Measuring State Size: Purely a Matter of Territory

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Abstract: There are few concepts more central to the field of political science than the concept of the state. Yet, despite its pervasiveness and centrality to the field, there remains no definite consensus on what - or who - constitutes a state. Given the disagreement on what a state is, there is even less agreement on how to measure state size. Previous scholars have suggested that state size is measured using various variables ranging from population figures to economic indicators to military capacity. This article adds to the debate surrounding the appropriate measurement of state size by first arguing for the necessity of having a consistent definition of what state size is, and secondly by rejecting the notions that the size of a state can be measured using any variable other than territory. Ultimately, the central thesis of this article is that the only valid and methodologically sound way to measure the size of a state is to measure the amount of territory under the state's control.

Introduction

In 1651, Thomas Hobbes argued in his well-known political treatise Leviathan that without the existence of a common power to keep people in awe, man lives perpetually in a condition called “Warre” in which every individual is constantly against every other individual. This condition is what Hobbes refers to as the “state of nature,” or anarchy. Without the protections of a state and the privileges and responsibilities of membership in a political body, Hobbes famously described the life of man as being “solitary, poor, nasty, brutish, and short.”

Indeed, the advent of the state is so important that much of the study of modern political science would be difficult, if not impossible, without it. The development of states has helped resolve Hobbes’s concern with anarchy and has allowed both culture and civilization to flourish. Although the first states concerned themselves with little more than the protection of their borders and property, or as Charles Tilly stated, “war made the state, and the state made war”,

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1 During the time in which Hobbes wrote The Leviathan, gender norms were different from modern notions of gender equality. Thus, by “man,” I, of course, am referring to all human beings, regardless of gender, but I have chosen to preserve the original language used by Hobbes.

2 Hobbes, Leviathan, Part One Chapter Thirteen.

modern states have developed significantly since the earliest states. Today, states can and do offer various services that extend well beyond border protection, ranging from healthcare to higher education and other forms of welfare. Modern states now take many different forms, including the three welfare states in Esping-Andersen’s typology4 and the developmental states of East Asia, such as Japan, as first described by Chalmers Johnson.5 Even though most political scientists have some idea of what the state is, there is not a single universally accepted definition of the state,6 much less a universally accepted means of measuring state size. Accordingly, many authors working in the field of political science use the term “state size” haphazardly, which poses problems ranging from technical misunderstandings to misapplications of political theory to real-world foreign policy.

In this article I make two assertions. First, because the concept of state size is so widely used in debates not only in the academic world, but also greatly affects the policy world, the problem of a lack of universal understanding of state size is not a trivial matter. A uniform understanding of how to measure state size will ensure that the debates around it will be about the same idea, which has broad implications for democracy, peacemaking, and diplomacy. Hence, my first goal will be to argue that the wide variation in the definition of state size is highly problematic and must be remedied by employing a more precise vocabulary. Second, I will argue that the matter of state size must be measured purely using territory. Indeed, I argue that any other way of measuring state size is inaccurate and misleading. To accomplish these two tasks, I will first conduct a literature review to demonstrate the stark differences in understanding of this concept across the literature. After the literature review, I will offer practical examples that exist today to illustrate how the other variations that authors have used do not accurately represent state size. Following my descriptions for why other measurements are not correct, I will then seek to demonstrate why measuring territory is the correct way to assess state size. Finally, I will offer my conclusions and suggestions for further research. It is my hope that this article can help in settling the disagreements about this concept so that future scholars can focus more on the consequences of state size as an explanatory variable rather than spend time fixated on how to measure it.

Current Usages in the Literature

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There exists a great deal of literature that mentions state size as a key variable in explaining various outcomes. However, few scholars, if any, have explicitly tried to define it. Many academic articles that use state size as an explanatory variable fail to properly define it, provide an ad hoc definition to suit their specific agenda, or seem to confuse the concept of state size with other dimensions of the state entirely. It is impossible to include every scholar who has ever grappled with the topic here. Nevertheless, even a cursory glance at the literature will demonstrate the wide range of interpretations of how to measure the size of the state.

