



LUND UNIVERSITY

Divided it falls

Lessons on state capacity development from American state legislatures 1840-1910

Olander, Petrus

2020

Document Version:

Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):

Olander, P. (2020). *Divided it falls: Lessons on state capacity development from American state legislatures 1840-1910*. (pp. 1-62). (STANCE Working Paper Series; Vol. 2020-2021, No. 3). Department of Political Science, Lund University.

Total number of authors:

1

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

STANCE

State-Making and the Origins of Global Order
in the Long Nineteenth Century and Beyond

Divided it falls:
Lessons on state capacity development
from American state legislatures 1840-
1910

Petrus Olander

Working Paper Series, 2020-2021:3
STANCE, Lund University



LUND
UNIVERSITY

STANCE is a six-year research program at the Department of Political Science at Lund University, Sweden. The program, consisting of several separate but connected research projects, aims to answer the question of how state-making and the international system co-evolved in the long 19th century (1789-1914) and beyond. The program is constructed around three research themes: (1) How did the different dimensions of state-making evolve? What actors and organized interests supported or put up resistance to these processes?; (2) How were these dimensions of state-making affected by geopolitical competition, warfare and the diffusion of novel political technologies?; and (3) What were the consequences for the international system, both with respect to the type of state that emerged and what entities were granted membership in the state system? The program aims to bridge the gaps between comparative politics and IR, as well as those between the study of political thought and positive empirical political science. The research has been made possible by the Bank of Sweden Tercentenary Foundation (Riksbankens Jubileumsfond). Visit the research program's website at www.stanceatlund.org

Please address comments and/or queries for information to:

Email address: info@stanceatlund.org

Mailing address: STANCE
Department of Political Science
Lund University
Box 52, SE-221 00 Lund, Sweden

In Series 2016

1. "STATE CAPACITY AS POWER: A CONCEPTUAL FRAMEWORK", Johannes Lindvall and Jan Teorell
2. "THE LAY OF THE LAND: INFORMATION CAPACITY AND THE MODERN STATE", Thomas Brambor, Agustín Goenaga, Johannes Lindvall, and Jan Teorell
3. "STEPPE STATE MAKING", Martin Hall
4. "WAR, PERFORMANCE AND THE SURVIVAL OF FOREIGN MINISTERS", Hanna Bäck, Jan Teorell, and Alexander von Hagen-Jamar
5. "THE NATION-STATE AS FAILURE: NATIONALISM AND MOBILITY, IN INDIA AND ELSEWHERE", Erik Ringmar
6. "CABINETS, PRIME MINISTERS, AND CORRUPTION. A COMPARATIVE ANALYSIS OF PARLIAMENTARY GOVERNMENTS", Hanna Bäck, Staffan Lindberg, and Jan Teorell
7. "SOCIAL POLICY AND MIGRATION POLICY IN THE LONG NINETEENTH CENTURY", Sara Kalm and Johannes Lindvall
8. "FROM AN INCLUSIVE TO AN EXCLUSIVE INTERNATIONAL ORDER: MEMBERSHIP OF INTERNATIONAL ORGANISATIONS FROM THE 19TH TO THE 20TH CENTURY", Ellen Ravndal
9. "A FEDERATION OF EQUALS? BRINGING THE PRINCELY STATES INTO UNIFIED INDIA", Ted Svensson

10. "REPUBLICA SRPSKA – THE BECOMING OF A STATE", Annika Björkdahl
11. "MILITARY RIVALRIES, ALLIANCES AND TAXATION: THE INTERNATIONAL ORIGINS OF MODERN FISCAL CONTRACTS", Agustín Goenaga and Alexander von Hagen-Jamar

In Series 2017

1. "THE SOCIAL ORIGINS OF STATE CAPACITY: ORGANIZATIONS, INSTITUTIONS AND LATE DEVELOPMENT", Agustín Goenaga Orrego
2. "TECHNOLOGY AND POLITICS: A RESEARCH AGENDA", Johannes Lindvall
3. "RULES OF RECOGNITION: EXPLAINING DIPLOMATIC REPRESENTATION IN THE LONG NINETEENTH CENTURY", Jan Teorell
4. "MIMESIS AND ASSEMBLAGE: THE IMPERIAL DURBARS AT DELHI", Ted Svensson
5. "INTERNATIONAL ORGANISATIONS, AUTHORITY AND THE FIRST PERMANENT SECRETARIATS IN THE 19TH CENTURY", Ellen Ravndal
6. "MILITARY SPENDING AS A COUP-PROOFING STRATEGY: OPENING THE 'BLACK BOX' FOR SPAIN (1850-1915)", Oriol Sabaté, Sergio Espuelas and Alfonso Herranz-Loncán
7. "STATE MAKING AND SWEDISH POLITICS IN THE NORTH", Martin Hall
8. "STANDARDIZING MOVEMENTS: THE INTERNATIONAL PASSPORT CONFERENCES OF THE 1920s", Sara Kalm
9. "PREPARING FOR WAR: DEMOCRATIC THREAT RESPONSIVENESS AND MILITARY SPENDING IN THE LONG 19TH CENTURY", Alexander von Hagen-Jamar
10. "DOES FEMALE LEADERSHIP MATTER? AN ANALYSIS OF SWEDISH FOREIGN MINISTERS AND THEIR PARLIAMENTARY SPEECHES 1955-2016", Hanna Bäck and Annika Björkdahl
11. "SOLVING THE DECIDER'S DILEMMA: SCAPEGOATS, FOREIGN AFFAIRES, AND THE DURATION OF INTERSTATE WAR", Alejandro Quiroz Flores, Hanna Bäck, Alexander von Hagen-Jamar, and Jan Teorell

In Series 2018

1. "INTERNATIONAL ORDER, LANGUAGE GAMES AND THE EMERGENCE OF CHINESE 'SOVEREIGNTY' CLAIMS IN THE SOUTH CHINA SEA, 1909-1947", Amanda J. Cheney
2. "EMPIRE AND STATE IN EARLY MODERN POLITICAL THOUGHT", Jens Bartelson
3. "THE AMBIGUOUS EFFECTS OF DEMOCRACY ON BUREAUCRATIC QUALITY", David Andersen and Agnes Cornell
4. "NOT BECOMING A STATE: THE ICELANDIC COMMONWEALTH FROM COLONIZATION TO NORWEGIAN SUZERAINTY", Martin Hall
5. "POOR RELIEF AND INTERNAL MIGRATION: LESSONS FROM THE NINETEENTH CENTURY", Sara Kalm and Johannes Lindvall
6. "WAR AND STATE CAPACITY IN THE LONG NINETEENTH CENTURY", Agustín Goenaga, Oriol Sabaté and Jan Teorell

7. "RAILWAYS AND REFORM: HOW TRAINS STRENGTHENED THE NATION STATE",
Alexandra L. Cermeño, Kerstin Enflo and Johannes Lindvall

In Series 2019

1. "INCOME TAX PROGRESSIVITY AND WAR INFLATION DURING THE TWO WORLD WARS",
Sara Torregrosa-Hetland and Oriol Sabaté
2. "WHY IS TIBET PART OF CHINA? LANGUAGE-GAMES, TRANSLATION AND
INTERNATIONAL ORDER TRANSFORMATION IN THE LONG NINETEENTH CENTURY",
Amanda Cheney
3. "ROME: REPUBLIC TO EMPIRE", Martin Hall and Torbjørn Knutsen
4. "TIBET'S INCORPORATION INTO CHINA: CONTRASTING HISTORICAL NARRATIVES AND
THE PRC'S ONTOLOGICAL SECURITY", Amanda Cheney
5. "CITIZENSHIP AND MIGRATION OF THE POOR: SWEDEN DURING THE 19TH CENTURY",
Sara Kalm
6. "ROYAL IMPORT", Klas Nilsson
7. "COSMOS AND CONQUEST: PRECURSORS OF IBERIAN OVERSEAS EXPANSION, c. 1500-
1600", Jens Bartelson
8. "FISCAL CAPACITY IN NON-DEMOCRATIC STATES", Per F. Andersson
9. "STATE CAPACITY BEYOND EXECUTIVE POWER: TOWARDS AN INSTITUTIONALIST
VIEW", Agustín Goenaga
10. "THE BELGIAN PARLIAMENTARY REGIME 1830-2014", Simon Davidsson
11. "NON-TAXATION AND NON-REPRESENTATION IN HISTORICAL EUROPE: INSIGHTS
FROM EARLY-MODERN SWEDEN", Klas Nilsson

In Series 2020-2021

1. "LINKING WAR, NATURAL RESOURCES AND PUBLIC REVENUES: THE CASE OF THE WAR
OF THE PACIFIC (1879-1883)", Oriol Sabaté and José Peres-Cajías
2. "WAR AND THE TURN TO HISTORY", Jens Bartelson
3. "DIVIDED IT FALLS: LESSONS ON STATE CAPACITY DEVELOPMENT FROM AMERICAN
STATE LEGISLATURES 1840 – 1910", Petrus Olander
4. "ECONOMIC DOWNTURNS AND MINISTERS OF FINANCE IN SWEDEN, THE UNITED
KINGDOM, AND THE UNITED STATES SINCE THE EIGHTEENTH CENTURY", Hanna Bäck
and Johannes Lindvall
5. "INVESTING IN FISCAL CAPACITY: LEGISLATIVE DEBATES, MILITARY PRESSURES AND
TAXATION IN THE UNITED KINGDOM (1817-1939)", Agustín Goenaga and Oriol Sabaté
6. "IMPERIAL DIFFUSION OF BUREAUCRATIC PRACTICES? ENTRANCE EXAMINATIONS TO
THE INDIAN CIVIL SERVICE AND THE BRITISH CIVIL SERVICE", Agnes Cornell and Ted
Svensson

7. "POLITICAL SCIENCE AS ARCHITECTUE", Johannes Lindvall
8. "CITIZENSHIP AND THE FORGOTTEN EMIGRATION: SWEDES IN DENMARK 1850-1914", Sara Kalm

STANCE working papers are available in electronic format at www.stanceatlund.org
COPYRIGHT © 2020 & 2021 by authors. All rights reserved.

Divided it falls:

Lessons on state capacity development from American state
legislatures 1840-1910

Petrus Olander
Post Doc in Political Science
Lund University

Abstract

Previous research on state capacity has largely focused on external and internal elite competition. This paper describes a complementary explanation for differences in state capacity. I argue investments in state capacity entails a commitment problem. To build state capacity, legislators must form and maintain investment coalitions, but these are vulnerable to defections, which can undermine the investments. When legislators defect from investments, state capacity development is held back. I evaluate the theory in the setting of 19th century American state legislatures. Using new data on the curious practice of passing special legislation, I show that when legislators defected, state capacity development suffered. The research further indicates that the ability of legislatures to facilitate state capacity depends on rules and practices governing the behavior and ability of legislators to defect from their commitments.

I INTRODUCTION

Moving away from simply assuming states are capable of implementing policy, researchers have linked deficient state capacity to poor development and found that increasing capacity can improve economic development (Dincecco and Katz 2014; Besley and Persson 2011). The extant literature shows how external and internal elite competition can facilitate or hinder state capacity building (Grafias 2018; North, Wallis and Weingast 2009; Tilly 1990). Despite their contemporary omnipresence, and historical abundance across regime types (Gandhi, Noble and Svulik 2020), legislatures and their inner workings rarely feature as a factor explaining state capacity outcomes. This is conspicuous, not least in democratic settings, since in democracies; we might expect investments in state capacity to pass through the legislature.

Building on Besley's and Persson's model, in which the creation of state capacity is a choice between spending with instant utility and investment with higher, but delayed, utility (2010). I argue that even when legislators overcome the initial problem of time horizons, the effectiveness of the investments can erode if legislators fail to police the investment coalition and allow fellow legislators to defect. Legislators defect by granting exemptions and privileges that have more immediate utility for themselves and their constituents, which undermines the effectiveness of the investments. This theory suggests that absent intense conflict, legislatures need institutions, rules and practices, which allow the policing of investment coalitions to facilitate the creation of state capacity.

To study the role of legislatures, I use novel data on American state legislatures during the 19th century, a period that has notable parallels to challenges facing developing countries today (Kou and Teorell 2016). The American states had very limited state capacity at the beginning of the 19th century and have largely been ignored in previous research (Gerstle 2015:55), with attention instead being focused on the federal state (e.g. Skrowneck 1982; Bensel 1991; Carpenter 2001; Balogh 2009) or in recent work being focused on the county level (Suryanarayan and White 2019; Acharya, Blackwell and Sen 2016). I find, similarly to previous research focusing mainly on the authority rather than ability of the states (e.g. Novak 1996, Gertsel 2015), that acts proscribing investments that could result in various state capacity resources were ubiquitous. From this observation, I go on to study what happens after the initial decision.

First, in a case study I examine Kentucky tax revenue during the 1870s and detail how legislator's use of special legislation undermined the effectiveness of tax collection. Revenue collection is an important facet of state capacity (e.g. Tilly 1990), and it is therefore a suitable area in which to test the theory. However, tax rates is not the same as state capacity, some states might have lower rates for ideological reasons.

The difference between what the state is hoping to take in and what it actually collected is a better indicator of state capacity but one for which data there is little data looking across states. Focusing on revenue in the case study allows me to see if there is support for the theory in the area of tax collection, before testing it in other areas in the quantitative section. As material for the case study, I use reports written by the Auditor of Public Accounts, the Governor's message to the legislature (the State-of-the-state address) and acts passed by the legislature. The study of the acts passed by the Kentucky legislature, combined with the reports and messages make clear that the state was failing to collect what it had set out to collect. Further, the sources show how legislators used special laws to grant relief, extensions and remittance of fines to delinquent tax collectors (Sheriffs) and assessors that undermined the collection of revenue proper, contributing to Kentucky having to cancel payments in 1879. To probe if this use of special legislation was widespread, I compare the general prohibitions against passing special legislation adopted by different states. I find that among those enumerating the types of special legislation prohibited 21 out of 30, explicitly mention tax related special legislation, I conclude that the problem of legislators defecting from investments was not confined to Kentucky.

Leveraging the widespread and peculiar practice of passing special laws, laws that only pertain to a single entity or individual, in 19th century American legislatures I quantify defections across states 1840-1900, and in a further application, I take advantage of constitutional prohibitions against passing special legislation.

