

# State Capacity and COVID-19 lockdowns

- a Case-Study on Brazil, Chile and Paraguay.



# Abstract

This paper tests the applicability of state-capacity theories concerning countries decision to carry out national 'lockdowns' during the initial phase of the COVID-19 pandemic. It draws on previous research by Axel Cronert and deepens his conclusion of high state-capacity's connection to a slow implementation of disruptive measures through a contrasting qualitative analysis. By measuring infrastructural state-capacity via a definition from Hillel D. Soifer a multiple-case study on Brazil, Chile and Paraguay is made. By evaluating statistics and empirical investigations I conclude that there seems to be a positive correlation between some aspects on infrastructural state capacity and slow implementation of national quarantines. These findings suggest that a more detailed qualitative study should be issued in order to further the potential understanding of this phenomenon.

*Keywords:* coronavirus disease 2019 (COVID-19), state-capacity, quarantine, Paraguay, Chile, Brazil

*Wordcount:* 7399

# Table of Contents

## **1. Introduction**

1

1.1. Problem and Purpose

2

1.1.2. Question of Issue

2

## **2. Method**

3

2.1. Selection of Cases

4

2.2. Material and procedure

4

2.3. Result and analysis

5

2.4. Validity and Reliability

5

2.5. Delimitation

6

2.5 Critique

6

## **3. Theoretical Framework**

7

3.1. State Capacity

7

3.1.2. Security

9

3.1.3. Administration

10

3.1.4. Extraction

11

3.2. Quarantine & State Capacity

11

## **4. Result & Analysis**

13

4.1. Paraguay

13

4.1.2. Security

	13
4.1.3. Administration	14
4.1.4. Extraction & Summary	14
4.2. Brazil	15
4.2.1. Security	15
4.2.2. Administration	16
4.2.3. Extraction & Summary	16
4.3. Chile	17
4.3.1. Security	17
4.3.2. Administration	18
4.3.3. Extraction & Summary	18
4.4 Summary Scheme	19
<b>5. Analysis &amp; Conclusion</b>	<b>20</b>
5.2. Further research	21
<b>7. References</b>	<b>22</b>

# 1. Introduction

State-capacity is a multi-faceted term widely used in political science when discussing why, how, and when states act the way they do. Work in progress research from Axel Cronert shows that states with higher state-capacity tend to implement disruptive measures later compared to states with lower state-capacity(Cronert, 2020, p.11). I intend to investigate whether this can explain states behaviour when deciding to quarantine its population during the outbreak of the COVID-19 pandemic. During the spring of 2020, the world responded to the global pandemic of a new type of coronavirus named COVID-19. To address the spread of the virus governments took to unparalleled disruptive measures like travel restrictions, curfews, school closings and quarantines(WHO, 2019). Whether the countries lay on the left, the right or the in-between did not seem to play a part when choosing which type of measures to use. Therefore it is relevant to use an analysis-tool that captures the bigger picture and help to explain when and why the national quarantine got implemented. Hence the impact of state-capacity.

State-capacity, which Michael Mann described as “the capacity of the state to actually penetrate civil society and implement logistically political decisions throughout the realm” (Mann, 1984, p. 189) is of interest here as institutional and political factors have been found to influence how governments respond to pandemics and other crises(Salajan et al. 2020).

Although it is still too early for any thorough analysis of the crisis response, it is possible to analyze some non-pharmaceutical measures that have been widely implemented and for which comparable data already is available. I will focus on the implementation of national quarantines through a case study on Brazil, Chile and Paraguay. In Latin America 13 out of the 17 countries have imposed some sort of quarantine, still ongoing as of April 24(BBC, 2020). Practices which reduce the probability of contact between people has emerged as the primary tool for reducing the spread of the coronavirus that causes COVID-19. Other methods for fighting infectious disease are mostly unavailable or ineffective due to the characteristics of this virus(WHO, 2019).

The implementation of quarantine is then in some ways expected as it may help slow the spread of the virus by drastically increasing social distancing. As the pandemic during the time of writing is still on-going it might be argued that the

paper is written too early which would negatively impact its validity. National quarantines or 'lockdowns' is something that you could already investigate due to it being a 'hard fact' - that meaning it has already happened - and it is safe to assume that we have seen the end of the first wave of obligatory quarantines (BBC,16 May 2020) My interest here lays in analyzing the countries behaviour in regards to national quarantine through theories of state- capacity.

## 1.1. Problem and Purpose

The purpose of this essay is to analyze whether state capacity could be considered a significant factor in how and when countries handled the outbreak of COVID-19. The cases of Brazil, Chile and Paraguay are of specific interest as there exists a telling diversity between them. Cronert released work-in-progress research of how theories of administrative state-capacity and democracy affected the timing of implementation of school-closures in relation to COVID-19(Cronert, 2020). I argue that quarantines exist in the same sector of "disruptive measurements" and I am interested in testing Cronerts preliminary results. This will hopefully modestly contribute to the expansion of the theories used when trying to explain state crisis management in response to COVID-19. I expect to find a correlation between high degrees of state capacity and slower implementation of quarantine in line with Cronerts preliminary results. Apart from it being of global interest, it is also relevant within the field.

### 1.1.2. Question of Issue

Could theories of state-capacity be used to explain countries decision in when to impose a quarantine on its population in relation to COVID - 19?

- a Case-Study on Brazil, Chile and Paraguay

## 2. Method

This essay is a qualitative describing case study where the aim is to on a theoretical and empirical level, test and develop theories of state capacity. I will investigate whether state-capacity theories can be successfully implemented and considered a significant factor when explaining countries behaviour during the COVID-19 pandemic. In extension, I'll test Axel Cronerts preliminary hypothesis.

