^2	0.0003	0.010	0.007	0.0001	0.016	0.011
Adjusted R^2	0.0001	0.010	0.006	−0.0001	0.016	0.011

Note: *p<0.1; **p<0.05; ***p<0.01

7.2 Appendix B: Figures

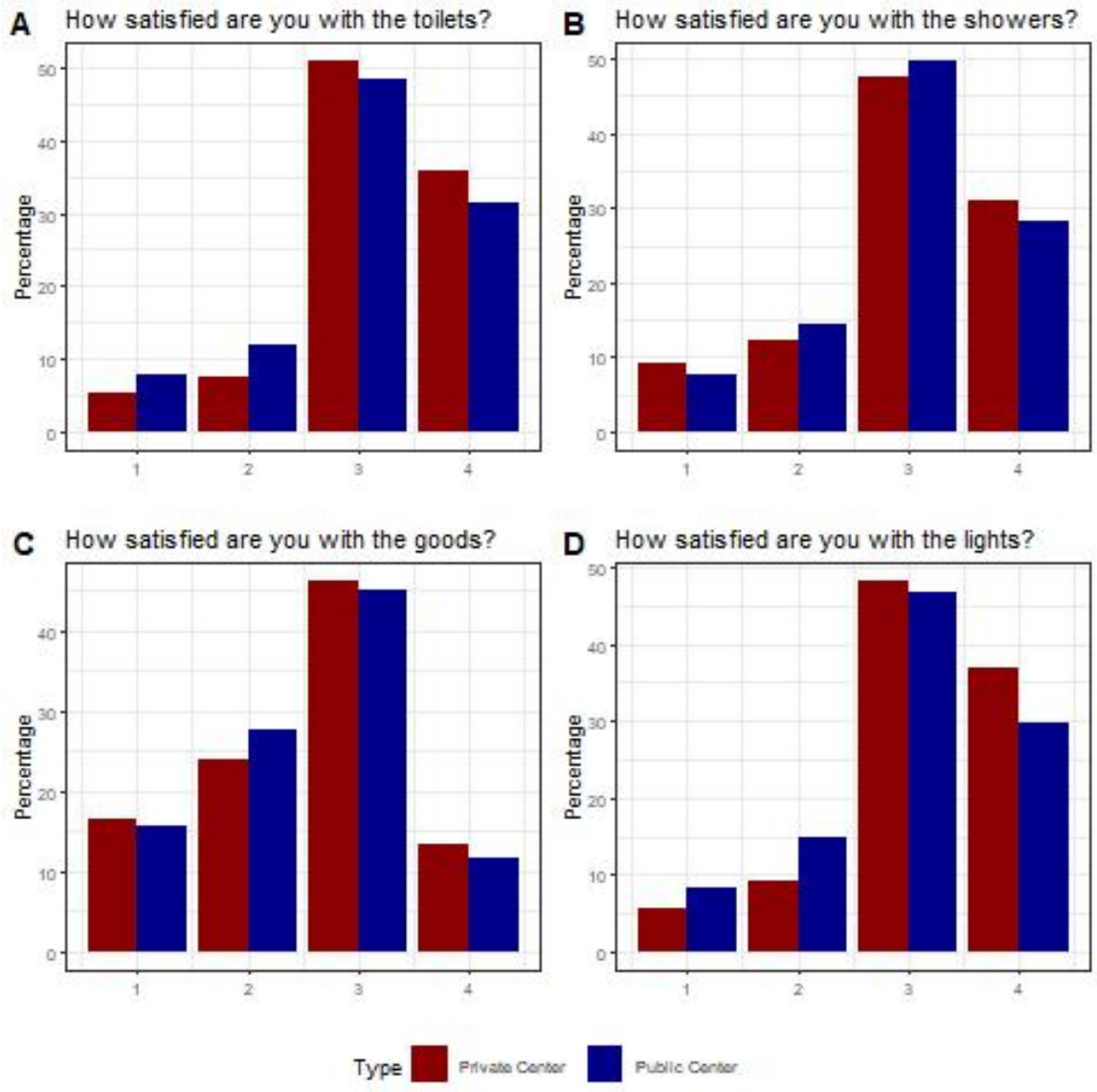

Figure 2: Contractible Quality. Group ratings for the toilet (top left), shower (top right), goods (bottom left) and lights (bottom right) services provided by each private (red) and public (blue) center. The bar-plots represent the percentage of people per group that answered that they were: Very Satisfied with the service (4), Somewhat Satisfied (3), Somewhat Dissatisfied (2) or Very Dissatisfied (1).