Using the data I collected on acts passed by legislatures, I test if the activities of the legislature impacted state capacity, operationalizing state capacity in three ways. First, using the notion of informational capacity or legibility (Scott 1998), that is the ability of the state to read its population, I measure the quality of the census at the state level 1850-1900. An approach to measuring state capacity which I adopt from Lee and Zhang (2016) who link legibility to tax compliance using cross national data, and also used by Suryanarayan and White to study county level state capacity in the U.S. south (2019). While the federal government commissioned the census, its agents relied on local infrastructure, as well as local law and order, to conduct the census, which is how it taps into local state capacity. Further, building on the idea that the expansion of railroads enhanced state capacity by allowing state agents to get to places (Cermenon, Enflo and Lindvall 2018), I use geographic data on railroad tracks (Atack 2016) which I match with historical boundaries to construct a measure of state capacity resources covering the period 1840-1910. Thirdly, I use Post offices (Rogowski et al 2018) as an indicator of state capacity. The expansion of postal services is considered a cornerstone of modern state building (e.g. Howe 2007) and has been used as an indicator of state capacity (Acemoglu, Moscona and Robinson 2016). Linking state politics to the establishment of post offices are postal routes, which were a prerequisite for the establishment of offices (Rogowski 2016), as these relied on roads and rail being

constructed in and by the states. The results provide support for the theory. The quality of the census was worse in states where the legislators defected more often by passing more special acts. Similarly, I find more defections inhibited railroad expansion as well as the expansion of postal services. Finally, I employ two-stage least squares (2SLS) estimator, using the general prohibitions against passing special legislation passed by some states as an alternative independent variable. These prohibitions inhibited the ability of legislators to pass special legislation and thus their ability to defect. The results offer further corroboration of the theory.

This article contributes to our understanding of the role of legislatures and legislators in building capacity, even when intense inter or intra state conflict is not present as an incentive. Previous scholarship has shown the significance of internal (Grafias 2018) and external conflict (Tilly 1990, Scheve and Stasavage 2012) for state capacity development. In Tilly's classic account the threat from competing states provided the impetus for investments in the capacity while mitigating domestic opposition. Focusing instead on domestic conflict, Francisco Grafias, building on work by Besley and Persson (2009, 2011) and North, Wallis, and Weingast (2009), show that economic elites can block the development of state capacity, but that the state can take advantage of economic shocks that weaken the economic elite to expand state capacity. This paper contributes to that discussion by looking at the role played by legislators, improving our understanding of state capacity development. Focusing on more peaceful political processes, this is especially important since while intense elite competition improve the chance of successful state capacity building, it is questionable as a policy prescription. The results in this paper, indicate that institutional reforms that help legislator's police collective action solutions could help facilitate improved state capacity.

This paper also adds to our understanding of legislatures as not only users, but also a source, of state capacity. Thereby contributing to bridging of the literature on state capacity with that on legislative capacity, which have been surprisingly independent. The general state capacity literature has focused on the bureaucratic side of the state. The legislative capacity literature has instead focused on how it improves the link between voter preferences and policy decisions (Lax and Phillips 2012, Maestas 2000), the legislature's composition and internal work (Fiorina 1994, Squire 1992) and less on its consequences for implementing policy (but see Fortunato and Turner 2018). Framing legislators and legislatures as a source of state capacity development links the two literatures.

While not focused on American political development, it never the less makes three contributions to that literature. First, it points to the emergence of government as an important actor influencing political and economic development, while focusing attention away from the federal level. It also goes beyond some of the contributions such as William Novak's (1996) and Gary Gerstle's (2015), by showing how local

conditions varied and changed. Additionally, it shines new light on special laws. In different accounts these have been argued to be outright corruption (Ireland 2004), home district pork (Gamm and Kousser 2010), or administration by statute (Field 1946). Special laws have been, and can be all these, but as I argue below, they can also be a vehicle for defection from coalitions to invest with detrimental effects on state capacity. Finally, previous research has shown how the federal state centralized authority and ability (e.g. Skrowneck 1982, Bensel 1991 Carpenter 2001). This paper provides further insight into why, despite having had the authority and willingness to regulate and organize social, economic and political life for decades, the individual states were still too weak to resist the centralization of power to the federal level.

II LEGISLATORS AND INVESTMENTS IN STATE CAPACITY

In this section, I build on previous research and present state capacity investments as a two-stage process, before I theorize its implications in a legislative setting and the behavior of legislators.

Besley and Persson frame state capacity as “the state’s ability to implement a range of policies” (2010, p.1), thus it mediates the link between a policy and an outcome. Besley and Persson focus on two particular policy areas, supporting markets and raising revenue, and posits that we can think of state capacity building as the accumulation or creation of the resources that mediates the link between policy and outcome. Examples of such resources are tax auditors and court systems. As pointed out by Lindvall and Teroell (2016), there is little reason to limit the concept to these particular areas, either in terms of policy or resources. States want to implement other types of policy, and can use a range of additional resources to do so, such as information or infrastructure. For example, a state that can send their agents to where they need to go will have an easier time implementing policy (Cermeño, Enflo and Lindvall 2018). The state must first create or gather state capacity resources before it can employ them, the decision to accumulate such resources is what Besley and Person refers to as an investment. Investing in state capacity resources will increase future pay-off as future policy outcomes will correspond more closely to the adopted policy. The decision to invest stands in contrast to a decision to spend the available funds on something of more immediate utility or abstain from investing, thus not having pay the cost of investment.

Consequently, the choice is contingent on the probability the decider places on being around to collect the rewards of the investment (Besley and Persson 2010). Other things being equal, the probability of an investment decision increases with the time horizon of the decider. In a legislative setting, we might therefor expect for

example longer terms to increase the likelihood of investment. Legislators who are uncertain about their prospects or face term limits may instead favor spending over investment (Carey, Niemi and Powell 1998), since they might judge there is little chance of being around to reap the rewards of the investment.

Once we move away from treating the incumbent decision maker as a uniform actor this reasoning yields a prediction that further contributes to our understanding of the role of legislatures in creating state capacity resources; individual legislators can try to have it both ways. Because there is a lag between decision and outcome, there is room for individual legislators to maneuver. A legislator whose constituency favors investment can vote in favor of investments, increasing the likelihood that they will stay in office and then spend by defecting from the investment, carving out exemptions for themselves and their supporters. This will undermine the investment and may cause it to fail. The legislator might either not see how they contribute to the failure (they know in theory, but their needs are different), or taking a more cynical view, the legislator will be able to campaign on favoring investment while saving their supporters the burden of the cost, perhaps even setting something aside for private consumption.

Because different legislators serve different districts or constituents, it can be in the interest of other legislators to allow a colleague to defect, as they might themselves have to rely on the same logroll at later occasions. Absent an institution providing the legislator with alternative means to secure their future, it can be in all their interests to allow fellow legislatures to defect when they deem it necessary. Further, taking a generous view towards defections could help get investment through the legislature as it promises legislators the opportunity to change their mind without having to vote again on the original investment. Legislators might therefore, allow, observe, foresee, or even help defections even though it undermines an investment they favor.

These defections can happen through a diversion of the funds invested towards private purposes, or through de jure and de facto exemptions from bearing the cost of the investment. Examples of the former are decisions to purchase products based on the location of the manufacturing facilities rather than function and price of the products, or even outright corruption and theft. Examples of the latter are uneven enforcement of tax codes. Common for these are that the investment suffers with an often feeble state as the result. Legislators are unlikely to want to record such defections in a systematic way, since it might reflect badly on them. The 19th century American practice of passing special legislation therefore offers a rare systematic account of the activities of legislators, that can be leveraged to examine the role defections play in shaping investment outcomes.

III EMPIRICAL STRATEGY

To evaluate the theory, I look at the work of state legislatures in the United States during the 19th century, using four outcomes related to state capacity: in an illustrative case I examine revenue, in a large-N setting I examine accuracy of the census, availability of post offices, and railroad expansion. This has several advantages. The historical American case has parallels to contemporary states with weak state capacity (Kuo and Teorell 2017), notable among these are democracy (with obvious deficiencies), sub national variations that function as a control for country constants and global setting, relatively recent independence and areas of limited state control.

If it is correct that legislators hamper development through defections, we cannot measure development as, for example, the legislature instituting a tax or passing a law regulating the economy. Defections take place between the passage of an investment and that investment being realized; therefore, it is often the outcome that is of interest rather than the investment. Studying defections by legislators is not straight forward as these are rarely public acts, or at least acts the legislators' wish to display as defections. To deal with this, I take advantage of the peculiar American practices of passing private/special laws during the 19th century. There is no reason to think defections only happen through special legislation, rather defections can come in the form of corruption, theft and graft. I focus on special laws because they offer a written record allowing us to track defections systematically. In a setting where special legislation is legal, we might even expect the recipient of the exemption or the favorable treatment to want it codified in law to make it more durable. Special legislation is therefore a good observable instance of defections. In the next section, I first describe special laws more generally, before I use the case of Kentucky to exemplify how legislators used special laws to defect and how state capacity suffered as a result. I probe the generalizability of the described causal chain by comparing enumerated prohibitions against the passing of special legislation. Having done so, I go on to describe how, I constructed the quantitative data of defections, prohibitions on special legislation and the indicators of state capacity resources, which I use in further tests of the link between defections and state capacity.

IV SPECIAL LEGISLATION, DEFECTIONS AND STATE CAPACITY RESOURCES -ILLUSTRATIVE CASE

Special laws are laws not meant to apply to a class of cases, but instead single individuals or entities, such as named individuals, companies or municipalities (Gamm and Kousser 2013). Because special laws allow legislators to grant exemptions and privileges to constituents without the same exemptions and privileges becoming available to the general public they provide a suitable vehicle for defections. The reason for focusing on the 19th century is that there is little doubt American state capacity was higher when the century ended than when it began, though more exact details and timing of authority being centralized is debated (e.g. Skrowneck 1982, Bensel 1991, Carpenter 2001). In previous accounts, the state level has largely been ignored (Gerstle 2015:55, Karch 2016), but we know the states were very active, regulating business and social life, were the original holders and users of the police powers (Novak 1996, Gertsel 2015) and far outspent the federal government on internal improvements (Goodrich 1960). An emerging consensus in the literature is that the states sought to play an active role in economic and social life from early on.

This view is easily corroborated by looking at the collection of the acts passed by any of the legislatures. Even going back to the early republic these reads like litanies of state capacity enhancing policies. For example, the acts passed by the first session of the Kentucky legislature (1792) include, the establishment of an Auditor of Public Accounts (Ch. I), organizing new counties and towns with governance structure (Ch. II-III, V), establishing permanent revenue (Ch. VI), organizing a Land office (Ch. XI), regulating the appointment of surveyors (Ch. XX), appointing sheriffs (Ch. XV), regulating the state militia (Ch. XVIII and XIX), regulating county courts (Ch. XXIX) and so on. Examining the records for the session in 1800, we still find a legislature busy reforming and expanding their authority, organizing new counties and towns with governance structure (Ch. II-IV), organizing the appointment of commissioners to survey roads (Ch. XIII), managing jails (Ch. XXI), reforming county courts (Ch. XXIII), regulating commerce setting weights, measures and standards (Ch. XXXIII), reforming the militia (Ch. LXV) and so on. A pattern that persists throughout the 19th century.

However, while authority endowed, money spent and regulation passed, might look like state capacity being built, it does not mean it was. That some of the intended outcomes were produced is beyond dispute: railroads were built, militias existed, tax collectors and sheriffs were appointed. It is however also clear, that many of these investments came to naught; many taxes were not collected or returned to the state,

law enforcement was lacking, and as was evident when the civil war broke out the state militias were wanting in many ways. I argue that an important intervening factor was the defections legislators made from the commitment to invest.

Because the payoff from investment is delayed, the success of an investment is contingent on the ability of decision makers to create and maintain a coalition for making the investment, and any investment agreement is subject to the risk of defections. That investment decisions were made in American state legislatures can therefore not be taken as proof that the outcome was produced. To my knowledge, there exists no systematic and detailed data on the link between policy decisions and outcomes for the period that goes beyond single investments (e.g. the Erie Canal). The American governing system however has one feature that allow us to bypass this problem, the widespread practice of passing special laws. While still legal in some states and at the federal level, during the 19th century the passing of special legislation was ubiquitous (Gamm and Kousser 2010), but there are few studies on the topic.

Special laws are laws that are intended to apply to only one case, be it a person, a place, or a corporation. They are special as opposed to general laws, which simply applies to everyone if they fit the description of the category, be it having murdered someone, owning a house, or earning a wage. What special laws are, in a broader sense depends on the perspective from which one looks at them. In some sense, they represent administration performed by legislators, or administration by statute (Field 1946). Overwhelmingly however, special laws are seen as suspect, negative, or even criminal, by historical onlookers and modern researchers. Gerald Gamm and Thad Kousser liken special laws to pork being delivered to legislators to constituents (2010, p.154). Francis Jordan, then secretary of the Commonwealth of Pennsylvania described it as "crude, undigested trash mis-called legislation . . . unworthy of the name, and a reproach to any civilized community in the nineteenth century" (quoted in Ireland 2004, p.274). Writing in the Atlantic monthly in 1906, Samuel P. Orth argues that "In truth, a special law is a law only in that its passage has conformed to the usages and formulae of legislatures. In substance it is not a law, but a privilege." (1906, p. 69).

Examining the special laws passed by state legislatures during the 19th century it is easy to see how special legislation both can be seen as administration by legislatures, or something more nefarious. In the same year (1800) as the aforementioned state capacity enhancing acts from Kentucky there are special acts, some of which are examples of rather mundane administration performed by the legislature such as, "An act for the relief of Edward Faris" (Ch. XIV), who was wrongly charged for lands he did not receive. Similarly, many state legislatures would routinely pass acts legalizing name changes on a case-by-case basis.

However, in addition to these there are acts that are defection from the commitment to invest. The same session of the legislature that passed the benign law giving relief to Edward Faris, passed several such laws. For example, the legislature

passed acts giving relief for various named Sheriffs who tasked with collecting taxes did not turn those taxes over to the government (e.g. Ch. XI, XV, XVI, XXXI) undermining the investment made to create revenue. A similar problem arises by the granting of relief for George Reading (Ch. XIX). Reading had received land from the state in exchange for building a dam, a common practice to improve infrastructure at the time. Reading had however not built the dam within the specified period and would have forfeited the land had not a friendly legislator stepped in to prevent the forfeiture through a special law. The state invested resources (land) to get a state capacity resource (improved infrastructure), but did not get a dam and failed to recuperate the invested land due to the intervention of a legislator. This pattern is repeated in corporate charters, where one law might set the tax rate, but individual charters are then used to set different tax rates for a specific corporation.

Cumulatively the effects of these defections are a weaker state. Because of the strong norm of legislative courtesy, which is similar to an implicit log-roll, by which legislators deferred to the authority of members to govern their own districts through special legislation (Ireland 2004, Hennessey 2014), these reliefs and exemptions are not translated into general legislation applying to all cases. It is not that the legislature changes its policy on an investment but rather that an individual legislator defects from the investment by introducing a special bill.

Going beyond examples of individual acts by legislators, perhaps the clearest way to track the systematic effect of such defections is by looking at tax revenue. Unlike when the goal post is moved for an infrastructure investment, the implications of such defections are more straightforward. Further, if revenue dries up state capacity suffers in other areas as the ability of states to subsidize infrastructure or employ human capital decreases.