To do this I will first discuss and determine the definitions and operationalizations of my terminology. The focus here lays on state-capacity, disruptive measures and quarantine. Further, I will use the cases of Brazil, Chile and Paraguay to test my assumption and focus the study in March 2020.

There are countless entrances to analyze and investigate the hypothetical explanations to why states behave they did/do in connection to the COVID-19 outbreak. State-capacity as a term is famously multi-dimensional and I will for the sake of functionality pin it down via Michael Mann, Hillel D. Soifer and Axel Cronert. Mann to get an overview of the term and its origins, and Cronert and Soifer to connect the term to the COVID-19 context.

Due to the particular political context of Latin America, I will follow the strategy presented in "Measuring State Capacity in Contemporary Latin America" by Soifer to help with operationalizing the concept(Soifer, 2012). I have tried to interpret Cronerts invitation of 'taking the state-capacity's multi-dimensionality to heart from the outset' by using variables that are both based on opinion polls and statistics such as tax as % of GDP(Cronert, 2020, p. 12). This allows me to combine research techniques to develop and test my theories.

A qualitative investigation of a multiple case study is suitable as it makes it possible to investigate the question of interest more profoundly(Teorell, Svensson, 2007, p. 273). It complements Cronerts previous research as the phenomena are investigated via the same themes but with a different operationalization.

It does not provide as good of ground for generalizations as a classic quantitative study but can instead deepen the understanding. Academic analysis is always a conditioned activity and all the results are dependent on its methodology. As this investigation draws on previous research where the reality is assumed to be measurable so will I. This method will make it possible to develop and discuss nuances that are not as approachable in other techniques. The data collected varies



widely and are analyzed to give width. There is then room for an analysis that lays in-between objectivity and subjectivity which in my opinion comes closer to the reality we are all constantly trying to explain.

## 2.1. Selection of Cases

Picking the right cases is essential when trying to develop and test theories through case-studies (Teorell, Svensson, 2007, p. 273). There is always the risk that they are not representable enough and therefore not such reliable starting points for analysis. To find cases that are representable for my investigation I've selected three depending on when they implemented a national quarantine; Paraguay, Brazil and Chile. These three are chosen through the diverse-case method presented in *The Oxford Handbook of Political Methodology* (Gerring, 2008, p.8). I've simply taken one case from each representative category, here timing of implementation of quarantine. Picking cases depending on their current state-capacity is also an option but because the state-capacity scales are never coherent and the term plus its operationalizations are constantly being discussed I chose to categorize from the "hardest fact".

Paraguay stands out as it implemented a national quarantine on the 12th of March, several days before the rest of the region (Oxford COVID-19 Government Response Tracker). Brazil, although reporting their first case on 25 February 2020 have not in time of writing (1st of May, 2020) implemented a national quarantine (Ministério da Saúde, 2020). The third case, Chile, is chosen as the "median" as they implemented their quarantine on the 19th of March 2020 (Oxford COVID-19 GRT) (Gerring, 2008, p.8). The separate cases will be able to provide insight beyond themselves as they reproduce the relevant causal features of a larger universe (Ibid).

## 2.2. Material and procedure

My main sources of information will be previous academic papers on state-capacity that I have come across through recommendations from my tutor and searches done in several databases connected to Lund University. The data collected used to measure the state-capacity indicators comes mainly from

LAPOP, ILO and OECD. The keywords used are state-capacity, administration, security and extraction. This will help with the theorization. As one of the purposes of this text is to test the hypothesis of Axel Cronert's applicability his report will be an essential building block. Hillel D. Soifers framework of how to interpret Latin American state capacity is another key-player. To find reliable information on the countries crisis management I have chosen to use official documents from the respective governments, the Oxford COVID-19 Government Response Tracker as well as news reportages. With this material, I will be able to present an overview of how the countries reaction relates to their state-capacity to test my hypothesis. The final part of the essay will be a discussion of possible explanations. Finally, I will present suggestions for further research.

## 2.3. Result and analysis

The operationalization of state-capacity is Hillel D. Soifers interpretation of Michael Manns "infrastructural power" which will allow us to separate and analyze the specific Latin American countries more profoundly(Soifer, 2012). Some of Soifers parameters of infrastructural power have been changed to find the data necessary. In the text, the infrastructural state capacity will sometime be referred to as state-capacity after it has been presented.

From the state capacity operationalization I have gathered relevant data from Chile, Paraguay and Brazil and presented it in three sub-categories of security, administration and extraction. I've assumed that all countries have access to perfect information when analyzing their behaviour. Through analyzing the results I will relate it to the question and purpose of the essay.

## 2.4. Validity and Reliability

The validity of the text could be harmed by the combination of data used to measure my results as I have developed Soifer's definition with my parameters to replace data I could not acquire. The data collected comes from reliable sources and do manage to measure the state-capacity in the three countries to draw conclusions. The state-capacity term is wide and it can't be excluded that there are other parameters who affect countries actions during the outbreak. The causal connection is therefore not crystal clear, but still offers insights. More parameters

and more time for an in-depth analysis of the results presented would improve validity. The reliability of the paper comes partly from that I manage to prove that state capacity does play a part in when countries decide to implement a national quarantine, most prominent in the case of Paraguay. This confirms the hypothesis from previous research by Axel Cronert(Cronert, 2020, p. 11). Again, it can't be excluded that what I've analysed is not a causal connection as more parameters are relevant to analyze than the ones I have had the opportunity to.

## 2.5. Delimitation

The investigation will only treat Chile, Paraguay and Brazil's responses during march 2020. State-capacity will be defined through Soifer's definition and investigated via data ranging from 2010 - present. The case-studies are chosen due to their representability and the time-limit of March 2020 used to get a framework for the study. Latin American countries are interesting and relevant when investigating state-capacity as they tend to be categorized as weak states(Soifer, 2012, p.589) It is extra interesting to test the hypothesis here and it increases the reliability of the study developing previous research. Other cases and other time-frames would increase the validity and deepen the investigation further. The limitations are, as always, applied for the sake of feasibility.