Some scholars use only population to characterize state size. Veenendaal and Corbett conceptualize state size based solely on population figures, and even go so far as to claim that “most publications in the field of comparative political science … [conceptualize] state size based on the basis of population figures”.7 As we will see in this literature review, the claim that most publications in this field conceptualize state size based on population figures alone is simply untrue, as there exists a plethora of different conceptualizations using other dimensions of the state. The authors contend in their article that scholars of democracy, including Arend Lijphart8 and Samuel Huntington9, neglect so-called “small states” in their theories, which undermines their arguments, and that the inclusion of these “small states” would help nuance their findings.

While Veenendaal and Corbett take for granted that there is consensus in the comparative literature that state size is measured using population, Gerald Scully takes for granted that the size of the state is “measured conventionally as government expenditures as a fraction of national output.”10 Measured in this way, Scully argues that the increasing state size is “harmful” in terms of economic growth. Already, it is clear that measurement of state size based on population and measurement based on government expenditures bear little to no relationship to each other, and these are only two of the many different conceptualizations of state size.

Difficulties with a universally understood conceptualization of state size is not a recent phenomenon. In 1964, Amry Vandenbosch measures state size using military power, and contrasts the small state with what he calls ‘Great Powers’.11 However, Vandenbosch conflates state size with state power. Even to this day, scholars frequently fail to distinguish between state size and state power properly. In her article “Small State, Big Influence,” Tianyi Wang argues that despite how weak North Korea is, it still has a major influence on China’s foreign policy, despite China being a significantly stronger and more powerful state.12 Unfortunately, not only...

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does Wang fail to properly distinguish between state power and state size, she also seems to confuse the concept of state capacity with state size as well.

Finally, David Lake and Angela O’Mahony describe state size as how much territory is within a state’s possession. Although they, unlike the other authors mentioned above, use state size as the dependent rather than as the explanatory variable, they assert that historical increases and decreases in average state size were the results of increasing and decreasing amounts of federalism. The manner in which Lake and O’Mahony use to measure state size is the one I believe is correct, for reasons that will be made clear later in the article.

There are many more examples in the literature, but we have seen enough to understand that there is significant disagreement and misunderstanding on how to measure the size of a state. Although this literature review is far from exhaustive, we can already see drastically varying definitions of state size, and often they are diametrically opposed. Authors such as Wang and Vandenbosch would assert that larger states have more power and are thus more influential in the world. Consequently, the two of them would find that an increase in state size has a general positive effect, at least for the states in question. On the other hand, authors such as Scully have expressed a more pessimistic view on increasing state sizes, arguing that the net effect of an increase in state size is negative. While on the surface these authors appear to disagree on the effects of state size, they are in fact not discussing the same topic. Collier and Levitsky indicate that many scholars in political science “are concerned with conceptual validity.” As a result, for the sake of conceptual validity alone, I believe that a clarification of state size is warranted. However, I will go even further and assert that inconsistent applications of the concept of state size are precarious not only on a theoretical level but have real-world consequences as well. In this article, I will offer my proposal on how to redress this issue.

**Theoretical Framework**

To understand the working definitions used in this paper, I propose the “car-and-driver” model of government and state. Let us imagine a car with one driver and perhaps a few passengers. In this conceptual exercise, the driver of the car is analogous to the government, the vehicle itself is analogous to the state, and the passengers are analogous to the population of a state. It is clear from this analogy that the government consists of a person (or in most cases of actual governments of countries, generally several people), whereas the state is a vessel; it is an inanimate structure without a will of its own. The government, by operating the car with a steering wheel, can express its own will. Similarly, just as the car itself has no control over whether the driver drives too fast or makes a wrong turn, or drives smoothly without getting

pulled over by a police officer for speeding, the state, as an inanimate object, is not capable of expressing its own will.