The detrimental effect of defections from investment in tax revenue creation is detailed in the 1873 message to the General Assembly of Kentucky from Governor P.H. Leslie. He first accounts for how the state had lost over half a million dollars¹ because sheriffs failed to return the taxes they had collected during the period 1852-1872. The Governor then writes; “It is a case of frequent occurrence that, when judgement has been rendered against a delinquent sheriff, a special act is obtained from the next Legislature releasing him from the damages assessed against him according to law”. Leslie further remarked how special acts of incorporation spoiled the tax policy by changing the tax rate on case-by-case basis, and that some, “railroad companies enjoy similar exemptions... .Some of them are exempted by law from all taxation for

¹ The total amount received from Sheriffs 1873-74 in Kentucky was \$ 786 534.63 (Report of the Auditor of Public Accounts of the State of Kentucky), the loss therefore represents about 2/3 of the revenue that would come in from sheriffs in one year

a number of years, and others, till their entire line of road is completed.” (Leslie 1873, p. 17-22).

In the corresponding report from the Auditor of Public Accounts, Howard D. Smith, Smith argues that the capacity of the state to raise revenue was failing, revenue would not match expenses, and Smith urged that action be taken to secure “a prompt and more certain method of collecting the public revenue.” (Smith 1873, p.V). Note especially that he is not arguing for higher taxes, but that the taxes already mandated be collected. As a remedy, Smith’s prescription is somewhat different from the Governor’s, he suggests the creation of a state equalization board to ensure property across the state is assessed correctly. The legislature responded by investing in the states capacity to collect revenue by passing “An act to amend the revenue laws. . . ” (Ch 443),² which reorganized assessments of taxable property. Reporting back in 1875, the Auditor lauded the legislature on making the investment which increased revenue, but notes that the revenue would have increased far more had the act “been strictly enforced in all of the counties. . . .” further stating that; ”I am informed and believe that in many counties it was not enforced at all” (Smith 1875, p. iv). Despite this remark by the Auditor, legislators kept defecting; in the same term, legislators granted five extensions to tax assessors who had failed to execute their duties (Ch. 102, 405, 473, 476 and 834), in addition to the previous non-enforcement. Additionally, legislators passed 58 acts,³ granting reliefs and/or extensions to Sheriffs who had failed to collect or turn over the taxes they collected to the treasury.

These defections did not go unnoticed by the Auditor and in his report in 1877 he returned to the topic of special legislation, delinquent sheriffs and the drain on the treasury asking; “very respectfully, to suggest that there be no legislation for the benefit of delinquent sheriffs and other officers in default, except upon full consultation with the Auditor.” (Smith 1877, p. vii). In his last report (1879), a noticeably dismayed Smith had to report that he had been forced to cancel payments during the year, and that the state would run a large deficit (Smith 1879 p.3-7). In this report the auditor does not mention special laws and poor enforcement as causes of the states “financial embarrassment”. Governor Blackburn in his message to the legislature however remarks that the auditor had hoped to resume payments once judgment had been rendered in some cases “as well as by the collections of sheriffs and others on account of the revenue of 1879; but in this it turns out that his hopes and expectations were not fulfilled.” (Blackburn 1879, p.35). Further, the Governors first recommendation to remedy the financial situation was “such amendments to existing laws as will secure

² 1873 adj session, not to be confused with Ch. 430 in the same volume which has a similar title.

³ The number 58 is derived using a conservative coding. Acts granting reliefs but where local conditions, such as “prevailing pecuniary embarrassment of county”, “crop failure”, or “smallpox” are cited as reasons have not been included, nor cases where death or resignations are cited as reasons motivating the extensions. As 1037 acts were passed 1875-76, that means relief to tax collecting sheriffs made up 5.5 percent of all acts passed.

a just, equal, and uniform valuation of the taxable property of the State.” (1879, p.38), thus calling for reform and further investment in state capacity. He concludes that “I am satisfied that such amendments to existing laws as I have thus indicated, will prevent future difficulties in our financial affairs, provided sheriffs and other collecting officers be required under heavy penalties to pay into the Treasury the public dues within the time prescribed by law.” (1879, p.60).

The legislators again showed that they were willing to invest in state capacity resource by passing a number of acts reforming the way in which assessments were carried out (Ch. 1319, 1565). But legislators again defected from the commitment to collect the revenue by passing six extensions to delinquent sheriffs, before giving up and passing a blanket extension for all current and former delinquent sheriffs (1879 Ch. 404). This however did not prevent additional defections, and in total legislators passed 28 acts granting extensions or remittances of fines for delinquent sheriffs.

This account shows that while the legislature invested in state capacity, legislators frequently defected from these investments eroding their effectiveness. The generalizability of Kentucky in the 1870s should not be taken for granted. It could be that the case is unique. To probe this, I look across states and examine the content of the general prohibitions against special legislation which were passed in 33 states during the 19th century. Out of these, 30 enumerates the types of special laws that legislatures were prohibited from passing. My argument is that if the enumerated prohibitions mentions taxes explicitly it suggests that the drafters of the section, presumably people with power or insight, believed it to be a common and detrimental use of special legislation. For this argument to hold we should expect that a numerated prohibition in Kentucky should contain a provision against special laws relating to taxes. Which is what I find. Article V, Section 59 of the 1891 constitution reads;

“The General Assembly shall not pass local or special acts concerning any of the following subjects, or for any of the following purposes, namely: . . . Fifteenth: To authorize or to regulate the levy, the assessment or the collection of taxes, or to give any indulgence or discharge to any assessor or collector of taxes, or to his sureties.”

Using a conservative coding, including only those cases where taxes are mentioned in the section prohibiting special laws rather than when a subsequent section mandates taxes be stipulated only through general law, I find that 21 of the 30 enumerated prohibitions explicitly mention tax related special legislation.⁴ For example, the 1851 constitution of Indiana prohibits the use of special legislation for the purpose of “the assessment and collection of taxes for State, county, township or road purposes” (Indiana 1851). In other constitutions, there are separate entries for tax assessment, extending time for collection and exemptions (e.g. California 1879). This supports the generalizability of the findings from Kentucky, legislators in other states also used

⁴ See Table A3 in Supporting information for the relevant wording in each of the cases.

special laws to defect from investments in revenue collection. In this section, I focused on revenue capacity, which is often considered central to state capacity (Tilly 1990). State capacity resources however go beyond just the ability to generate revenue and in the next section, I turn my attention to other resources that can help states implement policy, namely information and infrastructure.

V DATA AND MEASUREMENTS

Independent variables - acts and prohibitions

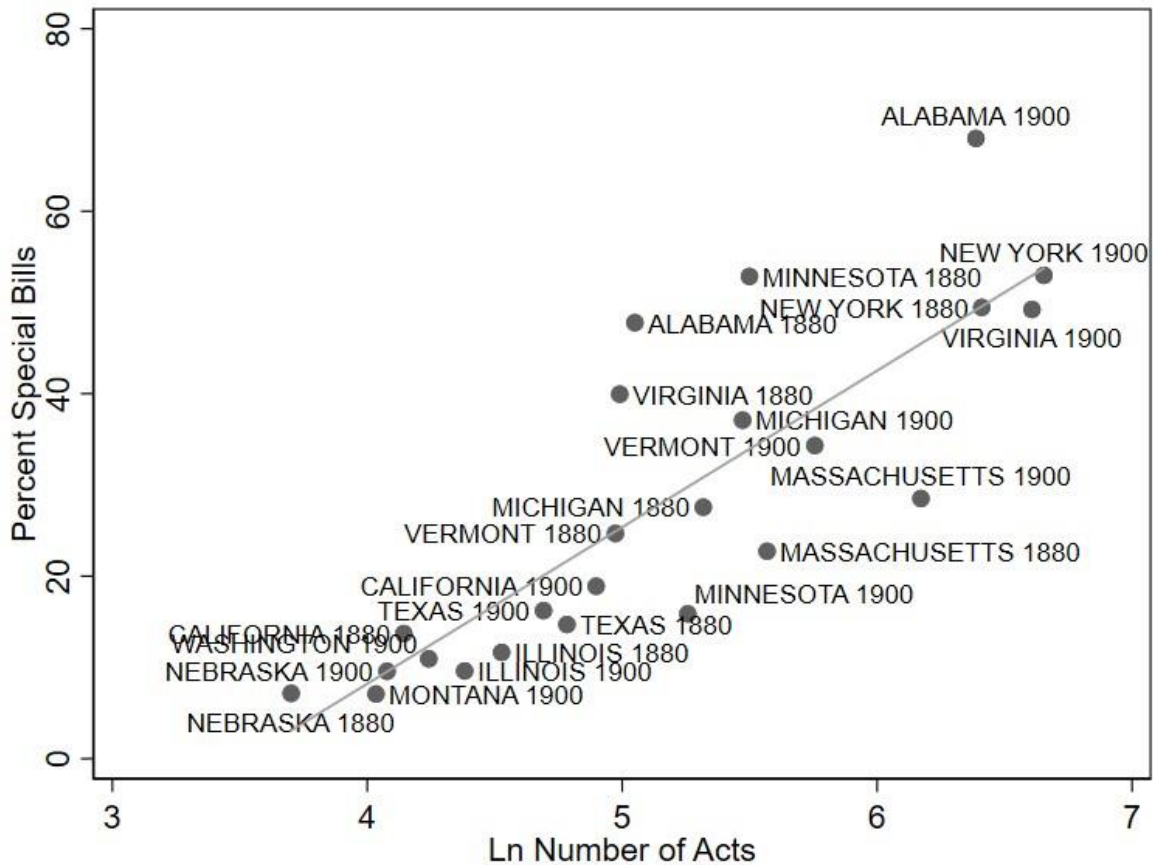
Defections can take many, often unlawful, forms like corruption and graft, quantify defections can therefore be hard as those defecting might prefer not to record their actions. However, because the American state legislatures recorded the special laws they passed, it offers a record of the actions taken by legislators to defect from investments. Unfortunately, since the American state legislatures passed hundreds of thousands of acts during the period, parsing out special laws from that corpus would be a mammoth task. Fortunately, the total number of acts passed by the legislatures is a good proxy for the prevalence of special laws, as shown below. To create a measure of the number of special acts passed by the legislatures, I count the number of all acts, general and special, passed by each legislature 1830-1900 and use this as a proxy for the number of special acts passed. I include legislatures as soon as they start to pass legislation, in some cases this includes periods before they gain statehood.

There are two reasons why we might expect the total number of acts passed and the number of special acts passed to correlate closely. The first reason is that special acts are more limited in scope and consequently much less cumbersome for legislators to prepare. Only the legislator whose district is affected needs to be familiar with the bill, other legislators can defer to legislative courtesy (Gamm and Kousse 2010, p.155). The second reason is that laws only pertaining to single entities made for a lot of acts being passed. A general law of incorporation has to be updated every now and then but it only makes for one act passed, but passing a law incorporating companies case by case requires an act per incorporation and one every time that charter needs updating. Dealing in special legislation inflates the amount of acts that the legislature needs to pass, while the number of general acts do not need to change.

I test the validity of using all legislation as a proxy using data from the detailed coding of all bills introduced in 13 states in the years 1880 and 1900 used by Gamm and Kousser (2010, 2013). The bivariate correlation between the number of all bills introduced in the state legislatures that were special bills from Gamm and Kousser and

the (log) annual number of acts passed is .83 for the 13 states in the sample. Using the 1880-1900 change in special bills introduced and the change in number of acts passed yields a correlation of correlation .84⁵ The total amount of legislation passed is therefore a good proxy for special legislation passed by the legislatures.

Figure 1: Special bills and log total number of acts passed 1880 and 1900



Note: States in sample, Alabama, California, Illinois, Massachusetts, Michigan, Minnesota, Montana (only 1900), Nebraska, New York, Texas, Vermont, Virginia, Washington (only 1900).

Some special laws are not defections, people need name changes, wrongs need righting, people need to start businesses and so on. To the extent that special laws were administration by statute (Field 1946) the need for passing them should be a function of population size, e.g. more people means more name changes, which I account for

⁵ I counted acts per session and there are several cases of biennial sessions, and/or different lengths of session for even/uneven years, therefore I divide the number of acts per year the term covered.

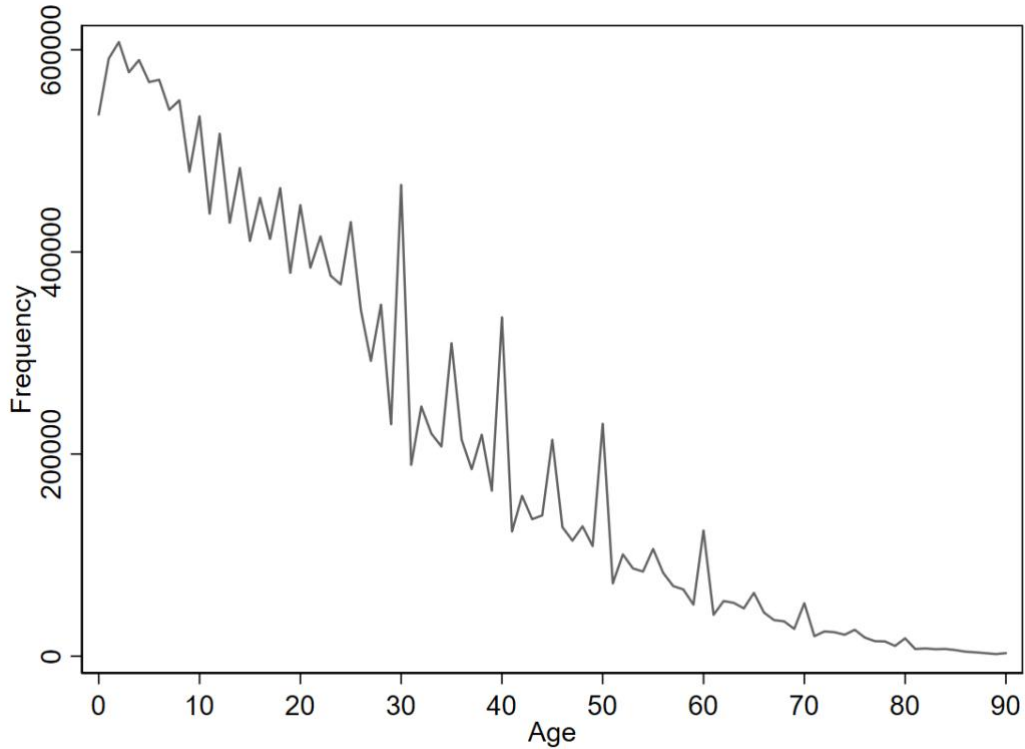
by using acts per capita in the statistical modelling below. In additional tests I use the general constitutional prohibitions against passing special legislation. This does not rely on a proxy for special legislation and it does not require that we account for administration by statute by considering acts per capita. As such it offers a meaningful alternative measure of defections, with different strengths than the amount of legislation passed.