## 2.5 Critique

The study is a mix-method case study with emphasis on qualitative method. Case studies tend to be harder to generalize from, and my preliminary results show this as many potentially relevant parameters are not included in the operationalization of state-capacity. This damages the validity and reliability of my study. Even though the results show an interesting tendency results are conditioned via my chosen method. I've altered Hillel D. Soifer's suggestion to fit the data I had available which would need further evaluation to be truly reliable. Due to lack of time and resources, the analysis of the countries specific cases fell short and would need further investigation to be able to properly present the preliminary hypothesis. Paraguay, Chile and Brazil are different from each other in many ways that are important to consider. Things like recent political turmoil, geography, ecological aspects, and demography all play a potential part in why

states act the way they do and when. The relation between the measured state-capacity and national lockdowns can therefore not be considered a perfect causal correlation. The data I've presented and analysed is relevant in the broader context of the research being done on COVID-19 responses and therefore fulfils the purpose.

## 3. Theoretical Framework

### 3.1. State Capacity

To understand the concept of state-capacity one needs to understand the concept of the modern state. In political science there exist a 'Weberian consensus' of how to most effectively define the state (Mitropolitski, 2011). The classical definition from 1946 as "a human community that (successfully) claims the monopoly of the legitimate use of physical force within a given territory" is still relevant (Weber, 1946). It manages to refer to a country's geographical territory and its institutions empathizing its sovereignty. This is a separate term from the word nation which refers to the people of the geographical area and puts emphasis on aspects such as belonging and identity (Mitropolitski, 2011). The nation is more connected to political unity while the state refers to the framework containing it. State-capacity relates to the effectiveness and functionality of this framework.

It is a key concept in political science, yet there does not exist a one-size-fits-all definition. Michael Mann's conceptualization of state capacity from 1984 is arguably the most influential one. State capacity is there presented as "state infrastructural power" and defined by "the capacity of the state to penetrate civil society and implement logistically political decisions throughout its national territory" (Mann, 1984, p. 189).

Johannes Lindvall and Jan Teorell refer to infrastructural state capacity at its most general level as a state's ability to "get things done" (Lindvall & Teorell, 2016, p.6).

How the states try to get these things done - that meaning - making members of society do things that they would not normally do to implement the policies the

government has selected - they use policy tools which come in three basic varieties, whom Mann called “ideological”, “economic,” and “military” power (Mann, 1984, p.193)(Lindvall & Teorell, 2016,p.6).

A state with a high state-capacity have access to a further variation of policy tools and is better at realizing its goals. The three powers are interconnected.

To simplify - states can be broken down into a couple of mutually supporting functions. For an effective monopoly of violence (coercive power) the police and military need resources extracted from society(extractive power). For that to happen they need to be supported by bureaucracies that happily coordinate with other parts of the state and have the peoples support(ideological power)(Ottervik, 2013, p.10). It is a multi-faceted intertwined concept where no parameter can function without the other.

How to measure the policy-tools effectiveness to get an overview of a states state-capacity you need indicators. When doing quantitative research aiming for broad strokes and general conclusion scholars tend to use parameters like GDP per capita (Fearon and Laitin, 2003) or road density to create graphs and scales that are easy to understand(Pablo Luna, 2014, p. 2)(Mann,1984) These do not manage to grasp the complexity of the state that is necessary for a qualitative study neither is it well-suited in a Latin American context.

Further, the traditional model has been criticized to tend to only treat the development of states in the region of Western Europe during a period from the sixteenth century to the present as a model of high state capacity(Lindvall & Teorell, 2016, p.6). The theories of state-capacity have in many ways been created to in Francis Fukuyama's words ”get to Denmark” - that meaning how to build prosperous, well-governed, liberal democracies (Fukuyama, 2011, p.14). To then analyze Latin American countries with a state-capacity theory that is inexplicably or explicitly designed to make states ”danish” would simply be inappropriate.

To analyze Paraguay, Chile and Brazil I will use Hillel D. Soifers approach presented in ”Measuring state capacity in contemporary Latin America” to operationalize state-capacity in a regionally relevant way. His scheme is designed to be able to *distinguish between the level of stateness* in contemporary Latin America rather than to label all four of these as relatively weak states by contemporary global standards(Soifer, 2012 p. 589). The measurement scheme is divided into three parts for measuring what Michael Mann called infrastructural power(1984)(Soifer, 2012, p.588). Infrastructural power is defined as the capabilities of the central state, the territorial reach of the state, and as the effects of the state on society(Soifer, 2012, p. 586). To investigate what then counts as good or bad/high and low state-capacity to be able to draw conclusions you need

further categorizations. For measuring the three core dimensions Soifer suggested the following indicators:

Figure 1: Measuring State Capacity<sup>19</sup>

State Capacity			
Dimensions:	Security	Administration	Extraction
Indicators:	Violent Crime Rate	Census Administration	<i>Direct Taxes/Indirect Taxes</i>
	Lynching Rate	National Identity Card Registration	<i>Direct Taxes per Capita</i>
	Private Security per capita	Vaccination Rates	Share of working population in formal sector

Soifer(2012, p. 596)

These parameters are similar to the parameters of Michael Mann and are not meant to replace but to improve existing indices in several ways(Soifer, 2012, p. 596).

### 3.1.2. Security

Soifers Security is similar to the more commonly used coercive capacity. or Manns 'military' power. Typically this parameter includes the "Weberian core": the monopoly of violence within a given territory, which implies domestic/internal "sovereignty"(Lindvall, Teorell, 2016, p. 18). Security is difficult to measure directly since we can most easily access it by seeing where it is absent or not functioning. Crime statistics are often imperfect and politically manipulated.