As previously mentioned, there is no universal consensus of what a state is. However, numerous scholars have attempted to provide such a definition. One of the most well-known and popularly accepted definitions is the one provided by Max Weber. As John C. Donovan et al. describe Weber’s conceptualization, “the state is the agency that, if it is to survive and be successful, claims the ‘the monopoly of the legitimate use of physical force within a given territory.’” For Weber, what differentiates a state from a non-state is only its “particularly enduring and manifest existence as a well-established power.” Accordingly, groups who employ violence to defend against external threats in an ad hoc manner do not qualify. The renowned French public intellectual and philosopher Pierre Bourdieu agrees with Weber on the use of physical force as a requirement for states, but also further argues that a successful state “claims the monopoly of the legitimate and symbolic use of violence over a definite territory and over the totality of the corresponding population.”

Weber is somewhat flexible with the boundaries of a state, stating that although the territory of a state “must at any time be in some way determinable,” it “need not be constant or definitely limited.” In contrast to Weber’s more malleable conceptualization of a state, Poggi firmly believes that a state’s territory must be more concrete, “geographically distinct, fixed, [with] continuous borders, and be militarily defensible.” In fact, he goes one step further by inextricably tying the identity of a state with its territory, declaring that “the state does not have a territory, it is a territory.” Michael Mann echoes Poggi’s sentiments, writing in his 1984 article “The Autonomous Power of the State” that the “state is merely and essentially an arena, a place,” and that this characteristic is precisely the “very source of [the state’s] autonomy.”

The aforementioned conceptualizations of states are some of the more well-known examples in the literature, but are by no means the only ones. As is evident, there is a great variety of understandings about what the state is, what it can do, and where it comes from. However, all of these conceptualizations share one common aspect: a state must have a recognizable and well-defined territory. The aim of this article is not to intervene in the debates on what a state is, but having these various conceptualizations gives an idea of what the debates share in common and where they diverge. This commonality among the competing theories of the state is the framework that will be used in this article.

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20 Ibid.
For the purposes of this article, “territory” will be understood to mean any recognizable area on the planet that is subject to political control by a state, no matter what the form. Hence, bodies of water under the control of a state, such as canals, rivers, and lakes, which are part of a state’s *polymorphic political geography*, will also be considered part of a state’s territory and will thus be included in the conceptualization of state size.22

**Why are the other measures inappropriate?**

Because of the plethora of different ways political scientists have conceptualized state size, this analysis will not be able to cover every single one of them. However, my aim is to simply prove that most mainstream ideas of state size are misnomers, and to show that territory is the only measurement of state size. Therefore, this section of the article is dedicated to demonstrating why other measures of state size are inappropriate.

To understand why the misuse of the term “state size” is problematic, it is useful to consider two examples. A country such as the landlocked Mongolia, which once ruled over “the largest continuous land empire that has so far existed,”23 has a population of just over three million people spread over a massive and vast territory. The Mongolian armed forces are under-equipped and military expenditures comprise less than one percent of Mongolia’s GDP, and the country’s entire navy consists of a single tugboat staffed by a crew of seven sailors, only one of whom reportedly knows how to swim.24 For Wang and Vandenbosch, because of its weak military power, Mongolia would be considered a small state. Similarly, owing to its small population, Veenendaal and Corbett would classify it as a relatively small state as well.25 On the other hand, with such a vast territory, Lake and O’Mahony would consider it a large state.