Dependent variables - state capacity

To estimate historical state capacity, I construct three measures, one using the quality of the U.S. census using data from the Integrated Public Use Microdata Series/IPUMS-USA, (Ruggles et al 2020), an approach similar to that used by Lee and Zhang (2016) but also Suryanarayan and White (2019). The second is an indicator measuring the expansion of railroads using data from Jermeij Atack (2016), the logic being that more railroads meant state agents to get to where they needed to go (Cermeño, Enflo and Lindvall 2018). Finally, I construct an indicator measuring new post offices established since 1775 based on data from Rogowski, Gerring, Maguire and Cojocaru, the establishment of Post offices is generally considered central to modern state building (Rogowski et al 2018).

As my first indicator of state capacity, I construct a measure called a Myers Index, based on the accuracy of the American census in each census year in each state 1850-1900 using digitized census records from IPUMS-USA. Most directly, this approach builds on the work of Lee and Zhang who use the same type of measure to estimate state capacity from a cross national dataset covering the period 1960-2012 (Lee and Zhang 2016), and Suryanarayan and White (2020) who use it to measure state capacity at the county level. This in turn builds on the work of James Scott and the idea of legibility, the clarity of information about localities (1998). Lee and Zhang (2016) as well as Brambor et al (2019) points out how legibility relates to the information resources available to the state, information that can be used to help implement policy. The underlying idea of the Myers Index is that the last digit in the age of people reported in a census should be distributed more or less uniformly unless something is going on. When the age of a person is unknown either to the respondent, or to the census canvasser, the age that is nonetheless reported in the census have been found to heap on focal numbers such as five or ten, but also even numbers (Lee and Zhang 2016 quoting Driscoll and Naidu 2012). Visually this heaping can be quite striking as in the case of Figure 2 in which the number of individuals of each age in the 1850 American Census is displayed. Note especially the spikes at 30, 40, 50 and 60, but also the spikes in even numbered years.

Figure 2: Persons by age, 7th American Census (1850).



The Myers Index is a way of quantifying this heaping.⁶ There could be a number of reasons why either a person or a census canvasser is unable to establish the correct age of someone. The person might not know their own age because the date was not recorded at their birth. The canvasser might have been unable or unwilling to ask a person their age, because the respondent might live in a remote or dangerous area, to which the canvasser does not want to go. In each case, the failure indicates an inability of the state either to record births and issue certificates, or of their bureaucrats to access the whole territory, and thereby it relates to the capacity of the state and might be used as an indicator of that. Due to the influx of immigrants there is a risk that lack of birth certificates causing heaping is attributable to weak states in the migrant's country of birth, which I control for in the applied models.

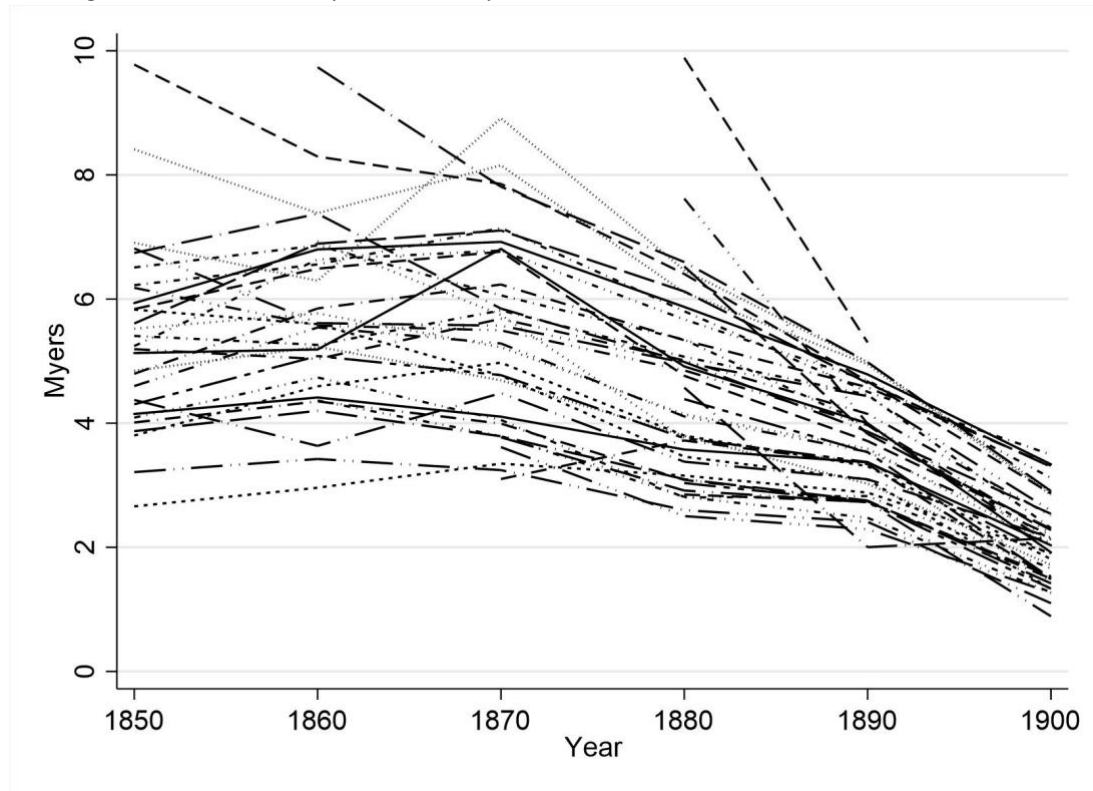
It was not until 1850 that individual level age was first recorded in the census, and therefore it is the first year in my time-series when the Myers index is the dependent

⁶ An alternative way of quantify heaping is using a Whipple score. There are two advantages to using Myers here. The Whipple score does not account for mortality, and the Whipple score require we know on which numbers the heaping occurs. Generally, the downside to using Myers is that it is biased when the population is very small and the true error is very small (Lee and Zhang 2016, p.124). This scenario is unlikely looking at the state level during the 19th century. Finally, the two correlate .98 in my data.

variable. Because the age of people held in slavery was not recorded on the individual level, I calculate the Myers index based on ages in the white population. The panel concludes with the turn of the century. The census of 1900 was the last census before the federal government established a permanent administration (the Census bureau), altering the conditions and presumably introducing a new dynamic to changes in the quality of the census.

Figure 3, displays Myers scores 1850-1900 each line representing one state. To put the scoring into perspective, the score denotes what percentage of the cases we would have to reclassify to obtain a uniform distribution of final numbers in the ages. In 1850 this ranges from a high of 9.8 percent in Louisiana, a low of 2.7 in Maine and mean of 5.4. Compared with the modern day numbers in Lee and Zhang, this puts 1850 America in the same bracket as their Latin American countries.

Figure 3: Timeline Myers index by State 1850-1900



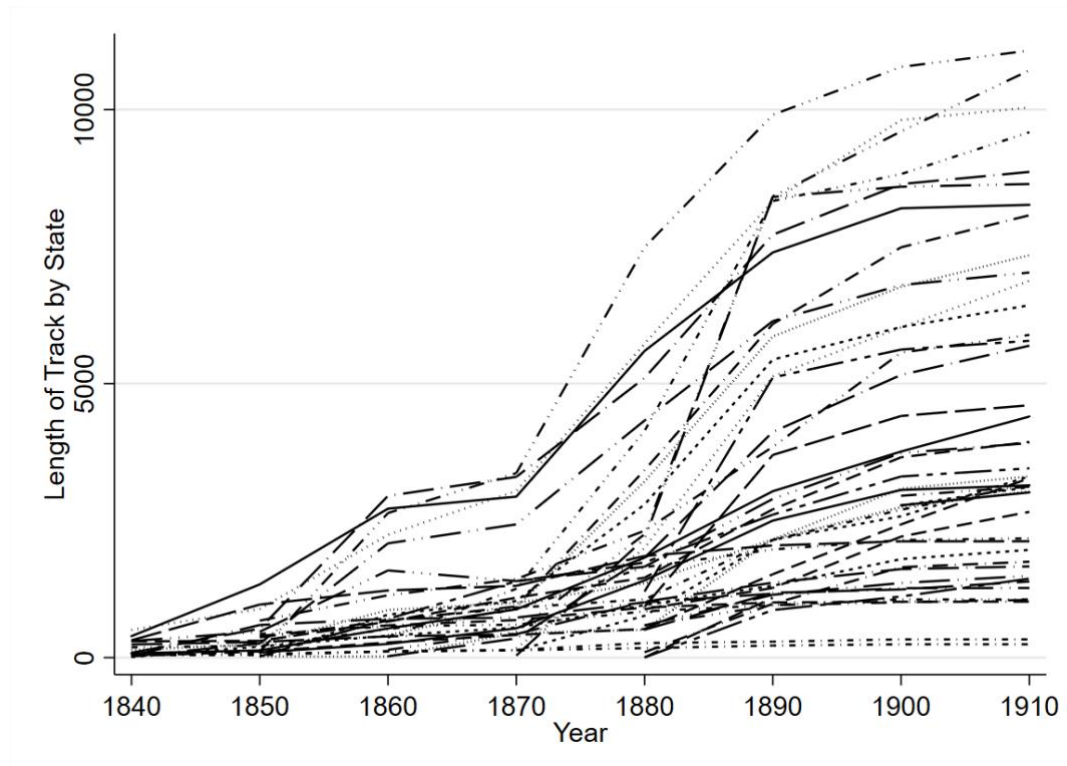
While the federal government administered the federal census, it taps into what might be called the non-excludable state capacity resources of the respective states and therefore offers an indication of one of the facets of local state capacity. I conceptualize non-excludable state capacity resources as resources that can help a government create a desired outcome but the use of which is not exclusive to that government, these include but are not limited to infrastructure such as roads, railroads and canals. For example, a road will allow government forces to travel from a capital to an area, making

it easier to control that area, but the same road might also be used by a competing army to reach the capital. Applied to the census and age heaping; the bureaucrats employed by the federal government still relied on local factors such as infrastructure and law and order to get to where they needed to go.

Looking again at Figure 3, we can note that the 1880 census takes place after the end of reconstruction, through which the role of the federal government in state politics decreased dramatically. Had the quality of the census during the period only relied on federal state capacity we would have expected the Myers index to increase in the south, no such change is visible. The logic for using this as an indicator is that when fewer legislators defect, investments in non-excludable state capacity resources are more successful which would have increased the ability of census takers to perform their job. Had investments not been undermined by defections, it would be easier for census takers to collect correct information. Finally, when the index is very high, single investments in state capacity, such as establishing a system of courts or appointing a sheriff, might make a very large differences. Since the focus here is on behavior that erodes the effectiveness of investments and not on whether or not legislators make investments, I log the Myers index.

My second indicator of state capacity is the length of railroad tracks in operation in the state. Large infrastructure projects generally relies on governments in one way or another. Certainly, transportation infrastructure often needs either right of way or extensive land grants to be feasible, even if a private corporation handles the rail and operation. That American state governments were instrumental in facilitating and sometimes blocking the development of railroads is well established in the literature (e.g. Howe 2007, Callen 2016) The expansion of railroads represent one of the most important technological developments of the 19th century, connecting people with each other, and with their governments. Recent research has shown that as railroads expanded so did the reach of the government, increasing its ability to effect outcomes as state agents were better able to travel to locations (Cermeño, Enflo and Lindvall 2018). State government involvement in railroad constructions went beyond the initial act of incorporation. Special laws could be used to alter contracts and conditions in favor of railroad companies, for example easing demands on the length of track a company had to construct before being paid or allowed to issue more stocks. My argument here is that while states frequently set out to facilitate the expansion of railroads by providing financial investments or invested in market supporting institutions, defections by legislators eroded those investments, the outcome of which was less railroad being constructed. In the counterfactual, according to this reasoning, without defections using special legislation 19th century America would have seen more completed railroad, perhaps even at lower costs.

Figure 4: Timeline Railroad Expansion

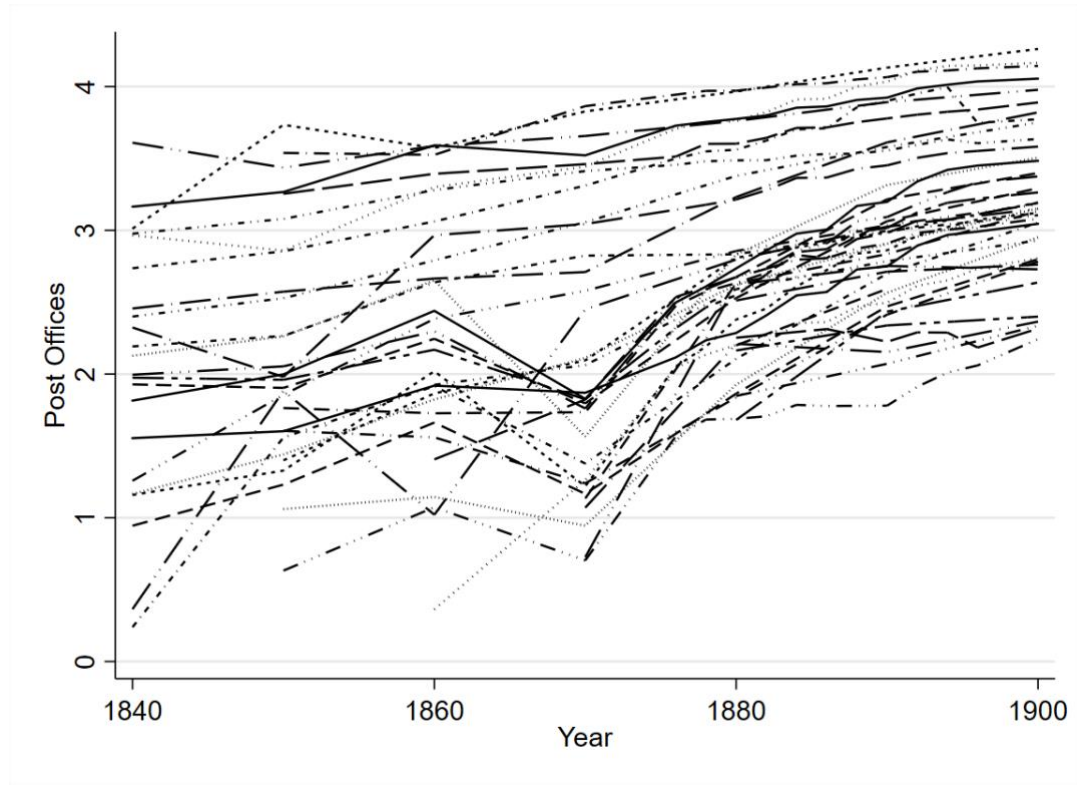


To construct a measure of railroad expansion, I use Jeremy Atack’s detailed geographical description of the spread of railroads (Atack 2016). Mapping the tracks onto historical maps of the states from *Atlas of Historical County Boundaries*, I summarize the total length of track within each state in census years and use the logged number to account for diminishing utility of more rail at higher levels.