I'll use a questionnaire from the LAPOP survey, which asks respondents whether they have been a victim of any type of crime in the latest year(LAPOP, 2018). The other category is lynching rates or so-called "street justice" as it manages to capture how much residents are willing to take justice into their own hands. A high number is an indicator of to which extent the state lacks a monopoly of violence. This is an informative indicator but unfortunately, it is very hard to find reliable accurate data(Soifer, 2012, p.596). It is only through NGO research and extensive collections of local news reports that it is possible to identify an approximation of how many deaths of this kind occur and with what frequency(Davison, 2019) Governments do not collect data on lynchings that take place, nor does other organisations such as the Human Rights Watch. This paired

with growing hostility towards the press in Latin America leads to extensive under-reporting(Davison, 2019). To complement I will use data for the percentage of the population that support vigilante justice, "street justice".

The third indicator is private security by capita. Private security aimed to be a proactive tactic where the presence of more uniformed forces on the street would automatically lower the crime-rate(Euchner, 2003, p. 279). An embodiment of community- policing(Ibid). It is supposed to reflect the perception of societal actors about the extent of the threat to their safety(Soifer,2012, p. 592). Unfortunately, I could not find coherent data for all countries. To capture the same phenomena I used a poll from LAPOP that appreciated to which extent people felt that security was a big / the biggest problem in the country. This is not as exact as a per capita number but still captures the picture Soifer aimed for.

### 3.1.3. Administration

Administrative capacity is little more loosely defined, but could be seen as the productivity and successfulness of the state's personnel(Lindvall & Teorell, 2016, p.18). The administration is particularly hard to measure in Latin America as usual indicators like broadband internet subscription wouldn't tell us much as it is usually provided by a private actor, like a firm or an NGO rather than the state. I didn't get access to the voter registration data or had the time to investigate the vaccination rates as suggested and instead used only the census administration and another complementary poll that measured system support. This will make the conclusions less exact, but will still provide an overview of a states administrative capacity. Further, Soifer's scheme was created to make quantitative research and find exact indicators. This report aims to investigate and analyze the causal generalizability of state-capacity's effect on it's reaction to the COVID-19 pandemic. I believe its important, when having the possibility, to connect different varieties of data to draw more general conclusions.

You need to get beyond the variations and find the indicators that lay on a state-level(Soifer, 2012, p.593). How to then measure the administrative capacity of the 'minimal' state?

The state's ability to register its citizens is an insightful measure of administrative capacity. Census administration is an evaluation of how effective the population count is. By identifying places where the state is powerful enough to collect full data you get a sense of the reach of the state-administrative apparatus(Soifer. 2012, p. 593) I've chosen to use a survey where System Support is measured. It presents the public views on whether their country's core

institutions and processes as worthy of respect and confidence(Zechmeister & Lupu, 2019). Support from the people is closely tied to the effectiveness of the state (a disobeying population severely hinders the states ability to "get things done") and therefore a relevant factor.

#### 3.1.4. Extraction

Extractive capacity is similar to the more commonly used "fiscal" capacity - the ability to raise revenue (Lindvall & Teorell, 2016, p.18). Mann's 'economic' power. Here I will try to grasp the technical ability of the state to impose its chosen policies on society. One will relate to taxation and the other reflects the states ability to regulate economic activity. A higher reliance on direct taxes of the people will cause a state to be scored higher on capacity. Contrasting, high reliance on trade taxes and resource rents will have the opposite effect(Soifer, 2012, p. 594). Taxes do not capture everything though. As an example, Chile faced a phase of drastic tax reduction after the neoliberal turn in after 1973. This was not an indicator of weakened state capacity as their extractive capacity went down, but was driven by policy change(Soifer, 2012, p. 595). You then need the third indicator of the share of the population working in the formal sector of the economy. A lower percentage indicates a higher state capacity as informal employments usually means a job without worker protections such as social security and other workers rights(ILO, 2015).

### 3.2. Quarantine & State Capacity

During the COVID-19 outbreak in March 2020 governments were imposing different types of movement restrictions to enhance social distancing(Beall, 2020). Perhaps the most disruptive measure implemented was a national quarantine, that meaning a mandatory restriction of all non-essential internal movement(Ibid). By the end of March over 100 countries worldwide had implemented either a full or partial so-called 'lockdown'(Dunford, 2020). It is a rarely seen drastic measure usually only implemented in parts (Ibid).

Previous research shows that government effectiveness is important when it comes to creating a successful response to a crisis such as natural disasters and pandemics(Persson & Povitkina, 2017; Raschky, 2008)(Cronert, 2020).



One could then assume that higher state capacity enables governments to prepare for and be ready to implement disruptive measures like 'lockdowns' faster if it were to be necessary. There is also research showing that states with a poorly functioning cooperation in-between different government branches or legislatures, (low state capacity) are less successful with implementing new reforms and policies. It could be assumed that low capacity states would implement disruptive measures later as it is simply much harder for the decision-making organs to 'get along' and properly function. A study done on the affordable care act reform in the United States showed that to effectively and quickly implement the new reforms state-capacity was of importance(Forest & Helms, 2017, p. 26-28)

On the other hand, countries that have a higher state capacity have a larger set of policy tools to work with and are not forced to implement drastic measures right away. Axel Cronert quotes the Singaporean minister of education in an article referring to school-closures in March saying: "We still have options. We are not like many countries, where they are forced into sudden school closures"(Cronert, 2020; Davie and Teng, 2020). High state-capacity countries would then tend to take more proportional measures and avoid unnecessary disruptive reactions if possible(Cronert, 2020, p. 4).