In sharp contrast to Mongolia, Taiwan26 has a population of over twenty-three million people, with nearly two million military - both active and reserve - personnel,27 packed onto a territory smaller than one tenth the size of Japan.28 Consequently, Taiwan is the antithesis of Mongolia on virtually every dimension. Using the definitions of state size mentioned above,

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25 Veenendaal and Corbett do not employ a hard-cutoff point for when a state is considered small or large. However, it would be reasonable to assume that a population of three million, in comparison with countries with significantly larger populations including China, India, or Japan, would be considered relatively small.
26 The political status of Taiwan is always a sensitive one, and Taiwan is not universally recognized as a sovereign nation. Although Taiwan does not have a seat in the United Nations, it does issue its own passports, maintain armed forces, and has an independent government. This article will not make a normative judgment on what political status Taiwan should be afforded. Rather, for the purposes of analysis, this article will treat Taiwan as a de facto sovereign state, regardless of official status.
Taiwan is either larger than or smaller than Mongolia, depending on the particular definition used. The contrast between Mongolia and Taiwan is the first reason why the wild inconsistencies of “state size” are problematic. Even holding all other factors constant, there is no consistency - using some dimensions, Taiwan is “smaller” than Mongolia whereas using other dimensions Mongolia is the “smaller” state. In the sections to follow, I clarify why state population, government expenditure, state power, and state capacity are not valid measurements of state size.

**More People, Bigger State?**

There are scholars who use population as a basis for state size, including Veenendaal and Corbett, Anckar,29 and Crowards,30 among others. Veenendaal and Corbett claim that countries with smaller populations tend to be democratic, despite their inherent disadvantages. However, while many of their claims in regards to the relationship between population and democracy seem to have merit, their claims are not based on state size as they insist. The problem with using population as a measurement of state size is that population is fleeting - people can die, the low birth rates in countries like Japan and South Korea mean that their populations will shrink significantly in the decades to come, and natural disasters have the potential to decimate large swathes of the population in an instant.31

It is true that for most scholars, population is necessary for a viable state. However, just as the passengers in the car-and-driver model are not structural components of the car, the people who live in a state are not permanent fixtures of that state. Both exogenous and endogenous factors have the potential to significantly alter population figures, which can change not just from year to year, but, depending on the circumstances, even day to day. Ergo, the number of inhabitants inside that territory, while important on many levels, does not change the size of the actual state. On the other hand, the only effective way a state would lose territory is for it to lose control to another foreign power, which is an exogenous factor. The only way for a state to lose territory endogenously is for it to voluntarily relinquish territory for nothing in return, which virtually never occurs, and indeed I cannot think of a single historical example of such an event happening. For a visual representation of what I mean, I present the hypothetical states A and B as represented in Figures 1 and 2, respectively:32

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32 I wish to thank Kathy Tian of the University of Illinois at Urbana-Champaign for these figures.
In this hypothetical example, both State A and State B have the same amount of territory, but State A has a significantly higher population. We can clearly see that the population has absolutely no bearing on the states’ sizes.

The Government Expenditure Explanation

Scully measures state size by government expenditures. In other words, in his conceptualization, the more money a government spends, the larger the state is. However, Scully seems to confuse the role of the government, which consists of actors with their own wills, with the role of the state, which is a structure that does not have its own consciousness. Even if there has not yet been a reasonable consensus on the definition of a state, most political scientists would be able differentiate a government and the state in which that government operates, which are related but are not identical to each other.

For a more concrete visualization, let us now return to the car-and-driver model. Increased government spending is comparable to the driver of a car spending more money on various goods and services, including gasoline, food, and oil changes. Just as the driver spending more money on higher quality gasoline does not actually change the size of the car, government spending does not change the size of the state. The only possible conclusion from increased government expenditures, given all other factors are equal, is that there is a bigger government, not a bigger state.

Of course, governments have access to not just the territory of a state but also the tools of the state, such as police departments, courts of law, and tax collection bureaus. Because the successful operation of these state institutions cost large amounts of money, it is possible that higher government expenditures could potentially indicate that these institutions are stronger. However, the strength of these state institutions is not an issue of state size. Rather, it is an issue of state capacity, which will be explored further in the next section.