The third indicator of state capacity, I use is the state mean number of post-offices per county. Post offices connected far away parts of the state by allowing communication and it required a bureaucracy to operate, a bureaucracy that also feed information back to the state (Carpenter 2001). Like the census, post offices were a federal project, and has been used as an indicator of federal state capacity (Acemoglu, Moscona and Robinson 2016) but also like the census it relied on local non-excludable state capacity resources to operate because a prerequisite for a post office was a postal route (e.g. Rogowski 2016). Postal routes in turn depend on transportation infrastructure such as roads, turnpikes and railroads, the development of which were contingent on the state governments. In the words of David Carpenter, “Although formally administered from Washington, postal operations were profoundly shaped and limited by the available mode of transportation.” (2001, p.65). The reasoning here is thus as follows, when legislators defect the expansion and maintenance of infrastructure suffers, and fewer post offices can be established. Had there been fewer

defections, investments in state capacity resources would be more successful and more post offices would have been established.

Figure 5: Timeline Post Offices



To get a measure of post-offices, I use data from Rogowski et al (2018). They log the number of offices in each county and I in turn use the state mean of their measure. The dataset covers years during the period 1837-1896, specifically 1837, 1846, 1855, 1867, 1876, 1886, and 1896. For the independent variables, I use data on each preceding census year (1830 for 1837, 1840 for 1846 etc.). Rogowski, finds a link having a co-partisan of the president representing the county in congress and the number of post-offices in the county (2016). To account for such a link, I include an indicator of whether or not the state supported the incumbent president in models when using post-offices as the outcome variable.

Dependent variables - state capacity

Some special legislation was what might be termed administration by statute, such as name changes and divorce. To account for this, I measure defections as laws per 1000 inhabitants since more people should mean more constituents to serve. I further

include the term length of senators, and house members respectively, coded from Dubin (2007). Longer terms should increase the chance of being around to reap the rewards of investing in state capacity making legislators less prone to defect. Because events in a new state, both in the legislature and in the state more generally, might be different from a more regular decade, I include a dummy variable for the first decade of statehood. Additionally, I include the 10-year change in population size. In Table 1, the dependent variable is state level aberrations in the census as measured by a Myers index, with higher numbers indicating more problems. To alleviate concerns that the aberrations captured are a result of poor state capacity in the countries of origin for migrants rather than local state capacity, I include the share of the people born abroad from the census (IPUMS-USA). Finally, to account for the partisan allocation of post-offices (Rogowski 2016), I include a variable indicating if the state supported the incumbent president or not.

VI FINDINGS

Defections and state capacity resources - Statistical evidence

I employ a panel-design to study within-unit changes in defections and state capacity outcomes. Focusing on a single country allows us to hold constant the international context as well as national level factors that are uniform across the country. Throughout, I employ state and time fixed effects, looking only at within state changes, and accounting for common trend and events in specific years. The time period included is limited by the dependent variables; using the census data confines the study to ten-year intervals starting in 1850 and ending in 1900 the last census before the establishment of the Census Bureau.⁷ The railroad data begins in 1836 and ends in 1911, and I employ data 1840-1910 at ten-year intervals. Finally, the post office data begins in 1837 and ends in 1896 after which many rural post offices were replaced by household mail delivery (Rogowski et al 2018). Throughout standard errors are clustered on the state level.

⁷ The 1890 original records were destroyed by fire, summary statistics that are detailed enough to construct a Myers index for 1890 did however survive. The data file I used to do this was provided by IPUMS-NHGIS (Manson et al 2020) from their internal resources which they were kind enough to share, but the raw data can be found in the Eleventh Census – Volume 1 Part I and II, Table 2.

Table 1 displays the results from panel regressions probing the link between defections and state capacity resources. Across specifications, the results are in line with expectations and support the theory. When defections are more common, the development of state capacity suffered. Uneven numbered models contain estimates based on all available data. Previously built railroads, post-offices already in operation and earlier problems conducting the census, are all things that might affect outcomes at later points in time, in the uneven numbered models I therefore include a lag of corresponding dependent variables. The coefficients for number of acts passed are consistently statistically significant and have the expected sign. In Models 1 and 2 where the dependent variable is aberrations in the census, it is positive, indicating that when legislators passed more special laws the quality of the following census was worse. In models 3 to 6 where the dependent variables are first the expansion of railroads and then the number of post offices the coefficient is negative, indicating less rail and fewer post-offices came into operation following legislators passing more special laws.

Table 1. Fixed-effects estimation: Number of acts passed and state capacity resources

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) |
|----------------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|
| | Ln Myers | | Ln Length of tracks | | Ln Post offices | |
| Lag Number of acts p.c. | .057** (.022) | .064*** (.020) | -.944*** (.229) | -.536*** (.186) | -.739*** (.129) | -.580*** (.154) |
| Lag Length of house term | .017 (.028) | .016 (.029) | -.147 (.179) | .056 (.134) | .008 (.074) | .003 (.077) |
| Lag Length of senate term | -.001 (.016) | -.001 (.016) | .060 (.075) | -.025 (.055) | .017 (.031) | .013 (.033) |
| Lag Growth Ln Population | .151*** (.033) | .154*** (.038) | -.571** (.257) | -.020 (.215) | -.016 (.067) | .008 (.077) |
| Lag First decade since statehood | -.132** (.052) | -.131** (.052) | -.308 (.372) | -.456 (.356) | -.082 (.086) | -.064 (.098) |
| Lag Share Foreign-born | 1.012*** (.287) | 1.077*** (.330) | | | | |
| Lag Supported the President | | | | | .001 (.052) | -.004 (.047) |
| Lagged dep. Var. | | X | | X | | X |
| State FE | X | X | X | X | X | X |
| Time FE | X | X | X | X | X | X |
| R-squared | .935 | .935 | .834 | .867 | .834 | .822 |
| n | 188 | 188 | 271 | 259 | 222 | 201 |
| N | 45 | 45 | 46 | 45 | 38 | 38 |

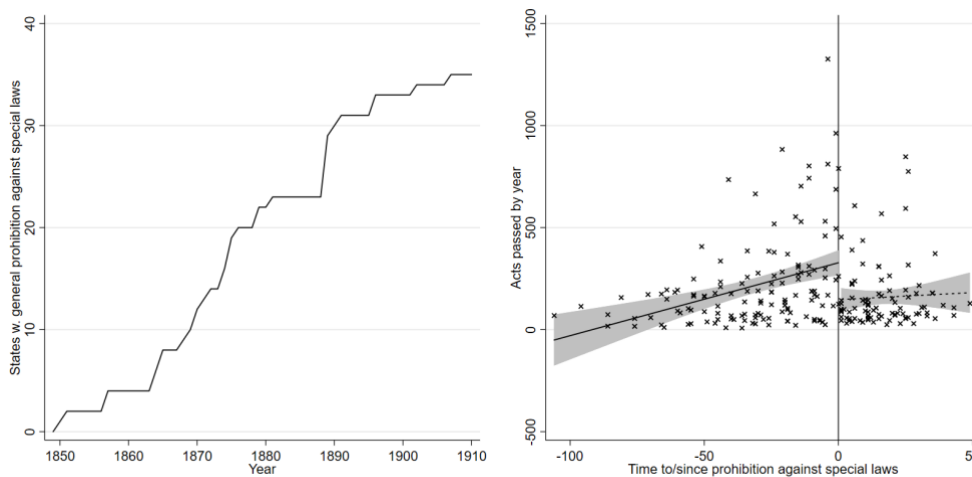
Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust Std. Err. Clustered at state level. All models include state and time fixed effects. All independent variables are lagged 10 years. Even numbered models include a lag of the dependent variable.

The substance of the correlation differs across the outcome variables. It is largest in the case of post offices (Model 5) where an increase of one standard deviation (which is .26) is associated with 24 percent of a standard deviation (.83) fewer post offices. Based on these estimations defections in local state legislatures have a less substantive association with the quality of the census (Model 1), a one standard deviation difference (.53) in the number of acts, is associated with a 6 percent of one standard deviation (.50) difference in the logged Myers score. In the case of rail roads in operation the association is again much more substantive, here a standard deviation change (.31) is associated with 20 percent of a standard deviation (1.24) less rail in operation.

I probe the sensitivity of these results in a number of additional analysis, the detailed results of which are presented in the Supporting information. Across these analysis the results are consistent with those in Table 1, though they vary somewhat in significance level and size of the coefficients but stay consistently within conventional levels of significance. Briefly summarizing these analyses, first I drop all covariates keeping only the two-way fixed effects, the results are similar to those in Table 1 in terms of sign and statistical significance, but it increases the size of the coefficient estimates (Table A5). Second, I use a fully balanced panel (Table A6), including only those states for which I have data from 1850 for each subsequent decade until 1900 for post-offices and the census, and 1910 for railroads, the results are consistent for the census, but for railroads the size of the coefficient is smaller (-.57). Third, Suryanarayan and White finds that southern whites intentionally weakened local state capacity to prevent the state from being used for cross ethnic economic redistribution, something they do not find in northern counties (2019). That suggests that there may have been different sentiments towards building state capacity in the north and the south. I therefore run separate estimations for states that seceded and states that did not. The results of these estimations are very similar in both samples, and consistent and close to the results in Table 1 for all outcome variables but the census where the size of the coefficient is three times larger in the Southern sample (Table A7). I then consider if the results are driven by the inclusion of legislatures in areas that were not yet states (no cases in Post office data). I rerun the models excluding observations before a state gained statehood (Table A8), again the results give no cause for concern, while there is some variation in the size of the coefficient the results remain statistically significant and are consistent in sign. Finally, I test to see if the results for the quality of the census depend on the choice of using the Myers measure rather than the Whipple measure; the results indicate it does not.

I conduct additional analysis using the aforementioned state prohibitions against passing special legislation passed by 33 states in my sample. Instituting a ban against passing general special legislation is a hindrance to legislators seeking to defect from investments, and as such, I expect that it should correlate with improvements in state capacity. First, I conduct the analysis using the same specification as in the uneven numbered models in Table 1, but replace the number of acts passed per 1000 inhabitants, with a dummy variable for the existence of a prohibition (Table A9). Doing so has at least two advantages. First, I no longer rely on using the number of acts as a proxy for special acts. Second, given the extensive set of covariates, it is not straightforward to see the chain of reversed causality in which the quality of the census, railroads and post-offices lead to states to adopt general prohibitions against special legislation. Nor how prohibitions would be related to the outcomes other than through its effect on the ability of legislators to pass special legislation. The amount of acts, might however increase the probability that prohibitions were adopted.⁸ Another problem using prohibitions, could be that since the prohibition were frequently adopted with new constitutions, there might have been other provisions in those new constitutions affecting state capacity. To account for this, I include a dummy indicating if the state adopted a new constitution in the last decade in additional analysis (Table A10). Both set of analysis using prohibitions produce almost identical results, and consistent with the theory, the results indicate state capacity improved in states that adopted a prohibition.

Figure 6. General State Level Prohibition against Passing Special Laws



⁸ This theory is however unsupported by evidence. I tried but failed to predict the adoption prohibitions using amount of legislation passed. This is less counter intuitive than it might first sound: where a lot of special legislation is passed demand might be higher but also opposition to prohibitions.

Note: List of prohibitions from Hennessey (2014) covering general prohibitions against passing special laws in state constitutions as found in the NBER State Constitutions website. In this category Hennessey includes any prohibitions against passing special legislation other than for corporations and municipalities. Examples of prohibited legislation is such that concerns individuals, highways, rate of interest, officials, and elections, the data here corresponds to Table 2. Column “General SL” (Hennessey 2014, p.423).

Prohibitions should only impact state capacity through a decrease in the number of defections by legislators. The right pane in Figure 6 shows the number of acts passed before and after prohibitions. The fitted lines indicate legislatures did pass fewer acts in the years after prohibitions. However, the drop is less than one might expect. A reading of the acts passed by legislators across states after prohibitions indicate that legislators were apt at finding ways around the new rules, passing legislation that was general in name only. Legislators could do so by passing class legislation written so narrowly it only applied to one case as when the New York legislature passed legislation applying to “all localities having a waterfall over one hundred feet high”, Niagara Falls being the only one, something unlikely to change (Orth 1906).

To deal with this, I conduct further analysis using a two-stage least squares (2SLS) estimator. There is a risk the exclusion restriction does not hold, prohibitions might not be exogenous to previous legislation passed by the legislatures. A reason for using the 2SLS estimator is however that it allows us to study state capacity in the wake of prohibitions taking into account how it affected acts passed by the legislature. In the first stage, I regress prohibitions on acts passed per thousand inhabitants, and then in the second stage I use the predicted values to examine the link between defections and state capacity.

Table 2. 2SLS

| | (1) | (2) | C3 |
|--------------------|--------------------|------------------------|---------------------|
| Dependent variable | Ln | Ln Length of Tracks | Ln Post- Offices |
| Lag Number of acts | 0.247* (0.147) | -2.216*** (0.676) | -1.117** (0.439) |
| Controls | X | X | X |
| State FE | X | X | X |
| Time FE | X | X | X |
| n/N | 188/45 | 242/45 | 222/38 |
| First stage | | | |
| Prohibition | -0.277** (.093) | -0.260*** (.057) | -0.200*** (.053) |
| F-stat | 6.87 | 12.94 | 6.80 |

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust Std. Err. Clustered at state level. All models include state and time fixed effects. All independent variables are lagged 10 years

Table 2, displays the results from these estimations. The first stage equations provide empirical support for the procedure as the results indicate prohibitions are associated with fewer acts per capita passed by the legislatures. As an instrument it is however not very strong, with an F-stat ranging between 6.80 and 12.94, suggesting a moderate downward weak instrument bias, towards the smaller single equation estimate. The second stage results are consistent with those in the OLS models, using the predicted values, more acts are associated with more age heaping in the census, less railroad tracks being completed and fewer post-offices being established. The estimated local average treatment effect are larger, especially for the Census variable and railroad tracks. In terms of interpreting the results causally caution is due, we cannot be certain the exclusion restriction holds, still the results are another piece of evidence in support of a causal interpretation. The results indicate that rules governing the behavior of legislators are linked to the accumulation of state capacity. These results further indicate that there are interventions, such as rule changes, which can constrain the behavior of legislators. While it did not stop the practice of defections through special legislation, prohibitions did suppress the volume.

VII CONCLUDING REMARKS

Investments made by legislatures is an intuitive pathway for the creation of state capacity. I argued that while legislatures make investments, they can also undermine the investments by defecting from that commitment. Evidence from original data on the work of American state assemblies during much the 19th century as well as data on the accumulation of state capacity resources is consistent with this argument.

These findings have important implications for our understanding of how states can develop capacity. While most research on state building has focused on preparations and the conduct of war (e.g. Tilly 1992) or elite competition (e.g. Grafias 2018), scholars have payed less attention to the work of legislatures.