Different agencies and experts can, of course, make different judgements about how to react in situations without having one being more or less effective in state-capacity terms. In this context, we can expect governments that are more heavily influenced by expertise to make decisions guided more by criteria related to proportionality and necessity than political pressure(Ibid).

Another way that countries with a higher state capacity - indicating a more effective administrative apparatus - might be slower to react strongly is simply due to the politicians not having to take the blame for a 'slow reaction'. The responsibility for the crisis-strategy is outsourced on the experts (Baekkeskov and Öberg, 2017). Politicians who face pressure from the voters in important decision-making tend to make faster decisions - due to less counselling with the experts on the specific subject(Poggi, 2011, p.76) Low state capacity would then indicate a faster reaction.

All of the above shows a slice of the variation of possible assumptions when it comes to whether states with a high state-capacity will implement disruptive measures sooner, or later. Axel Cronert shows from his quantitative-cross-analysis that countries with a higher state capacity were associated with a slightly more delayed implementation of school closures(Cronert, 2020, p. 11). This research lays as the base of the hypothesis.

## 4. Result & Analysis

### 4.1. Paraguay

According to the COVID-19 government response tracker from Oxford Paraguay made it required to stay at home from the 16th of March(Oxford, COVID-19 GRT). The first measurements taken by the government was on the 10th of March where public events were cancelled and there were recommendations on staying at home but it was yet to be *required*. Paraguay was the first country to react in the region(Oxford, COVID-19 GRT).

#### 4.1.2. Security

23,7% of Paraguayans reported that they've been a victim of some sort of crime in 2016(LAPOP, 2018). That is over the regional average of 20,2%. It is interesting to note that the same study performed in 2014 showed a different result where only 12,8% of the population reported being a victim of a crime(LAPOP, 2018). Paraguay was hit with several natural disasters in 2015 which research shows can lead to an increase in violent crimes(Schumacher, et al., 2010). In extension, this damages the state-capacity as trust in government and the official institutions can be expected to go down when they can't offer the state services that are promised in the social contract - such as security. Unfortunately, there is no more recent data which doesn't eliminate that the security status could have changed again.

A more recent LAPOP study shows the public perception of security as a problem in Latin America and Caribbean countries. Here 49,6% means that security is a significant problem in the country(LAPOP, 2018). The median of the region is 46,6 which makes Paraguay a relatively less secure state.

Support for Vigilante Justice measured to 42,3 % 2014. It's the second-highest support in the region(Zechmeister, 2014, p.101)

The statistics available shows that Paraguay lands 'on the bad side' of the median in all the data collected which from these points of view marks it as low state capacity. To do a claim like that you need, as previously stated, the total sum of the three interconnected parameters. The results from the security parameter present a challenge to the rule of law and the state's monopoly on the use of force.

#### 4.1.3. Administration

In research from the Americas Barometer, a survey which measures political legitimacy as the extent of how the public views their country's basic core institutions and processes as worthy of respect and confidence were made (Zechmeister & Lupu, 2019). On a scale of 1-100, Paraguay scored a 46,8 when the median in the region was 49,1 (Ibid). Support for the system is then lower in Paraguay compared to the region. In a study made 2010 Paraguays census omission rates were at an all-time high of 26.1% (Borges and Sacco, 2016, p. 12). To compare, Paraguay had a 7.3% census omission rate in the year 2000(Ibid). This shows that the state had insufficient resources to complete a reliable measure of its population. One reason for this has to do with the financial situation in the region that got worse by the international economic crisis of 2008(Ibid). Unfortunately, these wide studies are only performed every 10 years which affects the actuality of my study but it does show that the capacity and institutions of the state are not autonomous but extra vulnerable for exogen factors. This implies a weaker state. These results show that Paraguay's administrative capacity is worse compared to the other countries in the region.

#### 4.1.4. Extraction & Summary

Paraguay's tax-to-GDP ratio in 2018, 14.0% was below the Latin American and Caribbean average of 23.1%. The percentage of taxes on income, profits and capital gains were 2.3 % of which the percentage of personal income, profits and gains were only a 0.3 % of GDP which shows a poor ability to raise revenue(OECD, 2020). Higher reliance on direct taxes of the people will cause a state to score higher on state-capacity(Soifer, 2012, p. 594).

The percentage of the amount of Paraguayans working in the informal economy were in a study made by the International Labour Organization in 2015

63.8%(Gonzales, 2015). The third-highest number in the region. In states with a weak legal framework, there are more incentives to keeping people in the informal sector(Gonzales,2015).

As presented, Paraguay scores under the regional average on all measured parameters in Security, Administration and Extraction. The country through these parameters has a weak state-capacity. Further, Paraguay falls below the Latin American average in many socioeconomic factors such as immunization rates, income inequality and fertility rate(CIA, 2020). Cronert notes that factors related to family systems and demography could affect implementation of disruptive measures (Cronert, 2020, p. 11). Relevant to take into consideration in future research. There are many other parameters not analysed here but I do believe that with the overview presented above it is possible to get a sketch of Paraguay's state-capacity and its fluctuations in the recent years.

## 4.2. Brazil

The Brazilian president Jair Bolsonaro had at the end of March repeatedly claimed that the risks of the virus were exaggerated and not implemented a national quarantine(Phillips, 2020)(Oxford, COVID-19 GRT). Even if state governors have openly disagreed and imposed local quarantines to prevent the spread of the virus there had still not been a national quarantine implemented of the 30th of march(Marques, 2020). There were recommendations from the government to stay at home but it was not nationally required. Neither was there any restrictions on internal movement until the 17th of march and then again only locally which is not being investigated in this paper(Oxford, COVID-19 GRT).