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State Capacity versus State Size

Davidheiser gives three criteria for determining the strength of a state:

1) depth of penetration of society by the state;
2) breadth of penetration, and;
3) state autonomy, or penetration of the state by society.34

A strong state would have high depth of penetration in society, high breadth of penetration, and low penetration of the state by society. The opposite is true of weak states. In Davidheiser’s conceptualization, a country like Russia would be an example of a strong state. None of these three criteria mentions anything about state size. It is only a coincidence that Russia happens to be the largest country in the world; one could easily imagine a state with much less territory that could reasonably be considered strong, such as Singapore. Pardo and Reeves also specify that weak states are weak as a result of internal sources, such as “tensions between the institutional representation of the state and society.”35

Strong states, on the other hand, would have the ability to pass laws, enforce the laws, and collect taxes, among others. In the Singaporean case, with a total area of just over 700 km², Singapore is fairly small in terms of size.36 By means of comparison, the Chinese capital of Beijing has over 16,000 km² of area.37 Yet, Singapore can reasonably be described as a strong state.38

On the other hand, India and Pakistan have massive territories and populations. However, because of their weak institutions, they can reasonably be considered weak states.39 Indeed, India and Pakistan are significantly weaker than Singapore in terms of state institutions. It is doubtful that any political scientist could describe Singapore as being “bigger” than either Pakistan or India without raising the skepticism of his or her audience. In sum, the strength of a state is not determined by its size, and the two are completely separate and independent of each other. See table 1 for a visual summary.40

39 Pardo and Reeves, “Weak Power”
40 Again, I wish to thank Kathy Tian of the University of Illinois at Urbana-Champaign for this table.
There are no objective standards for what the cutoff point is between a weak state and a strong state, and between a large state and a small state. In essence, few would likely disagree that China is large, but the case of a country like South Korea is a little less clear because some might consider it to be a small state, while others might think that it has too much territory to be considered a small state. Additionally, the assertion that Mongolia is a weak state is unlikely to be controversial, but some might argue that India would not be considered weak. Hence, this table is necessarily somewhat arbitrary. Nevertheless, even if some of the countries get moved to a different category, this typology is still valid for the purposes of conceptual analysis, and shows that state strength and state size are two different variables that must not be confused with each other.

### State Size versus State Power

While state capacity is concerned with the internal, state power is concerned with the external. Barston (1973) proposes a five-point typology for assessing weak state power:

1) A less developed economy;
2) Weaker military capabilities;
3) Less proactive foreign policy;
4) More limited resources, and;
5) Regional, rather than global, interests.41

Again, none of these criteria mention anything about state size. Vandenbosch is less strict than Barton. He measures state power using military power, arguing that states with weak military power can only survive when more powerful states permit them to do so. While I am in no way arguing that his conclusions on the relationship between military power and survival are wrong, I am claiming that he is conflating two entirely different concepts, namely state size and state power. Just as in the case of state capacity, state power and state size are different variables and must not be conflated. It is possible to have a powerful state that does not have much

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territory under its control. On the other hand, some larger states may have weaker military power. Canada, the second largest country in the world by landmass, has a massive territory, covering a great portion of the North American continent. Indeed, it has more territory than China. However, militarily speaking, China is by far more powerful than Canada, and in the highly unlikely event that the two of them ever went to war, Canada would stand no chance without help from allies.

Tianyi Wang makes the same mistake that Vandebosch does. She reasons that North Korea, as a weak power, can safely ignore the effects its behavior has on the international stage while China, as a major global power, cannot do so and must consider its global influence before taking any action toward North Korea. In discussing China’s foreign policy towards North Korea, she points out that despite North Korea’s continued nuclear provocations, China is reluctant to change its policy towards North Korea significantly, even as North Korean nuclear provocations ostensibly “[hinder] China’s own strategic and security interests.”