I note three takeaways from the research reported in this paper. First, the rules, organizations and practices that govern the behavior of legislators can have important implications for the ability of the legislature to make and maintain investments in state capacity resources. This suggests that successful accumulation of state capacity is not only about what investments states should make, but also how legislatures should organize to constrain their own actions. Second, it further underlines the importance of separating authority and ability, when studying the creation of state capacity. While two legislatures can pass identical acts, their subsequent behavior can lead to different

outcomes, both will have claimed authority but both might not produce ability. Third, it offers further insight into how state governments played a role in the political and economic development of the United States, going beyond the federal government. The results also lends support to the growing assertion that the local state level had a substantial impact on local development and the outcome of federal policies. Importantly, the effect of the amounts of laws passed should not be construed as relating to active or passive governments generally, but as relating to the effect of defections. The use of amount of legislation passed as an indicator of defections works in this context but is not an argument for passive government or gridlock.

Finally, I note several limitations of the research in the paper and opportunities for further studies. First, the strength of the causal claim is limited by the design of the study. Special acts were not randomly distributed and while the robustness checks should alleviate some of the concerns associated with observational data it can still be subject to these limitations. Second, the American cases offers a particular, formalized and recorded, form of defections using special laws. Further research is needed to establish if and how legislators in legislatures where the practice of passing special acts is not used employ different practices for defecting from commitments to invest. Third, it is unclear what interventions can limit defections by legislators. The evidence here suggests depriving legislators of the option to pass special laws contributed to stemming the tide, but a cursory reading of acts passed after prohibitions indicate it was not sufficient as legislators learned to circumvent prohibitions. Understanding how legislatures can organize to constrain the behavior of legislators requires additional research.

VIII REFERENCES

- Acemoglu, Daron, Jacob Moscona, and James A. Robinson. "State capacity and American technology: evidence from the nineteenth century." *American Economic Review* 106, no. 5 (2016): 61-67.
- Acharya, Avidit, Matthew Blackwell, and Maya Sen. "The political legacy of American slavery." *The Journal of Politics* 78, no. 3 (2016): 621-641.
- Ashenfelter, Orley. "Estimating the effect of training programs on earnings." *The Review of Economics and Statistics* (1978): 47-57.
- Balogh, Brian. *A government out of sight: The mystery of national authority in nineteenth-century America*. Cambridge University Press, 2009.
- Bensel, Richard Franklin. *Yankee Leviathan – The Origins of Central State Authority in America 1859-1877*. Cambridge University Press, 1991.

- Besley, Timothy, and Torsten Persson. "State capacity, conflict, and development." *Econometrica* 78, no. 1 (2010): 1-34.
- Besley, Timothy, and Torsten Persson. "The origins of state capacity: Property rights, taxation, and politics." *American economic review* 99, no. 4 (2009): 1218-44.
- Besley, Timothy, and Torsten Persson. *Pillars of prosperity: The political economics of development clusters*. Princeton University Press, 2011.
- Brambor, Thomas, Agustín Goenaga, Johannes Lindvall, and Jan Teorell. "The lay of the land: information capacity and the modern state." *Comparative Political Studies* 53, no. 2 (2020): 175-213.
- Callen, Zachary. *Railroads and American Political Development: Infrastructure, Federalism, and State Building*. University Press of Kansas, 2016.
- Carey, John M., Richard G. Niemi, and Lynda W. Powell. "The effects of term limits on state legislatures." *Legislative Studies Quarterly* (1998): 271-300.
- Carpenter, Daniel. *The forging of bureaucratic autonomy: Reputations, networks, and policy innovation in executive agencies, 1862-1928*. Vol. 173. Princeton University Press, 2020.
- Carter Goodrich, *Government Promotion of American Canals and Railroads*. New York: Columbia, 1960.
- Cermeno, Alexandra L., Kerstin Enflo, and Johannes Lindvall. "Railways and Reform: How Trains Strengthened the Nation State." *STANCE Working Paper Series* 2018, no. 7 (2018): 1-28.
- Dincecco, Mark, and Gabriel Katz. "State capacity and long-run economic performance." *The Economic Journal* 126, no. 590 (2016): 189-218.
- Dubin, Michael J. *Party affiliations in the state legislatures: A year by year summary, 1796-2006*. McFarland, 2015.
- Field, G. Lowell. "Administration by Statute-The Question of Special Laws." *Public Administration Review* 6, no. 4 (1946): 325-338.
- Fiorina, Morris P. "Divided government in the American states: A byproduct of legislative professionalism?." *American Political Science Review* (1994): 304-316.
- Fortunato, David, and Ian R. Turner. "Legislative Capacity and Credit Risk." *American Journal of Political Science* 62, no. 3 (2018): 623-636.
- Gamm, Gerald, and Thad Kousser. "Broad bills or particularistic policy? Historical patterns in American state legislatures." *American Political Science Review* (2010): 151-170.
- Gamm, Gerald, and Thad Kousser. "No strength in numbers: The failure of big-city bills in American state legislatures, 1880-2000." *American Political Science Review* (2013): 663-678.
- Gandhi, Jennifer, Ben Noble, and Milan Svobik. "Legislatures and Legislative Politics Without Democracy." *Comparative Political Studies* (2020)

- Garfias, Francisco. "Elite competition and state capacity development: Theory and evidence from post-revolutionary Mexico." *American Political Science Review* 112, no. 2 (2018): 339-357.
- Gerstle, Gary. *Liberty and coercion: The paradox of American government from the founding to the present*. Princeton University Press, 2017.
- Hennessey, Jessica. "Loss of control: legislature changes and the state–local relationship." *Constitutional Political Economy* 25, no. 4 (2014): 407-433.
- Howe, Daniel Walker. *What hath God wrought: the transformation of America, 1815-1848*. Oxford University Press, 2007.
- Ireland, Robert M. "The problem of local, private, and special legislation in the nineteenth-century United States." *The American Journal of Legal History* 46, no. 3 (2004): 271-299.
- Jeremy Atack, "Historical Geographic Information Systems (GIS) database of U.S. Railroads for 1836-1910". (May 2016).
- Kuo, Didi, and Jan Teorell. "Illicit tactics as substitutes: Election fraud, ballot reform, and contested Congressional elections in the United States, 1860-1930." *Comparative Political Studies* 50, no. 5 (2017): 665-696.
- Lax, Jeffrey R., and Justin H. Phillips. "The democratic deficit in the states." *American Journal of Political Science* 56, no. 1 (2012): 148-166.
- Lee, Melissa M., and Nan Zhang. "Legibility and the informational foundations of state capacity." *The Journal of Politics* 79, no. 1 (2017): 118-132.
- Levi, Margaret. *Of rule and revenue*. Univ of California Press, 1988.
- Lindvall, Johannes, and Jan Teorell. *State capacity as power: a conceptual framework*. Department of Political Science, Lund University, 2016.
- Maestas, Cherie. "Professional legislatures and ambitious politicians: Policy responsiveness of state institutions." *Legislative Studies Quarterly* (2000): 663-690.
- North, Douglass C., John Joseph Wallis, and Barry R. Weingast. *Violence and social orders: A conceptual framework for interpreting recorded human history*. Cambridge University Press, 2009.
- Novak, William J. *The people's welfare: law and regulation in nineteenth-century America*. Univ of North Carolina Press, 1996.
- Orth, Samuel P. "Special legislation." *The Atlantic Monthly* 97 (1906): 69-76.
- Rogowski, Jon C. "Presidential influence in an era of congressional dominance." *American Political Science Review* 110, no. 2 (2016): 325-341.
- Rogowski, Jon C., John Gerring, Matthew Maguire, and Lee Cojocar. *Public Infrastructure and Economic Development: Evidence from Postal Systems*. Working paper, 2018.
- Scheve, Kenneth, and David Stasavage. "Democracy, war, and wealth: lessons from two centuries of inheritance taxation." *American Political Science Review* (2012): 81-102.

- Scott, James C. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven, CT: Yale University Press. 1998.
- Skowronek, Stephen. *Building a new American state: The expansion of national administrative capacities, 1877-1920*. Cambridge University Press, 1982.
- Smith, D. Howard. *Report of the Auditor of Public Accounts of the State of Kentucky, for the Fiscal Years Endings 1873*.
- Smith, D. Howard. *Report of the Auditor of Public Accounts of the State of Kentucky, for the the State of Kentucky, for the Fiscal Years Endings 1875*.
- Smith, D. Howard. *Report of the Auditor of Public Accounts of the State of Kentucky, for the the State of Kentucky, for the Fiscal Years Endings 1877*.
- Squire, Peverill. "Legislative professionalization and membership diversity in state legislatures." *Legislative Studies Quarterly* (1992): 69-79.
- Steven Manson, Jonathan Schroeder, David Van Riper, Tracy Kugler, and Steven Ruggles. *IPUMS National Historical Geographic Information System: Version 15.0* [dataset]. Minneapolis, MN: IPUMS. 2020. <http://doi.org/10.18128/D050.V15.0>
- Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. *IPUMS USA: Version 10.0* [dataset]. Minneapolis, MN: IPUMS, 2020.
- Suryanarayan, Pavithra, and Steven White. "Slavery, reconstruction, and bureaucratic capacity in the American south." Available at SSRN 2951964 (2019)
- Tilly, Charles, *Coercion, Capital and European States: A.D. 990-1992*, Cambridge, Massachusetts: Basil Blackwell, 1990.

IX Supporting Information

SI table A1: Acts passed by the Kentucky General Assembly session starting in 1875 relating to tax collectors (Sheriffs).

| Coded as defection | Chapter | Topic |
|-----------------------|---------|--|
| 1 | 13 | Delinquent Sheriff granted extension |
| 1 | 66 | Delinquent Sheriff granted extension |
| 1 | 68 | Delinquent Sheriff granted extension |
| 1 | 78 | Act for the benefit of sheriff (unclear reason) |
| 1 | 87 | Delinquent Sheriff granted extension |
| 1 | 91 | Delinquent sheriff gets a refund |
| 1 | 93 | Further extension |
| 1 | 99 | Further extension |
| 1 | 103 | Further extension |
| 1 | 114 | Delinquent Sheriff granted extension |
| 1 | 124 | Increase in pay to sheriff a higher percent of taxes, no reason given |
| 1 | 139 | Relief to sheriff |
| 1 | 165 | Delinquent Sheriff granted extension |
| 0 | 169 | A named sheriff doesn't have to collect a local tax, instead another collector should be appointed |
| 1 | 399 | An act for the benefit of sureties to a delinquent sheriff |

| | | |
|---|-----|--|
| 1 | 394 | Delinquent Sheriff granted extension |
| 1 | 186 | Delinquent Sheriff interest remitted |
| 0 | 196 | Resignation by sheriff |
| 1 | 216 | Delinquent Sheriff granted extension |
| 1 | 218 | Delinquent Sheriff granted extension |
| 0 | 222 | Delinquent Sheriff blames oversight gets off the hook |
| 0 | 231 | Poorly managed handover: Delinquent Sheriff granted extension |
| 0 | 245 | Sheriff collects local tax |
| 0 | 251 | About where to hold process |
| 1 | 254 | Delinquent Sheriff granted extension |
| 1 | 299 | Delinquent Sheriff granted extension |
| 1 | 302 | Delinquent Sheriff granted extension |
| 0 | 320 | Payment to sheriff for services rendered |
| 0 | 352 | Payment to sheriff for services rendered |
| 1 | 366 | Delinquent Sheriff granted extension |
| 1 | 376 | Relief to sheriff (interest on delinquency) |
| 0 | 381 | Relief due to dead book keeper |
| 1 | 384 | Delinquent Sheriff granted extension |
| 1 | 411 | Refund |
| 1 | 420 | Delinquent Sheriff granted extension |
| 1 | 464 | Sheriff that did not collect tax is now allowed opportunity to collect |
| 1 | 490 | Delinquent Sheriff granted extension |

| | | |
|---|-----|---|
| 1 | 496 | Delinquent Sheriff granted extension |
| 0 | 497 | Some printing business |
| 1 | 505 | Delinquent Sheriff granted relief (interest) on unpaid taxes |
| 1 | 506 | Legalizing some payment to a Sheriff |
| 0 | 508 | Sheriff may be paid by a county court named in the act. |
| 1 | 509 | Failure to appoint sheriff |
| 0 | 541 | A payment without stated reason to a Sheriff |
| 0 | 549 | Delinquent Sheriff granted extension - one sheriff has taken over from another |
| 1 | 562 | Relief for a Sheriff that failed to get a credit when it was due |
| 1 | 563 | Delinquent Sheriff granted extension |
| 0 | 614 | Allowing Sheriffs to execute work for county |
| 1 | 593 | Delinquent Sheriff granted relief (interest) on unpaid taxes |
| 1 | 594 | Delinquent Sheriff granted extension |
| 0 | 769 | Payment to sheriff for transfer of mule thief to House of Reform |
| 1 | 644 | Relief, a sheriff made a mess, but will not suffer |
| 0 | 653 | The courts ruled a sheriff paid too much, now he gets the money back |
| 0 | 654 | Delinquent Sheriff granted extension (Small pox!) |
| 0 | 667 | Payment , but not clear the sheriff did something wrong |
| 1 | 668 | Relief for a sheriff that having been granted an extension had failed to live up to the granted extension but still gets further relief |
| 1 | 683 | Delinquent Sheriff granted extension |

| | | |
|---|-----|---|
| 1 | 693 | Delinquent Sheriff granted extension |
| 1 | 699 | Delinquent Sheriff granted extension |
| 1 | 701 | Delinquent Sheriff granted extension |
| 1 | 713 | Delinquent Sheriff granted extension |
| 1 | 721 | Delinquent Sheriff granted extension |
| 1 | 727 | Delinquent Sheriff granted relief (interest) on unpaid taxes |
| 1 | 751 | Delinquent Sheriff granted extension |
| 1 | 806 | Delinquent Sheriff granted further extension |
| 1 | 811 | Delinquent Sheriff granted extension |
| 1 | 817 | Delinquent Sheriff granted extension |
| 1 | 847 | Delinquent Sheriff granted extension |
| 0 | 889 | Payment for extra work |
| 1 | 913 | Relief for delinquent sheriff |
| 1 | 915 | Delinquent Sheriff granted extension |
| 1 | 917 | Delinquent Sheriff who had been granted extension but failed is granted relief |
| 0 | 929 | Apparently a sheriff failed to collect a tax due to misapprehension, but is now allowed to collect it later |
| 1 | 940 | The sureties of a sheriff who was late are exempt from the interest due to the lateness of the sheriff |
| 0 | 941 | A county named in the law may pay a sheriff to collect county taxes |
| 1 | 949 | Delinquent Sheriff granted extension |
| 1 | 955 | Delinquent Sheriff granted extension |

| | | |
|---|------|--|
| 1 | 978 | Delinquent Sheriff granted extension |
| 1 | 991 | Delinquent Sheriff granted extension |
| 0 | 1091 | Delinquent Sheriff granted extension but for reasonable reason |
| 0 | 1021 | Payment to sheriff for services rendered by a county court |

SI table A2: Acts passed by the Kentucky General Assembly session starting in 1879 relating to tax collectors (Sheriffs).