### 4.2.1. Security

The percentage of Brazilians that reported they had been a victim of a crime was 23.90% in 2016. That is over the regional average 20,2 % (LAPOP, 2018). Further, 55,5 % meant that security is a significant problem in Brazil of 2016(LAPOP, 2018). Again, over the median of the region of 46,6 % (Ibid). As well as in Paraguay there was an increase in the percentage that reported security as a problem in comparison to two years earlier.

Support for Vigilante Justice was 23,5 % in 2014 which was the second-lowest in the region(Zechmeister, 2014, p.101). All in all, Brazil could be seen scoring below the regional average on two out of three indicators. Lower support for vigilante justice could be an indicator of higher trust in the governmental institutions but as the more general inquiries witnesses of an overall uncertain reality, the security can still not be seen as stable.

#### 4.2.2. Administration

The public support for Brazil's current system measured 42,1 on a scale of 1-100 which was the second-lowest in the region with a median of 49,1(Zechmeister & Lupu, 2019). The people's confidence for its countries core-institutions and processes are prominently lower in Brazil than in the rest of the region. On the other hand, the census omission rates were one of the best in the region with a number of 4,5%. Overall, the Brazilian censuses have been presenting a regular and satisfactory coverage-error for decades(Borges and Sacco, 2016, p.11). This shows that the state-institutions are working quite well as they don't stand or fall depending on outer circumstances. Again, these data are the oldest ones I've used in this analysis gathered in 2010 and much could have happened since then. It is unlikely though as Brazil has been the strongest economy in Latin America for many decades and therefore one could assume that the country would have more developed state-institutions, although not necessarily well run, which shows in the LAPOP study of the public support for the system.

#### 4.2.3. Extraction & Summary

Brazil's tax-to-GDP ratio in 2018, 33.1%, was well above the LAC average of 23.1%. Taxes on income, profits and capital gains were 7,1% of which personal income, profits and gains was 2.8%(OECD, 2020). These numbers indicate a stable economic system and a good fiscal capacity.

The informal employment rate measured to 36,5 % in 2015 (Gonzales,2015). This is the third-lowest rate of informal jobs as a percentage of total employment(Gonzales, 2015). Together this shows that Brazils ability to raise revenue is good and their extractive capacity is strong.

Of the three security-parameters, Brazil scored below average on two. The indicators to analyze the administration show that the public's belief in its system is very low but the census administration is one of the best in the region. The country's extractive capacity is strong and the framework of the state could from this be seen to be in place even when the people's support is lacking. Brazil is an interesting case as the political climate has gone through many turbulent changes in the latest couple of years. The favoured presidential candidate was put in jail for corruption charges during the latest election which damaged the people's trust in its institutions but due to the relatively good and long-standing infrastructure, the country's concrete state-capacity is still quite high(Reinhart, 2018).

### 4.3. Chile

The first restrictions in Chile were implemented on the 16th of March when schools and workplaces closed. The national quarantine was announced on the 19th of March 2020 after several mayors of Chile's central departments had written an open letter pushing for a lockdown(Oxford COVID-19 GRT). Internal movement restrictions were then implemented and there was a national requirement for staying at home(Ibid). At the moment of writing, some areas have transferred to a system of rolling obligatory quarantines based on a formula combining an area's new cases per capita(Thompson & Sanders, 2020). For my analysis I will use the date of the official lockdown.

#### 4.3.1. Security

The percentage of Chileans reported having been a victim of a crime 2016 was 22,40% according to LAPOP (LAPOP, 2018). That is slightly over the regional median of 20,2%(Ibid). 40,8% percent said that security was a big or the biggest problem in their society which is under the regional median of 46,6 %(LAPOP, 2018). Further, the support for vigilante justice were 25,4% in 2014. I would assume this has increased in recent years as Chile went through heavy protests in 2019 where police-brutality was prominent and many allegations of abuse and excessive force brought forward(MgGowan, 2019) This had consequences for the population's trust in the national police which in turn can be connected to an increasing acceptance of "street justice"(Ibid).

With the data we have at hand, two out of three indicators shows that Chile's 'security' is relatively good. The data should be handled with a critical eye as these things change quickly and my analysis is focused on the current state-capacity. More of this in the final discussion.

#### 4.3.2. Administration

The populations support for it's system measured up to 45,4 % according to LAPOP in 2018. This is under the regional median(Zechmeister & Lupu, 2019). It has decreased with about 5 % since the previous measuring in 2014(LAPOP, 2018) This could also be a consequence of the latest years political turmoil in the country as the people have been loosing fate in its institutions. Interesting enough the census administration worsened quite substantially from 3,1 % in 2000 to 9,8% in 2010(Borges and Sacco, 2016, p.12). This shows that there has been a decline in infrastructural capacity as well as trust in government during the latest decades. This report unfortunately does not have the time to investigate why Chile's state capacity could be seen being in decline since the early 2000's. I will use the data presented for the analysis.

#### 4.3.3. Extraction & Summary

Chile's tax-to-GDP ratio in 2018, 21,1 % was below the Latin American and Caribbean average of 23.1%. The percentage of taxes on income, profits and capital gains were 7,5 % of which the percentage of personal income, profits and gains were a 1.4 % of GDP which is quite high(OECD, 2020). This means that Chile's 'fiscal' capacity is high and that they can successfully raise revenue as high reliance on direct taxes of the people will cause a state to score higher on state-capacity(Soifer, 2012, p. 594).

The percentage of the amount of Chileans working in the informal economy were 27,68 % in 2018 which is the lowest number in the region(Gonzales, 2015) (ILO, 2019). Together these two indicators show that Chile's 'fiscal' capacity is good and the state has the ability to fund its state-apparatus.

This data is retrieved from another source than the other two, due to inability to find coherent data for the three countries in the same year. It damages the validity but i do believe it is still valid in drawing conclusions from as it gives an overview of the situation in the country.