Although this explanation is reasonable, to title her article “Small State, Big Influence” and to continuously use state size and state power interchangeably throughout the article is greatly misleading and can lead to erroneous and potentially disastrous results. In response to Wang, Pardo and Reeves would argue that “[s]mall states, while having less material resources than medium or large states, are not necessarily weak.” It is true that Singapore has drastically fewer material resources than a country like Mongolia. However, in terms of military power, Singapore has Mongolia beat by far. In this example, a small state has more state power than a larger state. Even using Barton’s five-point typology, on every single aspect - from the level of economic development to foreign policy to geographic location of interests - Singapore has significantly more power than Mongolia. Although this is just one example, the contrast between Singapore and Mongolia demonstrates that 1) size and power are not equivalent, and 2) size does not necessarily determine power.

The State as a Territory

One question readers may have is, “How is it possible to measure something when there is no agreement on what that thing is?” In response, I would like to begin this section with the Indian parable of the blind men and the elephant. In this well-known parable, a group of blind men who have never encountered an elephant before each try to conceptualize the elephant by touching it, but only one part such as the tail, the trunk, or the tusk. Based their limited experience, each individual gives a description of the elephant that differs significantly from the others.

Just as each blind man has a different conceptualization of the same object - in this case, the elephant - political scientists have different conceptualizations of the same structure: the

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state. However, just because each of the men has a limited understanding of the elephant does not change the elephant’s characteristics, weight, or size.

Even though Weber, Mann, Poggi, Bourdieu, and other scholars have all provided different criteria for what constitutes a state, they all have one feature in common. Namely, virtually all plausible theories of the state require that a state have a well-defined territory. While state power or state capacity are not always easily measurable, territory, on the other hand, is generally easy to measure. The only differences are that some scholars may exclude water in territory figures while others, including myself, would include all geographic space under the political control of a state in measuring territory. Of course, there are still border disputes between various countries - as an example, consider China’s border disputes with India, Russia, and Vietnam. However, these disputes, once settled, produce well-delineated boundaries.

Conclusion

For a topic that is so fundamental to a field, one would imagine that there would be a consensus on what it is. After all, it is hard to believe that any mainstream economists would be unclear about the definitions of supply and demand, that any biologist would not understand what DNA is, or that any statisticians would disagree with one another about what standard deviation means. Yet, political science as a field has failed to come to a consensus or even a viable, widely-employed working definition on such a basic concept. Economists may disagree on what to include in GDP - for example, some think that blackmarket activity should be included while others do not. However, at least there is consistency in the general sense of what it means. For the field of political science, different conceptualizations of state size are as varied as the people who devise them.

If political scientists want their work to be taken seriously, conceptual rigorousness will help ensure scientific validity of the field. Thus, there must be a consensus or at least a generally agreed-upon meaning of the concept of how to measure the state. At the very least, I hope that if I have not managed to convince my readers that territory is truly the only way to measure state size, then I hope at least to have convinced my readers that this topic is one worthy of further discussion and should not be dismissed as a trifle issue.

As was stated in the beginning, if for nothing more than conceptual validity alone, the issue of state size merits attention. However, there are larger implications. One example of which is the Democratic Peace Theory, which holds popular support even if there is not convincing theoretical explanation for why democratic states tend not to go to war with one another. According to Veenendaal and Corbett, states with small populations are more likely than not to be democratic, in spite of their inherent disadvantages. However, again they misapply the term “small state” to describe population, not actually the size.

45 See Friedan et al., 2016; Slaughter, 2011; Huntington, 1991, and many more.
As a final word of caution, this article must not be misunderstood to mean that other state characteristics, including population, capacity, and power, are unimportant. Indeed, the survival of a state often depends on whether it has strong capacity and power, regardless of the amount of territory under its control, and having a sufficient population is a necessary condition to maintain that capacity and power. The only theoretical claim that this article makes is that state size is a matter of territory. The implications of this claim are still open for future research. Lastly, this article also mostly focused on countries in Asia as examples. Future studies could also expand the scope to other regions of the world.
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