| Coded as defectio n | Chapte r | Topic |
|---------------------------|-------------|--|
| 1 | 39 | Extension for delinquent sheriff |
| 0 | 93 | Delinquent sheriff may appoint a deputy |
| 1 | 94 | Extension for delinquent sheriff |
| 0 | 96 | Current Sheriff is granted right to collect taxes due to delinquent former sheriff |
| 1 | 98 | Extension for delinquent sheriff |
| 1 | 102 | Extension for delinquent sheriff |
| 1 | 115 | Extension for delinquent sheriff (OVERSIGHT) |
| 0 | 137 | Sheriff gets rebate, paid too much |
| 1 | 258 | Extension for delinquent sheriff |
| 0 | 276 | Extension for delinquent sheriff (FIRE) |
| 1 | 324 | Extension for delinquent sheriff |
| 1 | 325 | Sureties of late sheriff are released from paying outstanding debt |
| 0 | 332 | Money to an ex sheriff, no reason given |
| 1 | 333 | Sureties of late sheriff are released from paying outstanding debt |
| 0 | 334 | Tax was paid to treasury but not by sheriff, therefore he is no longer liable |
| 0 | 382 | Regulating outstanding money due to a sheriff |
| 1 | 387 | An act for the benefit of a sheriff (allowing him credit from treasury) |

| | | |
|---|-----|--|
| 0 | 416 | Repealing an act for the benefit of a sheriff (this is in direct connection with the blanket extensions given to all Sheriffs) |
| 0 | 417 | Pay for services rendered |
| 1 | 419 | Extension for delinquent sheriff |
| 0 | 424 | Forgiveness of a lot of stuff due to mix ups |
| 1 | 425 | Extension for delinquent sheriff |
| 1 | 426 | Sureties of delinquent sheriff released |
| 1 | 446 | Extension for delinquent sheriff |
| 1 | 566 | Extension for delinquent sheriff |
| 0 | 570 | Extension for delinquent sheriff (FIRE) |
| 1 | 581 | Remittance of interest for a sheriff |
| 0 | 592 | Revision of sheriffs accounts |
| 0 | 595 | Forbidding a named county court from exonerating tax payer after tax has been paid |
| 0 | 607 | Special reimbursement rate |
| 0 | 610 | Services rendered |
| 1 | 666 | Extension for delinquent sheriff |
| 0 | 756 | A sheriff can collect taxes in a part of the county that joined another |
| 0 | 774 | Regulating a faulty payment |
| 1 | 800 | Extension for delinquent sheriff |
| 1 | 801 | Extension for delinquent sheriff |
| 0 | 853 | Regulating outstanding warrant |

| | | |
|---|------|---|
| 0 | 891 | Regulating outstanding warrant |
| 0 | 990 | Regulating outstanding warrant |
| 1 | 992 | Extension for delinquent sheriff |
| 0 | 993 | Regulating a mistake |
| 0 | 994 | Regulating outstanding warrant |
| 1 | 1006 | Extension for delinquent sheriff (list) |
| 0 | 1116 | County court - sheriff relation |
| 1 | 1119 | Extension for delinquent sheriff |
| 1 | 1141 | Appointment of deputy |
| 1 | 1147 | Extension for delinquent sheriff (list) |
| 0 | 1174 | Allowed to list with constable |
| 1 | 1200 | Extension of a previous act for the benefit of sheriff |
| 1 | 1325 | Extension for delinquent sheriff |
| 0 | 1342 | Increased pay to a sheriff |
| 0 | 1380 | County court - sheriff relation |
| 0 | 1403 | Benefit of heir of dead sheriff |
| 0 | 1441 | Basically it enlists future sheriffs to collect delinquent taxes, but makes it so that delinquent sheriffs are the beneficiaries of the preformed labor |
| 1 | 1448 | Regulating outstanding warrant |
| 1 | 1499 | Extension for delinquent sheriff |
| 0 | 1552 | Services rendered |
| 1 | 1595 | Extension for delinquent sheriff |

SI table A3: Enumerated state constitutional prohibitions against special laws mentioning taxes explicitly

| State | Year | Enumeration | Tax | Wording |
|----------------|------|-------------|-----|--|
| New Jersey | 1875 | Yes | No | Coded as not mentioning tax in the enumeration (ART. IX. SEC. VII.), the next paragraph however states that: "12. Property shall be assessed for taxes under general laws, and by uniform rules, according to its true value." |
| Pennsylvania | 1874 | Yes | Yes | ART. 3. SEC. 7. The General Assembly shall not pass any local or special law:... ...Exempting property from taxation |
| Georgia | 1865 | No | No | |
| Maryland | 1864 | Yes | Yes | ART. 3. SEC. 32. The general assembly shall not pass local or special laws in any of the following enumerated cases, viz: the time for the collection of taxes |
| New York | 1874 | Yes | No | |
| South Carolina | 1896 | Yes | No | |
| Kentucky | 1891 | Yes | Yes | ART. 5. SEC. 59. The General Assembly shall not pass local or special acts concerning any of the following subjects, or for any of the following purposes, namely: Fifteenth: |

| | | | | |
|---------------|------|-----|-----|--|
| | | | | To authorize or to regulate the levy, the assessment or the collection of taxes, or to give any indulgence or discharge to any assessor or collector of taxes, or to his sureties. |
| Tennessee | 1870 | No | No | |
| West Virginia | 1872 | Yes | Yes | ART. 6. SEC. 39. The Legislature shall not pass local or special laws in any of the following enumerated cases; Releasing taxes; |
| Louisiana | 1879 | Yes | Yes | ART. 7. TITEL. 99. The General Assembly shall not pass any local or special law exempting property from taxation |
| Mississippi | 1890 | Yes | Yes | ART. 4. SEC. 90. The legislature shall not pass local, private or special laws in any of the following enumerated cases, but such matters shall be provided for only by general laws, viz: (h) Exemption of property from taxation, or from levy or sale. |
| Alabama | 1875 | No | No | |
| Missouri | 1865 | Yes | Yes | ART. IV. SEC. XXVII. The general assembly shall not pass special laws lation forbidden; extending the time for the assessment or collection of taxes, or otherwise relieving any assessor or collector of taxes from the due performance of his official duties; or exempting any property of aiy named person or corporation from taxation. |

| | | | | |
|----------|------|-----|-----|---|
| Florida | 1868 | Yes | Yes | ART. 4. SEC. 17. The Legislature shall not pass special or local laws in any of the following enumerated cases, that is to say: or the assessment and collection of taxes for State, county, and municipal purposes |
| Texas | 1869 | Yes | No | |
| Indiana | 1851 | Yes | Yes | ART. 4. SEC. 22. The General Assembly shall not pass local or special laws, in any of the following enumerated cases, that is to say: For the assessment and collection of taxes for State, county, township or road purposes; ARTICLE X SECTION 1. The General Assembly shall provide, by law, for a uniform and equal rate of assessment and taxation; and shall prescribe such regulations as shall secure a just valuation for taxation of all property, both real and personal, excepting such only for municipal, literary, scientific, religious or charitable purposes, as may be specially exempted by law |
| Illinois | 1870 | Yes | No | But it does prohibit the use of special laws for the purpose of remitting fines, penalties or forfeitures. |
| Michigan | 1850 | Yes | No | |

| | | | | |
|------------|------|-----|-----|--|
| Iowa | 1857 | Yes | Yes | ART. 2. SEC. 30. The General Assembly shall not pass local or special laws in the following cases: For the assessment and collection of taxes for state, county, or road purposes; |
| Wisconsin | 1871 | Yes | Yes | ARTICLE IV SECTION 31. The Legislature is prohibited from enacting any special or private laws in the following cases : 6th. For assessment or collection of taxes or for extending the time for the collection thereof. |
| Minnesota | 1881 | Yes | Yes | ART. 4. SEC. 33. The legislature is prohibited from enacting any special or private laws in the following cases : For assessment or collection of taxes, or for extending the time for the collection thereof. |
| California | 1879 | Yes | Yes | ART III. SEC. 25. The Legislature shall not pass local or special laws in any of the following enumerated cases, that is to say: Tenth—For the assessment or collection of taxes.; Thirteenth—Extending the time for the collection of taxes.; Twentieth—Exempting property from taxation. |
| Oregon | 1857 | Yes | Yes | ART. IV. SEC. 23 The Legislative Assembly shall not pass special or local laws, in any of the following enumerated cases, that is to say: For the assessment, and collection of taxes, for state, county, township, or road purposes. ARTICLE IX FINANCE Section No. 1 The Legislative Assembly shall provide by law, for a uniform, and equal rate of |

| | | | | |
|--------------|------|-----|-----|---|
| | | | | assessment and taxation, and shall prescribe such regulations as shall secure a just valuation for taxation of all property, both real, and personal, excepting scientific, religious, or charitable purposes, as may be specially exempted by law.-*scientific, religious, or charitable purposes, as may be specially exempted by law.such only for municipal, educational, literary, |
| Nevada | 1864 | Yes | Yes | ART. 3. SEC. 20. The Legislature shall not pass local or special laws in any of the following enumerated cases-that is to say: For the assessment and collection of taxes for State, county and township purposes; |
| Nebraska | 1875 | Yes | No | |
| Colorado | 1876 | Yes | No | |
| Montana | 1889 | Yes | Yes | ART. 5. SEC. 26. The legislative assembly shall not pass local or special laws in any of the following; for the assessment or collection of taxes extending the time for the collection of taxes, refunding money paid into State treasury; exempting property from taxation; |
| North Dakota | 1889 | Yes | Yes | ART. II. SEC. 69. The legislative assembly shall not pass local or special laws in any of the following enumerated cases, that is to say: 23. For the assessment or collection of |

| | | | | |
|--------------|------|-----|-----|--|
| | | | | taxes. 25. Extending the time for the collection of taxes. 29. Exempting property from taxation. |
| South Dakota | 1889 | Yes | No | |
| Washington | 1889 | Yes | Yes | ART. II. SEC. 28. The legislature is prohibited from enacting any private or special law in the following cases: 5. For assessment or collection of taxes, or for extending the time for collection thereof. |
| Idaho | 1889 | Yes | Yes | ART. III. SEC. 19. The legislature shall not pass local or special laws in any of the following enumerated cases, that is to say: Extending the time for collection of taxes. Exempting property from taxation. |
| Wyoming | 1889 | Yes | Yes | ART. III. SEC. 27. The legislature shall not pass local or special laws in any of the following enumerated cases, that is to say: for the assessment or collection of taxes; extending the time for the collection of taxes; ; exempting property from taxation; |
| Utah | 1896 | Yes | Yes | ART. VI. SEC. 26. The Legislature is prohibited from enacting any private of special laws in the following cases: Eighth Assessing and collecting taxes. |

Table A4: Correlations

| | Ln Myers | Ln Length tracks | Ln Post offices | Post N of Acts p.c. | % Foreign-born | Length house term | Length senate term | Δ Population (10y) | Ln First decade since statehood |
|------------------------------|----------|------------------|-----------------|---------------------|----------------|-------------------|--------------------|---------------------------|---------------------------------|
| Ln Myers | 1.00 | | | | | | | | |
| Ln Length tracks | -0.53 | 1.00 | | | | | | | |
| Ln Post offices | -0.22 | 0.71 | 1.00 | | | | | | |
| N of Acts p.c. | 0.23 | -0.56 | -0.61 | 1.00 | | | | | |
| % Foreign-born | 0.04 | -0.06 | -0.12 | 0.27 | 1.00 | | | | |
| Length house term | -0.25 | 0.18 | -0.02 | -0.13 | -0.35 | 1.00 | | | |
| Length senate term | -0.11 | 0.13 | 0.01 | -0.05 | -0.29 | 0.54 | 1.00 | | |
| Δ Ln Population (10y) | 0.16 | -0.36 | -0.21 | 0.24 | 0.37 | -0.09 | 0.01 | 1.00 | |
| First 10y since statehood | 0.01 | -0.25 | -0.18 | 0.20 | 0.16 | -0.09 | -0.02 | 0.55 | 1.00 |
| Constitutional prohibition | -0.42 | 0.49 | 0.21 | -0.26 | 0.06 | 0.35 | 0.35 | -0.01 | -0.02 |

Table A5. FE: Number of acts passed and state capacity resources minimal specification

| VARIABLES | (1) Ln Myers | (2) Ln Length of tracks | (3) Ln Post offices |
|-------------------------|-------------------|-------------------------------|------------------------|
| Lag Number of Acts p.c. | .089*** (.016) | -1.135** (.476) | -.540*** (.104) |
| Balanced panel | | | |
| State FE | x | x | x |
| Time FE | x | x | x |
| R-squared | .906 | .764 | .831 |
| n | 223 | 280 | 268 |
| N | 45 | 47 | 45 |

Note: *** p<0.01, ** p<0.05, * p<0.1. Robust Std. Err. Clustered at state level.

Table A6. FE: Number of acts passed and state capacity resources balanced panel

| VARIABLES | (1) Ln Myers | (2) Ln Length of tracks | (3) Ln Post offices |
|------------------------------------|---------------------|-------------------------------|---------------------------|
| Lag Number of acts p.c. | .059*** (.010) | -0.572* (0.287) | -0.711*** (0.185) |
| Lag Length of house term | 0.017 (0.028) | -0.062 (0.175) | 0.025 (0.082) |
| Lag Length of senate term | -0.001 (0.016) | 0.091 (0.090) | 0.022 (0.034) |
| Lag Growth Ln Population (10 year) | 0.151*** (0.033) | -1.602*** (0.335) | 0.084 (0.137) |
| Lag First decade since statehood | -.131** (.052) | 2.163*** (0.416) | -0.057 (0.176) |
| Lag Share Foreign-born | 1.012*** (.287) | | |
| Lag Supported the President | | | 0.003 (0.059) |
| Balanced panel | X | X | X |
| State FE | X | X | X |
| Time FE | X | X | X |
| R-squared | .952 | .860 | .805 |
| n | 160 | 168 | 156 |
| N | 32 | 24 | 26 |

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust Std. Err. Clustered at state level. Striking a balance between the number of cases and length of panel, I use 1850 as the base year for all balanced panels.