To sum it up, Chile's state-capacity is from these seven parameters relatively good. On state-security, many Chileans report being victims of a crime, but their overall perception of security is relatively better than the rest of the region. The support for vigilante justice is also relatively low looking at data from 2014. On administration, the public's support of their system is low and decreasing and the census administration has also worsened. Chile's extractive capacity seems to be well functioning from the data on taxes and the percentage of people working in the informal economy is the lowest in the region.

## 4.4 Summary Scheme

	Paraguay	Brazil	Chile
Experienced Crime in the Latest Year %	23,7 %	23,9 %	22,4 %
Security as a Problem %	49,6 %	55,5 %	34,3 %
Support for Vigilante Justice %	42,3 %	23,5 %	25,4 %
Public System Support %	46,8 %	42,1 %	45,4 %
Census Omission Rate %	26,1 %	4,5 %	9,8 %
Tax as % of GDP	14 %	33,1 %	21,1 %
% of Tax on Personal Income,	0,3 %	2,8 %	1,4 %
Share of Working Population in formal sector %	63,8 %	36,5 %	27,68 %
Above average	0 / 7	4 / 7	5 / 7
Relative State-Capacity	☹	☺	☺

1

<sup>1</sup> Data collected from OECD, ILO, LAPOP, Borges and Sacco, Zechmeister & Lupu, Gonzales, Ranging from the years 2010-2019



## 5. Analysis & Conclusion

The empirical analysis above has demonstrated two patterns. There seems to be a slight correlation between degree of infrastructural state-capacity and implementation of quarantine. Paraguay was the first country to implement a national quarantine, as their state-capacity is lower you could assume that not having enough policy tools to work with therefore forced the state to implement drastic measures right away (Cronert, 2020).

Chile seems to be the most well-functioning state all together, but when summarizing the administrative and extractive sector their state-capacity is lower than that of Brazil, although higher than Paraguays. If you see to only the *administrative* state-capacity there is a clear correlation between high state-capacity and a later implementation. This confirms Cronerts results of that a higher administrative state-capacity's connects to later implementation of school Closures (Cronert,2020,p.11). Which parameters of state-capacity has the most importance when it comes to implementing a lockdown? Is it the peoples perception of its state or the states technical institutional capacity? Cronerts research showed that administrative state capacity had a significance which these findings would confirm.

Soifer expressed that it was impossible to separate the different parameters of the infrastructural power when measuring state-capacity but the findings show that it might be of relevance here (Soifer, 2012, p.589).

The 'security parameter' preliminary does not play an important role in when states decide to 'lock down', but does affect the functionality of the state overall. The administrative and extractive power is as stated above of some importance.

Even though the results suggest the beginning of the possibility of a theoretical generalization it is still impossible to draw any conclusions.

There are too many parameters excluded from the research due to feasibility. Especially important is the current politics and recent history. There has for example been many discrepancies inside the government of Brazil, Chile and Paraguay. The current Brazilian president Jair Bolsonaro fired the health minister Luiz Henrique Mandetta in April after disputes over how to respond to COVID-19 (Phillips, 2020). This would imply an unstable government. Chile was last year riddled with violent protests demanding a constitutional change and Paraguay has one of the highest corruption rates in the world (Cuffe, 2019) (Blair, 2018). All of

these would affect states decision-making processes in times of crisis. I would also like to point out that the results presented here do not intend to evaluate or say anything about the effectiveness of any particular tactic regarding COVID-19. One thing that is also important to take into consideration is that the data used is gathered from 2010-2019. This harms the analysis as some of the numbers are not longer relevant and can not be seen as reliable explanatory variables.

The methodology of the essay results in empirical evidence that indicates a correlation between state-capacity and the time of implementation of national quarantine. The theoretical explanations lays in line with research from Axel Cronert. National quarantine is only one of the measures taken by governments, and even though there seems to be a correlation between the degree of (administrative)state-capacity and timing of implementation it is still to early to make a certain claim. To create a more exact result one would need a deeper qualitative analysis more focused on for example process-tracing to analyze the sequence of events with a more in-depth knowledge of each case(Teorell & Svensson, 2007, p. 247). Due to lack of time and resources this essay could only scrape the surface of a field that is in is essence never-ending.

Could then, theories of state-capacity be used to explain countries decision in when to impose a quarantine on its population in relation to COVID - 19? This essay suggests that state-capacity theories are indeed relevant when explaining states response to the COVID-19 pandemic. The findings here preliminary show that different aspects of state-capacity are related to when states implement disruptive measures such as national quarantines.

## 5.2. Further research

Looking forward, state-capacity is relevant when explaining states decision making during crisis. Other parameters such as recent political turmoil or varying demographic socioeconomic factors should also be taken into consideration. The state-capacity theories used would need to take more parameters into the operationalisation and widen the term to develop the study further.

## 7. References

- BBC (2020) *Coronavirus: How lockdown is being lifted across Europe*. BBC, Explainers. 16 May 2020.
- Beall, Abigail (2020). *Why social distancing might last for some time*. BBC Future. 25th March 2020.
- Blair, Laurence (2018) *Long Overdue, Can an Anti-Corruption Surge in Paraguay Last?* World Politics Review. 14 November 2018.
- Borges, Gabriel and Nicolás Sacco (2016). *Has census coverage in Latin America improved with time?* Unicamp, Nepo, IUSSP, Campinas - Sao Paulo.
- Cameron, Maxwell,(2006). *Peru Election 2006, Elections, Democracy and the State*. 9 June 2006. Accessible : <http://blogs.ubc.ca/peru/2006/06/09/elections-democracy-and-the-state/>
- Central Intelligence Agency. *The World Factbook - Paraguay*. 16th April 2020. CIA.
- Cronert, Axel (2020). *Democracy, State Capacity and COVID-19 Related School Closures*. Department of Government: Uppsala University.
- Cuffe, Sandra (2019) *Chile protests 2 months on: 'We're ready to continue to very end*. Aljazeera. 18 December 2019.
- Davison, Tamara (2019). *How a distrust in police leads to lynch mob culture*. Latin America Reports. 29th March 2019.
- Dunford, Daniel et. al (2020). *Coronavirus: The world in lockdown in maps and charts*. BBC. 7 April 2020.
- Euchner, Charles, (2003). *Urban policy reconsidered: Dialogues on the problems and prospects of american cities*. Abingdon: Routledge
- Fearon, James D and David D. Laitin (2003). *Ethnicity, Insurgency, and Civil War*. Vol. 97 / Issue 1 February 2003 / 75 - 90. Cambridge University Press.
- Fukuyama, Francis (2011). *The Origins of Political Order*. New York : Farrar, Straus and Giroux.
- Gonzalez, Elizabeth (2015) *Weekly Chart: Latin America's Informal Economy*. Americas Society Council of The Americas.
- Hale, Thomas and Samuel Webster (2020). *Oxford COVID-19 Government Response Tracker*. <https://www.bsg.ox.ac.uk/research/research-projects/oxfordcovid-19-government-response-tracker>.

- Helms, David and Pierre-Gerlier Forest (2017). *State Policy Capacity and Leadership for Health Reform*. New York: Milbank Memorial Fund.
- LAPOP (2018) *Porcentaje de victimización por delincuencia para cada país en el año 2016*. Centro Centroamericano de Población, Universidad de Costa Rica. Accessible: <http://infolapop.ccp.ucr.ac.cr/index.php/mapa-victimizacion-delincuencia-latam.html>
- Lindvall, Johannes and Teorell, Jan (2016). *State Capacity as Power: A Conceptual Framework*. (STANCE Working Paper Series; Vol. 2016, No. 1). Lund: Department of Political Science, Lund University.
- Mann, Michael (1984). *The Autonomous Power of the State: Its Origins, Mechanisms and Results*. Archives européennes de sociologie 25: 185–213.
- McGowan, Charis (2019) *Chile police accused of using excessive force on protesters*. Aljazeera. 29 October 2019.
- Ministério da Saúde (2020) *Brasil confirma primeiro caso da doença*. 26 February 2020.
- Mitropolitski, Simeon (2011). *Weber's Definition of the State as an Ethnographic Tool for Understanding the Contemporary Political Science State of the Discipline*. Canadian Political Science Association.
- OECD et al. (2020). *Revenue Statistics in Latin America and the Caribbean 2020*. OECD Publishing, Paris. <https://doi.org/10.1787/68739b9b-en-es>.
- Ottervik, Mattias (2013). *CONCEPTUALIZING AND MEASURING STATE CAPACITY: Testing the Validity of Tax Compliance as a Measure of StateCapacity*. QoG Working Paper Series 2013:20 University of Gothenburg.
- Persson, Tove Ahlbom and Marina Povitkina (2017). “‘Gimme shelter’: The role of democracy and institutional quality in disaster preparedness”. *Political Research Quarterly* 70.4, 833–847.
- Phillips, Dom (2020). *Bolsonaro fires popular health minister after dispute over coronavirus response*. The Guardian, 16 May 2020.
- Poggi, Gianfranco (2011). *The Nation-State*. Chapter 4 in *Comparative Politics* 3rd ed. Caramani. Oxford: Oxford University Press.
- Public Intelligence Small Arms Survey (2011). *Global Private Security/Police Officer Personnel Levels By Country/Per Capita 2011*. Accessible: <https://publicintelligence.net/global-private-securitypolice-officer-personnel-levels-by-countryper-capita-2011/>
- Reinhart, RJ (2018) *Brazilians Face Confidence Crisis Ahead of Election*. Gallup. 27 September 2018)
- Raschky, Paul A (2008). ‘Institutions and the losses from natural disasters’. *Natural hazards and earth system sciences* 8.4, 627–634. Monash University, Australia.

- Saccone, Valeria (2017). *Brasil, a la cabeza del mundo en linchamientos*. El Confidencial, June 22, 2017.
- STATISTA (2012) *Perceptions about security as a problem in Latin American and Caribbean countries in 2012*. Statista Research Department, Jun 24, 2014. Accessible : <https://www.statista.com/statistics/312834/security-as-a-problem-in-latin-american-and-caribbean-countries/>
- Soifer, Hillel David (2012). *Measuring State Capacity in Contemporary Latin America*. Revista de ciencia política/volumen 32 / N° 3/2012, 585 – 598. Temple University. Philadelphia, Pennsylvania.
- Teng, Amelia and Sandra Davie (2020). *Coronavirus: Students to do home-based learning once a week from April as schools step up safe-distancing measures*. Straits Times, March 27, 2020.
- Thompson, Eduardo and Philip Sanders (2020). *Chile Charts New Path With Rolling Lockdowns, Immunity Cards*. Bloomberg. 22 April 2020.
- Teorell, Jan, and Svensson, Torsten (2007). *Att fråga och att svara - samhällsvetenskaplig metod*. Solna: Liber
- WHO (2019). *Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza: annex: report of systematic literature reviews*. World Health Organization.
- Zechmeister, Elizabeth and Noam Lupu (2019). *Topical Brief #036 - The 2018/19 AmericasBarometer*. LAPOP. Vanderbilt University. Nashville, Tennessee.
- Zechmeister, Elizabeth (2014) *The Political Culture of Democracy in the Americas, 2014: Democratic Governance across 10 Years of the AmericasBarometer*. LAPOP. Vanderbilt University. Nashville, Tennessee.