Table A7. FE: Number of acts passed and state capacity Northern and Southern states separately

| VARIABLES | Only states that did not succeed | | | Only states that succeeded | | |
|------------------------------------|----------------------------------|----------------------------|----------------------|----------------------------|----------------------------|------------------------|
| | (1) Ln Myers | (2) Ln Length of tracks | (3) Ln of offices | (4) Post Ln Myers | (5) Ln Length of tracks | (6) Ln Post offices |
| Lag Number of acts p.c. | 050** (023) | -865*** (275) | -699*** (168) | 152* (080) | -819*** (202) | -637** (205) |
| Lag Length of house term | 081 (070) | -148 (217) | -087 (089) | -019 (023) | -138 (167) | 096* (043) |
| Lag Length of senate term | -036 (030) | 078 (080) | 058* (033) | -001 (027) | 104 (079) | 026 (040) |
| Lag Growth Ln Population (10 year) | 151*** (039) | -733*** (250) | -142* (071) | -027 (104) | -1.205*** (306) | 008 (100) |
| Lag First decade since statehood | -130** (060) | 026 (343) | -035 (128) | -105 (115) | -1.994*** (585) | -313*** (056) |
| Lag Share Foreign-born | 1.311*** (341) | | | 524* (247) | | |
| Lag Supported the President | | | -002 (061) | | | -125* (069) |
| State FE | X | X | X | X | X | X |
| Time FE | X | X | X | X | X | X |
| R-squared | 928 | 831 | 841 | 970 | 930 | 966 |
| Observations | 133 | 192 | 151 | 55 | 79 | 71 |
| Number of state_icpsr | 34 | 35 | 27 | 11 | 11 | 11 |

Note: *** p<0.01, ** p<0.05, * p<0.1. Robust Std. Err. Clustered at state level. States in most inclusive northern sample (Model 2): Arizona, California, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New

Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming. States in all models 4-6: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas and Virginia.

Table A8. FE: Number of acts passed and state capacity only post-statehood states

| VARIABLES | (1) Ln Myers | (2) Ln Length of tracks | (3) Ln Post offices |
|------------------------------------|---------------------|-------------------------------|------------------------|
| Lag Number of acts p.c. | 0.087* (0.051) | -1.038*** (0.228) | -0.739*** (0.129) |
| Lag Length of house term | 0.014 (0.027) | -0.154 (0.182) | 0.008 (0.074) |
| Lag Length of senate term | 0.001 (0.016) | 0.062 (0.075) | 0.017 (0.031) |
| Lag Growth Ln Population (10 year) | 0.162*** (0.022) | -0.574** (0.261) | -0.016 (0.067) |
| Lag First decade since statehood | -0.128** (0.053) | -0.290 (0.395) | -0.082 (0.086) |
| Lag Share Foreign-born | 1.053*** (0.275) | | |
| Lag Supported the President | | | 0.001 (0.052) |
| State FE | X | X | X |
| Time FE | X | X | X |
| R-squared | 0.947 | 0.837 | 0.834 |
| n | 182 | 266 | 222 |
| N | 43 | 45 | 38 |

Note: *** p<0.01, ** p<0.05, * p<0.1. Robust Std. Err. Clustered at state level.

Table A9. FE: Alternative dependent variable: Whipple score instead of Myers for the census.

| VARIABLES | (1) | (2) |
|------------------------------------|-------------------|-------------------|
| | Ln Whipple | |
| Lag Number of acts p.c. | .017*** (.004) | .012** (.005) |
| Lag Length of house term | .003 (.009) | .004 (.009) |
| Lag Length of senate term | .005 (.005) | .004 (.004) |
| Lag Growth Ln Population (10 year) | .017* (.009) | .018** (.008) |
| Lag First decade since statehood | -.028* (.016) | -.029* (.015) |
| Lag Share Foreign-born | .403*** (.094) | .333*** (.096) |
| LDV | | X |
| State FE | X | X |
| Time FE | X | X |
| R-squared | .938 | .940 |
| n | 188 | 188 |
| N | 45 | 45 |

Note: *** p<0.01, ** p<0.05, * p<0.1. Robust Std. Err. Clustered at state level.

Table A10. FE: Alternative independent variable: Using prohibitions instead of number of laws.

| VARIABLES | (1) Ln Myers | (2) Ln Length of tracks | (3) Ln Post offices |
|--|--------------------|-------------------------------|------------------------|
| Lag General Prohibition against Special laws | -0.072* (0.041) | 0.430** (0.160) | 0.208** (0.100) |
| Lag Length of house term | 0.023 (0.030) | -0.123 (0.149) | 0.043 (0.077) |
| Lag Length of senate term | -0.001 (0.018) | 0.037 (0.072) | -0.004 (0.032) |
| Lag Growth Ln Population (10 year) | 0.105* (0.058) | -0.703*** (0.202) | -0.125* (0.062) |
| Lag First decade since statehood | -0.102* (0.057) | -0.162 (0.333) | -0.086 (0.106) |
| Lag Share Foreign-born | 0.681* (0.393) | | |
| Lag Supported the President | | | 0.048 (0.057) |
| State FE | X | X | X |
| Time FE | X | X | X |
| R-squared | 0.924 | 0.830 | 0.796 |
| Observations | 195 | 279 | 224 |
| Number of state_icpsr | 46 | 46 | 38 |

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust Std. Err. Clustered at state level. Since the independent variable here is prohibitions we should expect it to decrease the age heaping in the census and facilitate rail construction and the establishment of post offices. For the results to corroborate the theory we should expect signs the signs for the coefficients to be opposite of results in the previous tables, which is what we find.

Table A11. FE: Alternative independent variable: Using prohibitions instead of number of laws.

| VARIABLES | (1) Ln Myers | (2) Ln Length of tracks | (3) Ln Post offices |
|--|-------------------|-------------------------------|------------------------|
| Lag General Prohibition against Special laws | -.080** (.039) | .473*** (.162) | .219** (.104) |
| Lag dummy new constitution in last decade | .041 (.058) | -.285 (.171) | -.073 (.096) |
| Lag Length of house term | .018 (.032) | -.106 (.153) | .049 (.080) |
| Lag Length of senate term | -.000 (.019) | .035 (.073) | -.004 (.032) |
| Lag Growth Ln Population (10 year) | .102* (.059) | -.673*** (.196) | -.125* (.062) |
| Lag First decade since statehood | -.098* (.058) | -.210 (.330) | -.087 (.106) |
| Lag Share Foreign-born | .686* (.395) | | |
| Lag Supported the President | | | .048 (.057) |
| State FE | X | X | X |
| Time FE | X | X | X |
| R-squared | .925 | .832 | .797 |
| n | 195 | 279 | 224 |
| N | 46 | 46 | 38 |

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust Std. Err. Clustered at state level. Since the independent variable here is prohibitions we should expect it to decrease the age heaping in the census and facilitate rail construction and the establishment of post offices. For the results to corroborate the theory we should expect signs the signs for the coefficients to be opposite of results in the previous tables, which is what we find.

SI: Collecting data on the number of acts passed

To assemble this data, I examined the content of all the various volumes covering session laws passed by American legislatures in census years, from the federal constitution or inception until the year 1900 or the following year whenever the session that was incumbent in 1900 ended. The general coding principle is simple enough; any act entitled “an act” and printed in the Session laws volume of a state legislature either in that sessions volume or later is counted as a law passed by the legislature. I have not

counted resolutions passed, this is a debatable choice since while theoretically different from laws in practices resolutions have often been given a force very close to that of laws (Reinsch 1907:135). Since I use state fixed effects throughout

The practical counting is just that, flipping through the volumes counting the number of times the words “An act...” are printed followed by “Passed...” or “Approved...” all in keeping with the operations of that particular legislature. Early in the process, I attempted to utilize Optical Character Reading (OCR) but I could not locate electronic copies printed and scanned with a high enough clarity to capture the headings consistently. The practices of the printers of the volume differs both over time and across states.

Thankfully, the acts passed have sometimes been numbered, which has allowed me to corroborate my count. Both my counting and the counting of legislative clerks and printers may nonetheless be off in some cases. Fortunately, the volume of acts passed makes it unlikely such mistakes will be consequential. This is because where the volume is small mistakes are less likely than where the volume is large. That is to say, the risk of skipping a page is smaller when the volume has 26 pages (Arkansas 1821), than when there are 1670 pages (Pennsylvania 1871), but when there are more than a thousand pages in the volume missing an act or even two will not alter results substantially.

Tracking the number of acts passed by the state General Assemblies (GA) during the period is not without its challenges. Constitutions, practices change, and the provisions governing the number of meetings of the general assemblies and the duration of the meetings vary and there are numerous called and extra ordinary sessions of the general assemblies. Further, many constitutions limit the number of days a general assembly can meet and as a way to circumvent such provisions the legislators came up with more or less creative workarounds. The Kentucky General Assembly, for example, would frequently vote to “stop the clock” meaning that when the actual meeting time expired they would agree to pretend it had not and keep passing legislation. The clock would therefore stand at a minute until midnight until they had finished their business. Thus, we cannot always trust the dates noted for the passing of an act. Some states seeking to limit the amount of legislation passed adopted bans on how late in a session new bills could be introduced (Reinsch 1907). Such changes makes the supposed relationship between session length and amount of legislation uneven across states and time. It is also the case that the rules governing the calling of extra and special session vary by state and across time, thus while session length in some cases will causally affect the amount of legislation in other cases the causality will run in the opposite direction as sessions are called to pass legislation. To deal with this, unless a volume only pertains to one year, I count the number of acts passed and divide it by the number of years that assembly was elected for.

SI: The American census

The American census, or rather an enumeration of the population, is mandated in the constitution for the purpose of allocating seats to congress and used to distribute the debts incurred during the war of independence among the states. The actual census is preceded by enabling legislation, often with provisions that should no new legislation be passed the legislation from the last census one is carried forward. The enabling legislation specifies things like how and when the enumeration should be done, who is responsible and who is paying what, what is the punishment for not answering (fines) and what questions should be asked. The first census started August 1 1790 and was allowed to be in the field for nine months, a deadline that was extended to as late as March 1 1792 in the case of the census in South Carolina. Practically the U.S. Marshall were given the task of hiring assistants for each of their districts to complete the enumeration. All the collected data was recorded at the household level, therefore we cannot construct a Myers Index for the censuses during this period. Up until and including the sixth census in 1840 no great changes were made to the administration and collection of the census though the staffing, the pay and some of the questions changed over the years (Wright & Hunt 1900).

For our purposes one thing should be noted, the view that the census could be a state capacity resource has been part of the discussion about the census from the very start. Specifically the idea has been that it could foreshadow direct taxation by the federal state on individuals. For example, many at the time were convinced the first census had failed to record many of the people residing in America (the 1790 census returned lower population number than was expected based on colonial estimates). They attributed this to people lying about the number of people in their household due to fear of taxation (Wright and Hunt 1900). When in 1840 attempts were made to collect economic data in connection with the enumeration it prompted one Southern journal to ask if “Federal prying into the domestic economy of the people” was not “a precursor to direct taxes” (quoted in Wright & Hunt 1900:38).

The 1850 census marks a departure from the preceding censuses, the responsibility was given to the newly established department of the interior, and a temporary census board was established to organize centrally the census. The scope of each sub-district was limited in size, the field period was a cut to 5 months, and for the first time in the federal census each person in America was recorded individually. The record of age at the individual level is what allows the construction of the Myers index, and thus the first census for which data is included in when using the Myers index. Each subsequent census saw some efforts to improve the quality, and of course correspondingly each census saw efforts to limit the scope and/or cost of the same.

The 1860 census was taken just as the sectional conflict approached war, even so a reading of the literature does not indicate this adversely affected the results of the census (or at least not to an extent where they have found it noteworthy). Gradually the time limits for the census were narrowed, and while usually some of the collection failed to meet the deadline as the 19th century ended the period for the census was really starting to come down to the now mandated two weeks for towns and four weeks for the countryside. A perceived issue with the administration of the census was that the organization and personal hired to collect and compile the census after having finished their work would be let go. It was not until 1902 with the establishment of the Census Bureau that the census was given a permanent staff. Throughout the period the census was managed by the federal government and the result of the census was kept by the federal government. The involvement of the respective state governments is limited, at least in regards to the collection of age statistics.

The quality of the census as captured by the Myers Index, is reflective of on the one hand of the information resources the Federal government has about people in the states, and also an outcome variable and an estimation of the state capacity of the federal government in the realm of information collection. As argued in the paper however, I use the census or rather state level Myers indices as an indicator of not only federal capacity, but capacity of the respective states. Lindvall and Teorell argues that that the coherence between policy instruments and outcomes is conditioned on the state capacity resources (2016). For the American census, this scenario would look something like this: to conduct the census the federal state enacts enabling legislation that specifies a mix of policy instruments that should be employed to secure that the policy is realized. In relation to individuals the enabling act uses various carrots, such as salary for canvassers, and for individuals the promise of proportional representation in congress. But also stick, fines for delinquent canvassers and people not being forthcoming towards canvassers. In terms of state capacity resources the federal state mostly draws on its financial resources to ensure the policy instruments work, i.e. they pay the canvassers, but also design canvassing districts based on previously collected information of how many people the district ought to include. Here we might also note the choice not to invest in retaining human capital between censuses until the 20th century, but also how oaths were used to improve honesty among the canvassers. State capacity in relation to individuals is however only part of the story, many states historically and the federal U.S. government until at the very least 1865 confronts competing state organizations.

In relation to the competing state organizations things look somewhat differently. As noted above the first census was implemented using the carrot that congressional seats would be allocated based on the results of the census, but also came coupled with the allocation of war debt. It is clear from the legislation that the census should report directly to the Federal state (the President even) and that it should rely on the federal

organization for its implementation. The enabling acts did not explicitly enlist the state capacity resources of the states to ensure the accuracy of the census. However, as is evident from the higher pay allowed canvassers in sparsely-populated areas getting around was one of the great challenges facing the census, local lawlessness and infrastructure were therefore primary conditioners of the causal effect between the policy instrument and the outcome. That is to say, they were and are state capacity resources that are non-excludable since the federal state could enlist them just as the local state could.

Stated more generally, a road can help with the implementation of a policy (cf. Cermeño, Enflo and Lindvall 2018) and it might be considered a state capacity resource, the road strengthens the link between policy instrument and outcome. However the same road can also be used by competing states. Assume there are two actors competing for control of a rugged area, the first is the generally recognized state, the other a band of rowing bandits. The state is militarily stronger but the bandits are more nimble and can move quicker through the rugged terrain, the state therefore has a problem of bringing its superior forces to bear when and where it is needed to defeat the bandit. Should the state build a road through the area it would be a non-excludable good allowing both state and bandit to move with the same speed but since moving with the same speed would eliminate the bandits advantage (being more nimble) the road would strengthen the government relative to that particular foe. However when the foe is a competing state organization, such as the federal government the road allowing the same movability to all might weaken the state government in relation to the federal government. To make the census the federal government uses the non-excludable state capacity resources of each state. Once we account for other factors the remaining differences in the quality of information generated by the census gives an indication of the non-excludable state capacity resources in the different states. Comparing this indicator to the amount of acts passed as a proxy for special acts passed we can begin to get a picture of the relationship between the work of the legislatures and the state capacity created.

References

Cermeño, Alexandra L., Kerstin Enflo, and Johannes Lindvall. "Railways and Reform: How Trains Strengthened the Nation State." *STANCE Working Paper Series* 2018, no. 7 (2018): 1-28.

Lindvall, Johannes, and Jan Teorell. *State capacity as power: a conceptual framework*. Department of Political Science, Lund University, 2016.

Wright, Caroll D. & William C. Hunt. 1900. *The History and Growth of the United States Census*. Washington Government Printing Office.